SONY

Corporate Social Responsibility Report 2003

Year Ended March 31, 2003

CSR Report 2003 Year Ended March 31, 2003

SONY

The core responsibility of the Sony Group to society is to pursue enhancement of corporate value through innovation and sound business practices. The Sony Group recognizes that its businesses have direct and indirect impact on the societies in which it operates. Sound business practices require that business decisions give due consideration to the interests of Sony stakeholders, including shareholders, customers, employees, suppliers, business partners, local communities and other organizations. The Sony Group will endeavor to conduct its business accordingly.

Reporting Scope and Period

In principle, this report covers the entire global operations of the Sony Group*1 (consolidated basis), mainly for the period of fiscal 2002 (April 1, 2002 to March 31, 2003). It introduces the approach of the Sony Group to social and environmental activities, and presents global results and future trends.

Disclosure and Communication

Sony believes in the importance of communication and the disclosure of appropriate information to stakeholders. Sony has been publishing reports on its environmental activities since fiscal 1994*2. Sony also recognizes the importance of corporations acknowledging accountability for their social responsibilities. From 2002, in line with this thinking, the report was expanded to cover various issues concerning Sony's interactions with individuals and society as a whole. Since the report has grown in scope to encompass Sony's corporate social responsibilities, it is now entitled the CSR*3 Report.

Sony views this report as a medium for disclosing important information. We value any comments or advice (see p. 81 for details on contacting Sony).

Sony has referred to various guidelines during the preparation of this report, in particular those published by the Global Reporting Initiative (GRI)*4.

Units of Measurement

In principle, the units of measurement found in this report are written out in the body of the text (e.g. "tons"), with symbolic notation used in graphs, charts and diagrams (e.g. "t"). From page 69 onward, only symbolic notation is used. Units of measurement contained within this report are as follows:

Text	Graphs
Tons (unit of weight)	t
Cubic meters (unit of volume)	m^3
Joules (unit of heat)	J
Tera (10^{12})	T

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*1 The Sony Group includes all consolidated subsidiaries in which Sony Corporation holds a capital stake of 50% or more. Be advised, however, that some of the captions and other data in this report are from joint ventures such as American Video Glass Company (U.S.), ST Liquid Crystal Display Corporation (Japan), Sony Ericsson Mobile Communications Japan, Inc. in which Sony Corporation holds a capital stake of 50% and other companies using the Sony trademark. In this report, the term "Sony" refers to the Sony Group, while the parent company is referred to as "Sony Corporation."

*2 Sony issued an Environmental Report in 1994, 1997, 1999, and 2001. The first annual Sony Social & Environmental Report was issued in 2002.

*3 CSR is an abbreviation for corporate social responsibility.

*4 For more details on the GRI guidelines, please visit the GRI website at the following URL: http://www.globalreporting.org/.

Sony CSR Report 2003 Contents

Messages from Management

Sony has been fortunate to conduct business globally for many years in a predominantly peaceful environment. The reality is, however, that our world has not been free of tribulations during this period. The terrorist attacks of 9.11 have been followed by wars in Afghanistan and Iraq. The recent outbreak of severe acute respiratory syndrome (SARS) has also highlighted just how vulnerable the international community has become in recent years. There are some who point to globalization of the world economy and rapid economic development as sources of such tensions and calamities.

In this environment, I believe there are fundamentally two objectives every business must fulfill. First, businesses must create superior products and services that in turn generate a steady stream of profit. The second objective involves companies assuming responsibilities as a good corporate citizen. It is vital that these two aspects are pursued simultaneously, and in line with the peculiarities of each company.

Thanks to the support of our stakeholders, including our customers, shareholders, suppliers, and local communities, Sony has become one of the renowned global corporations. While our operations are diverse and span over many different countries, we are making genuine efforts to ensure that all of our activities are compatible with sustaining a healthy environment.

We are also working to improve our regulatory compliance. In May 2003 we published a common set of standards to be adopted by all Sony Group companies and employees called the "Sony Group Code of Conduct." As a global corporation, Sony takes its social responsibilities seriously, and we will strive to uphold the highest ethical standards at all times.

This report introduces some of the social and environmental activities we are undertaking to fulfill our responsibilities as a global corporate citizen. I sincerely hope it will provide you with a greater understanding of our endeavors.

Nobuyuki Idei
Chairman and Group CEO,
Representative Corporate Executive Officer, Member of the Board

Recent unanticipated events have caused a growing sense of unease internationally. The conflict in Iraq and the outbreak of SARS are forceful reminders that people everywhere share in a single community with a common destiny. Clashes are, to a certain extent, inevitable in a globalized society with diverse cultural and social values. I believe however that cultural differences do not and should not equate to any sense of superiority.

Sony conducts its business globally. Consequently, Sony fosters a culture in which all employees are free as individuals to maximize their talents regardless of gender, ethnicity or other factors. And at Sony, we aim to earn the respect and appreciation of the local communities in which we operate through our actions.

Every year we provide the world over 100 million units of hardware from our electronics and games businesses alone. As a leading global company, I believe that Sony has a natural obligation to supply products that excel in terms of both quality and environmental consciousness. This translates into a number of important efforts to make our business compatible with the health of the global environment: to make effective use of limited resources by reducing the power consumption of products and by recycling post-use products; to reduce the number of parts and components in each product so that less waste is generated; and to upgrade our manufacturing systems so that we only produce what is needed. When I first initiated the drive to reform Sony's production systems several years ago, I recall that the underlying rationale was a clear realization that the complete elimination of waste was critical for the future of humanity.

I firmly believe that Sony is in the business of creating more than just monetary profits. I believe that we must strive to become a company with which all our stakeholders can feel proud to be associated. Sony seeks to help people from different regions and cultures overcome the limitations of time and space to share their passions and values with one another. With this, we aim to contribute to the ultimate goal of creating a more culturally enriched society. In the coming era of broadband networks, the Sony Group will be as much about content and solution-based businesses as it is about hardware. If our united efforts continue to bring new value to our customers, I will regard this as a truly wonderful achievement.

Kunitake Ando
President and Group COO,
Representative Corporate Executive Officer, Member of the Board

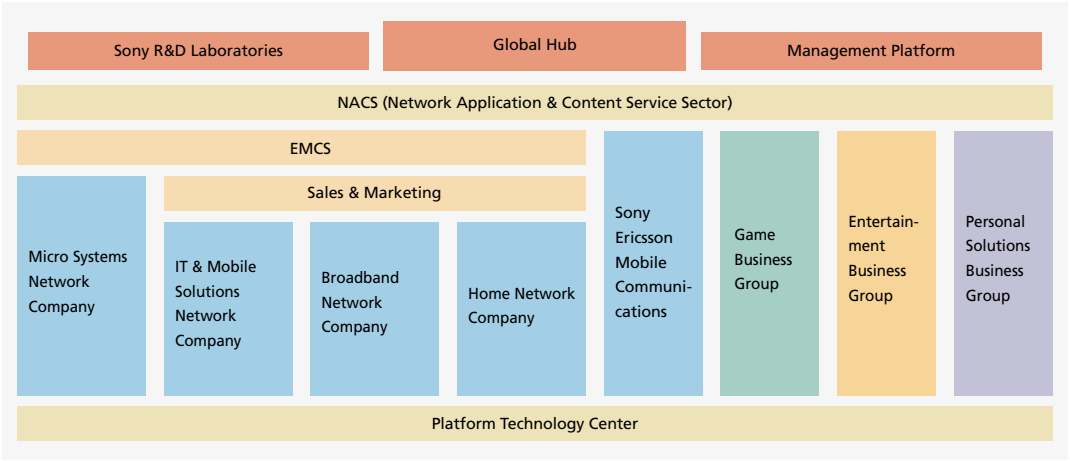
Sony Overview

Corporate Data

Headquarters:	6-7-35 Kita-Shinagawa, Shinagawa-ku, Tokyo, Japan
Established:	May 7, 1946
Employees:	161,100 (As of March 31, 2003)
Sales and operating revenue:	¥7,473.6 billion (Year ended March 31, 2003)

Sony Overview

The Sony Group spans eight principal organizational units, which are organized into four network companies, three business groups and Sony Ericsson Mobile Communications as shown below.

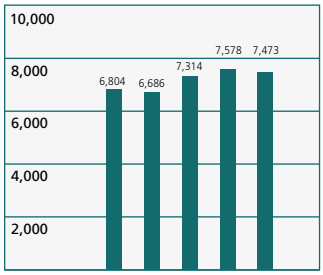


In addition to the Network Application and Content Service Sector (NACS) which is at the center of Sony's network business, a Platform Technology Center will be established to support Sony's total business from hardware to content. The Platform Technology Center will support network companies and business groups on a horizontal basis.

- **Home Network Company**
  Create a new home environment with networked electronic devices centered on next-generation TV
- **Broadband Network Company**
  Development of next-generation electronics devices and linkages to Game devices
- **IT and Mobile Solutions Network Company**
  Realize a connected world with PC and mobile devices and strengthen the B to B solutions business
- **Micro Systems Network Company**
  Enhance key devices and modules as core components of attractive set products
- **Game Business Group**
  Promote Game businesses for the broadband era
- **Entertainment Business Group**
  Develop entertainment content businesses based on pictures and music and develop a new content business model for the network era
- **Personal Solutions Business Group**
  Integrate various business units providing services based on direct contact with customers (finance, retail, etc). Strengthen synergies and develop attractive new business models for customers through the application of IT
- **Sony Ericsson Mobile Communications**
  Provide high-quality products and communication services tailored to the mobile networking age

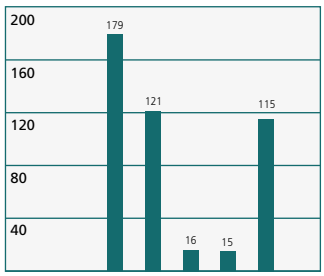
Financial Highlights (¥ billion)

Sales and Operating Revenue*1



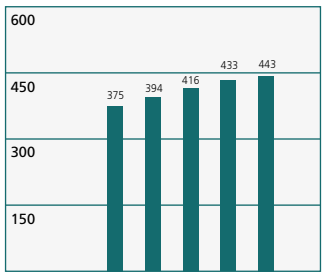
(Years ended March 31)

Net Income



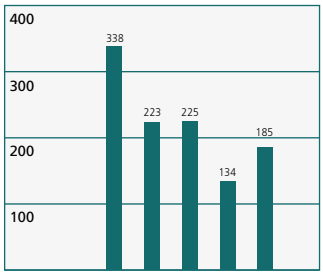
(Years ended March 31)

R&D Expenses



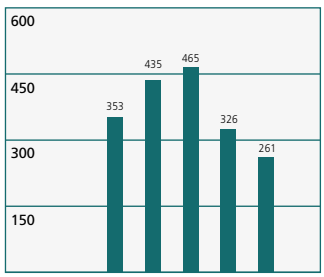
(Years ended March 31)

Operating Income*1



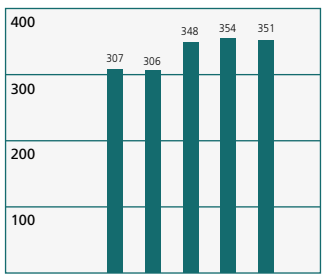
(Years ended March 31)

Capital Expenditure



(Years ended March 31)

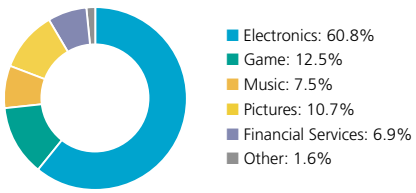
Depreciation and Amortization*2



(Years ended March 31)

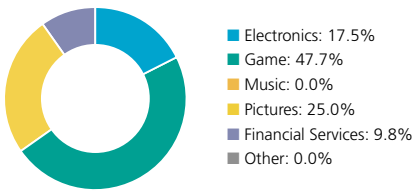
Sales and Operating Revenue by Business Segment

(Total sales and operating revenue: ¥7,473.6 billion)
Year ended March 31, 2003



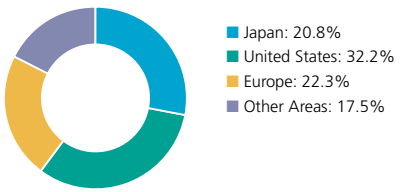
Operating Income by Business Segment*3

(Total operating income: ¥185.4 billion)
Year ended March 31, 2003



Sales and Operating Revenue by Geographic Segment

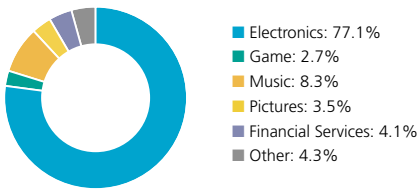
(Total sales and operating revenue: ¥7,473.6 billion)
Year ended March 31, 2003



Workforce Composition

Employees by Business Segment

(Total employees: 161,100)
As of March 31, 2003



*1 Includes inter-segment transactions.
*2 Includes amortization of deferred insurance acquisition costs.
*3 Losses suffered by Music and Other above have been treated as zero in the operating income ratios for the sake of convenience.

Major Group Business

	BUSINESS AREAS	MAJOR COMPANIES
Electronics		
	Audio, video, television, information and communication, semiconductors, components and others	Major companies for Electronics are listed on page 7.
Game		
	Game console and software business	Sony Computer Entertainment Inc. Sony Computer Entertainment America Inc. Sony Computer Entertainment Europe Limited
Music		
	Music software	Sony Music Entertainment (Japan) Inc. Sony Music Entertainment Inc. Sony Digital Audio Disc Corporation
Pictures		
	Motion picture, television and digital entertainment business	Sony Pictures Entertainment (Japan) Inc. Sony Pictures Entertainment Inc.
Financial Services		
	Life insurance/non-life insurance, leasing and credit financing business and Internet-based banking business	Sony Life Insurance Co., Ltd. Sony Assurance Inc. Sony Finance International, Inc. Sony Bank Inc.
Other		
	Network services, advertising agency business and other businesses	Sony Corporation Sony Communication Network Corporation Frontage Inc.

Electronics at a Glance

Audio

MAJOR PRODUCTS

Home audio, portable audio, car audio and car navigation systems

Video

MAJOR PRODUCTS

Video cameras, digital still cameras, video decks and DVD players/recorders

Televisions

MAJOR PRODUCTS

CRT televisions, projection televisions, plasma televisions, set-top boxes and PC projectors

Information and Communications

MAJOR PRODUCTS

PCs, computer displays, printers, personal digital assistants, broadcast and professional use audio/video/monitors, LCD televisions, and other professional use equipment

Semiconductors

MAJOR PRODUCTS

LCDs, CCDs and other semiconductors

Components

MAJOR PRODUCTS

Optical pickups, batteries, CRTs, audio/video/data recording media and data recording systems

Other

MAJOR PRODUCTS

Aiwa products, entertainment robots and products and services not included in other categories

MAJOR COMPANIES

Sony Corporation, Sony Chemicals Corporation, Sony Electronics Inc., Sony EMCS Corporation, Sony Engineering Corporation, Sony Fukushima Corporation, Sony Manufacturing Systems Corporation, Sony Marketing (Japan) Inc., Sony Miyagi Corporation, Sony Precision Technology Inc., Sony Semiconductor Kyushu Corporation, Sony Tochigi Corporation, Sony Trading International Corporation, Sony Electronics (Malaysia) Sdn. Bhd., Sony Electronics (Singapore) Pte. Ltd., Sony Marketing Asia Pacific Pte. Ltd., Sony Semiconductor (Thailand) Co., Ltd., Sony Technology (Malaysia) Sdn. Bhd., Sony Deutschland GmbH, Sony Ericsson Mobile Communications AB, Sony France S.A., Sony United Kingdom Ltd.

Management

Corporate Governance Reform

Over the years Sony has implemented various measures designed to strengthen corporate governance. One example is the Corporate Executive Officer ("Shikko-Yakuin") system, which aims to make a clear distinction between the different roles involved in management oversight and business operations.

Recently, Sony has initiated further corporate governance reforms to enhance the operation of existing structures. In June 2003, Sony adopted the "Company with Committees" system based on the revised Japanese Commercial Code, supplemented with certain additional reforms intended to further bolster corporate governance.

These changes help to strengthen the oversight functions of the board of directors while ensuring that operational management authority is clearly distinguished from such functions. The goal is to improve the management of the Sony Group by boosting responsiveness, transparency and dynamism.

Evolution of Corporate Governance at Sony

1970: Appointment of two outside directors
1976: Adoption of the CEO system
1983: Introduction of the Business Unit system
1991: First appointment of non-Japanese outside director
1994: Introduction of the Company system
1997: Introduction of the Corporate Executive Officer ("Shikko-Yakuin") system
1998: Establishment of Compensation and Nomination Committees
1999: Introduction of the Network Company system
2000: Chairman of the Board formally separated from business execution functions
2002: Establishment of Advisory Board
2003: Adoption of "Company with Committees" system

Corporate Governance Reform

Sony has decided to adopt the "Company with Committees" system, which is an alternative corporate governance structure provided for under the revised Japanese Commercial Code. The move strengthens the oversight functions of the board of directors while delegating greater authority and responsibility to executives in charge of business operations. This corporate governance reform promotes more dynamic and responsive management.

Additional Board Rules and Shift to New Structure

Sony Corporation gained approval for the adoption of the "Company with Committees" system at the ordinary general meeting of shareholders held on June 20, 2003. Adoption of this system legally obliges a company to abolish the corporate governance structure based around statutory auditors and an internal board of auditors, and to introduce in its place a corporate executive officer system, plus three committees (nomination, audit and compensation) each composed of a majority of outside directors. A total of 17 directors, including 8 outside directors, were elected at the same shareholder meeting. At the subsequent meeting of the board of directors, the members of the three board committees were appointed and a total of 12 corporate executive officers were elected, including three representative corporate executive officers.

Sony Corporation has also established a set of board regulations covering the operation of the board of directors and the board committees. These rules are designed to maintain the independence of the board from the execution of business operations and provide a framework for the adequate functioning and decision-making of the smaller committees. This move elevates corporate governance at Sony to a level beyond the requirements of the revised Japanese Commercial Code.

Roles of Separate Corporate Governance Components

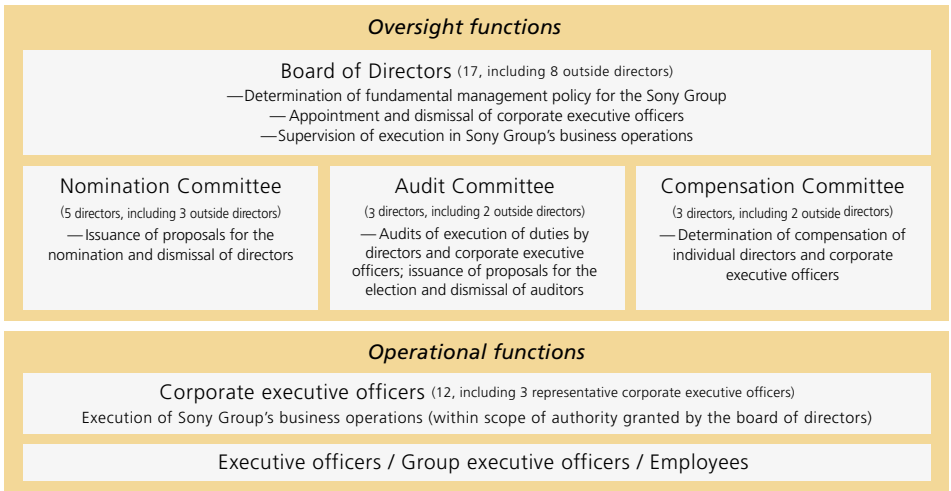
• Board of directors and three board committees

The newly composed board of directors and three board committees are charged with determining fundamental management policies for the Sony Group and ensuring that the Sony Group is managed legally and appropriately.

• Corporate executive officers and executive board

The corporate executive officers are responsible for the operational matters relating to the entire Sony Group, within the scope of authority granted to them by the board of directors. Its objective is to increase the Sony Group's corporate value. Significant decision-making authority regarding investments, business alliances and related operational matters are delegated to the executive board. This delegation is designed to make management of the Sony Group more dynamic and responsive.

Sony's New Corporate Governance Structures



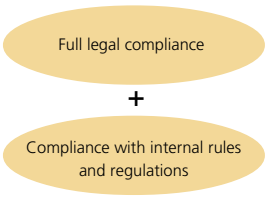
Improved Compliance Functions

Compliance with laws and internal rules is one of the most fundamental duties that a company must undertake to fulfill its social responsibilities. To this end, Sony has formulated the "Sony Group Code of Conduct," a set of internal standards to guide corporate behavior within the Sony Group. An office responsible for corporate social responsibility (CSR) has also been created with the view to increase focus on CSR.

Sony Compliance Structure

Dedicated teams within Sony concerned with issues such as product safety and environmental conservation have always worked to ensure full legal and regulatory compliance in their related areas of responsibility. In July 2001, Sony established in its head office a separate group charged with exercising overall control over compliance activities across the Sony Group.

Compliance at Sony

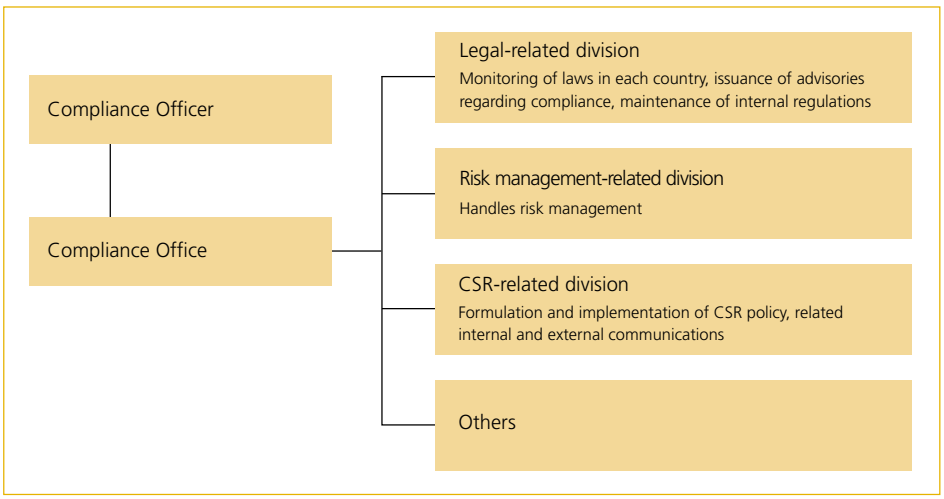


Office Responsible for CSR

Sony has implemented numerous measures over the years aimed at raising customer satisfaction, improving working conditions for Sony employees, lessening the environmental impact of its business activities and maintaining good relationships with local communities as a corporate citizen. Recently, society has begun demanding more from companies in respect of corporate citizenship activities, and companies have grown keenly aware of the importance of this. For these reasons, and to ensure that it takes proper actions as a corporate entity, Sony established an office responsible for CSR in March 2003.

The office is charged with coordinating the CSR activities formerly carried out separately throughout Sony. The office is also responsible for formulation of CSR-related policy and implementing related internal standards that govern Sony Group activities, as well as handling CSR communication with stakeholders.

Sony Compliance Structure



Improved Compliance Functions

Managing Internal Rules

For Sony to properly engage in compliance activities, it must first ascertain which laws are relevant to its operations. Sony must then determine what additional internal rules, if any, must be formulated to help assure compliance with applicable laws.

The Compliance Office is charged with monitoring laws in every corner of the globe that may affect Sony's business operations, and with drafting policy proposals that form the basis for internal rules designed to ensure compliance with such laws. At the same time, the office is responsible for ensuring consistency among and determining the effectiveness of Sony's major internal rules.

Internal Hotline System

Sony Corporation and several affiliated companies have had systems in place for reporting a wide array of concerns and possible misconduct within their legal and business environments. In recognition of the importance of business ethics and compliance with all applicable laws and internal rules, Sony is establishing an internal hotline system to cover the entire Sony Group. Operation of this "Compliance Hotline" has already commenced in Japan from May 2003.

The hotline encourages employees to help assure compliance by enabling Sony to recognize potential risks from possible violations of law and internal policies. Sony treats the reports fairly and respectfully, and does not permit retaliation against employees who make any such reports in good faith.

Crisis Management

Even the best-designed internal standards and reporting networks cannot prevent issues arising due to unforeseen events. At Sony, a system has been designed to deal with issues quickly and appropriately should they arise. In the unlikely event of a crisis situation, the global crisis management system in place throughout the entire Group enables top management to take the lead in implementing crisis management measures to respond swiftly and appropriately.

Creation of the "Sony Group Code of Conduct"

As a company engaged in diverse businesses that impact society in a variety of ways, transparent and ethical behavior that gains the trust of all stakeholders is a matter of the utmost importance to Sony. As a company active in a global business context, Sony must also show sensitivity to regional and cultural differences.

In actuality, this mindset has been a part of Sony since its founding, as witnessed in the prospectus*1 drafted by Sony co-founder Masaru Ibuka. Nevertheless, to ensure that behavioral expectations are fully disseminated to all directors, officers and employees throughout the Group, Sony formulated its "Sony Group Code of Conduct" in May 2003. Aside from standards regarding legal and regulatory compliance, this code sets out Sony's basic policies regarding business integrity, respect for human rights, disclosure of information, intellectual property and environmental conservation. The "Sony Group Code of Conduct" represents the first time that a common set of such behavioral norms has been defined for the entire Group, and reflects Sony's commitment to ethical business conduct (please refer to the following page). The "Sony Group Code of Conduct" refers to guidelines proposed by the Organization for Economic Cooperation and Development (OECD)*2, the United Nations Global Compact, and the Universal Declaration and the Fundamental Human Rights Conventions of the International Labour Organization.

*1 To see the prospectus, please go to http://www.sony.co.jp/SonyInfo/CorporateInfo/History/prospectus.html

*2 The corporate guidelines of the Organization for Economic Cooperation and Development (OECD) are available in several languages at http://www.oecd.org. The UN Global Compact website is available at http://www.unglobalcompact.org/, and the International Labour Organization's (ILO) website can be found at http://www.ilo.org.

Sony Group Code of Conduct

Established May 2003

<Scope of application: companies>

Standards applicable to: Sony Corporation, any company more than 50% of whose outstanding stocks or interests with voting rights is owned directly or indirectly by Sony Corporation, and such other companies be determined by the board of directors of Sony Corporation to be included.

<Scope of application: personnel>

Standards applicable to: all Sony Group directors, officers and employees

<Headings>

1. General Standards
   - 1-1 Compliance with Laws as well as Internal Rules and Policies; Honest and Ethical Business Conduct
   - 1-2 Relationship with Stakeholders
   - 1-3 Appreciating Diversity
   - 1-4 Avoiding Structural Conflicts of Interest
   - 1-5 Communication of Concerns and Alleged Violations

2. Respect for Human Rights
   - 2-1 Equal Employment Opportunity
   - 2-2 No Forced Labor / Child Labor
   - 2-3 Sound Labor and Employment Practices
   - 2-4 Work Environment

3. Conducting Business with Integrity and Fairness
   - 3-1 Product and Service Safety
   - 3-2 Environmental Conservation
   - 3-3 Fair Competition
   - 3-4 Advertising
   - 3-5 Public Disclosure
   - 3-6 Personal Information
   - 3-7 Intellectual Property
   - 3-8 Confidential and Proprietary Information
   - 3-9 Fair Procurement
   - 3-10 Gifts and Entertainment
   - 3-11 Recording and Reporting of Information

4. Ethical Personal Conduct
   - 4-1 Insider Trading
   - 4-2 Personal Conflicts of Interest
   - 4-3 Corporate Assets
   - 4-4 Media Relations and Public Statements

URL To read "Sony Group Code of Conduct" in its entirety, go to http://www.sony.net/eco/book

Sony and the People

Sony and the People

The Sony Group recognizes that it impacts society in a number of ways over the course of its business activities. For this reason, Sony considers it a matter of importance to take into account the varying interests of its stakeholders including shareholders, customers, employees, suppliers, business partners and local communities, when conducting its operations.

For Customers: Customer Satisfaction and Product Quality Improvements

Sony is taking various measures to continuously improve product and service quality from a customer's perspective in order to gain its customers' "satisfaction," "trust" and "confidence."

Customer Satisfaction (CS) Philosophy

Sony believes that it is Sony's mission and its major goal to continue to be "the customers' most trusted partner" in the 21st Century by always viewing things from "the customers' perspective" and to continuously implement and provide improved high quality CS, as a company with high expectations from customers.

Based on this commitment, in the year ended March 2002, Sony has developed the "Sony CS Charter" to firmly establish the importance of CS consciousness throughout the organization. In the year ended March 2003, we have expanded the idea into a company-wide program, the "CS21 Campaign," as part of the efforts to put the "CS Charter" into effect and into practice.

"CS21 Campaign" Activities and Results

Sony launched a company-wide project "CS21 Campaign" ("CS21") in February 2002. The campaign's slogan is "Customer Satisfaction is Sony's Corporate Culture." To meet the slogan, various activities are taking place to fulfill product quality and service that meet customers' satisfaction.

"CS21" encourages every single Sony employee in every part of the world and every level of business operations to review its business activity from customers' perspective and to implement concrete measures to further improve the quality of CS. This initiative is steadily generating results in all aspects of Sony's business operation.

With regard to product quality improvement, Sony is first listening more carefully to the voices of its customers. Then, Sony is proactively implementing reforms to improve product quality, reexamine features, etc. based on the lessons learned from its customers. For example, Sony made an effort to reduce machine noise while in operation to reflect a user's opinion.


The Sony CS Charter

Sony is strongly committed to be the trusted partner for our customers worldwide in the broadband age.

- We will listen carefully to customers' voice
- We will provide unique and high quality products and services
- We will strive to earn customers' trust
- We will actively promote customer satisfaction to meet customers' needs and realize dreams
- We will continue to pursue corporate activities that will contribute and are harmonious with society

COO

Customer Information Center

Sony established its first "Customer Information Center" in Japan in 1963 to provide its customers with timely and appropriate consultation to their inquiries. This function has now expanded to worldwide sales subsidiaries.

For the year ended March 2003, the number of inquiries received worldwide totaled approximately 24 million. Many of the inquiries are related to the specifications or use of Sony products close to the time of purchase; however, in recent years, there has been an increasing number of inquiries concerning connectivity of Sony products to other manufacturers' products, reflecting the needs of the modern age.

Further, with the growth of internet use, Sony has also increased its efforts to develop cyber-infrastructure to provide Sony product information in a timely manner. Some examples include disclosure of products information and reinforcement of the FAQ site (compiling most frequently asked questions and answers) on the website.

In the U.S., Sony has improved the IT infrastructure by installing the latest automatic voice-response systems to provide quicker and smoother service to its customers.

*1 COO at the time the Sony CS Charter was established.

Sony's Global Repair Service Network

Besides Sony's efforts to improve product quality, Sony is also implementing various measures to improve after-sales services quality to follow up on the problems after the products have been used.

Currently, Sony has more than 8,000 repair-service locations worldwide, including all service stations and certified repair agents. In every region, Sony has instituted permanent programs aimed at making continuous improvements in the quality of repair services. These include training courses to develop improved repair skills and sharing of information on the latest Sony products. Every effort is made to ensure the uniformity of high standard of services provided worldwide at any Sony repair-service locations.

Since 1996, Sony implemented a company-wide electronic distribution of service-related technical information. This measure fulfilled a) the rapid distribution of the latest information, b) shortening of repair lead-time and, c) sharing of common knowledge database*1 and various training programs on a worldwide basis.

In the year ended March 2003, following the business consolidation of Aiwa Co., Ltd. to Sony, a number of initiatives were in progress to provide the Sony quality repair-service to Aiwa products as well.

Safety of Products and After-Sales Services

Customers' safety is a matter of greatest importance to Sony. As such, Sony is constantly striving to identify and improve customer safety in a wide range of business activity areas, from product development to after-sales services.

Sony strives not only to conform to applicable international and national product safety standards, but also to ensure that the necessary measures are taken to avoid potential harm to customers. Sony has developed its own internal safety standards from product development, designing, and through every production stages.

Sony also takes comprehensive measures to ensure product safety after they have been repaired or serviced, through careful control of specifications that govern replacement parts.

In 1995, when product liability legislation was first enacted in Japan, Sony took the opportunity to strengthen the existing "safety standard compliance program." Additionally, Sony has a department charged with analyzing any latent medical risks posed to customers. This department undertakes research to ensure that the use of Sony products and services does not have possible adverse effects on human body. The research information is shared with related departments as deemed necessary and is applied to make appropriate management decisions.

Quality Assurance System

To preempt problems concerning product quality, Sony has a comprehensive quality management system specially attuned to its distinctive lineup of products with ISO 9001 as its basis. Quality assurance activities are implemented to encompass everything from product design to final shipment. Further, Sony is proactively enforcing quality assurance activities for software products by adoption of the Capability Maturity Model (CMM*2).

As Sony is moving into the era of the ubiquitous value network (UVN*3), Sony will continue to focus on activities to deliver UVN products that not only have seamless connectivity among its own UVN products, but are also cross compatible with UVN products from other companies, so that all customers will find Sony products easy to install and operate.

Quality Assurance Issues

In April 2003, Sony posted an announcement on the Internet concerning a problem discovered with the re-charger base of the digital still camera model DSC-P1. Regrettably, more than one year passed before Sony was able to pinpoint the exact problem and notify the users. In light of such quality management issues, Sony is making efforts to handle future quality assurance issues more effectively, including conducting a thorough reexamination of its entire quality assurance processes and procedures.

*1 A searchable database of knowledge and know-how.

*2 A framework for identifying elements vital to the software development process.

*3 Ubiquitous Value Network (UVN) centers on a new hardware platform that allows the seamless connection of both PC and non-PC consumer electronics devices, including televisions, audio equipment and other electronic devices. The UVN concept is one where devices and products can seamlessly access the network and connect with each other at any time, from any place. Users will connect with each other and with Sony, creating a completely new lifestyle.

Personal Information Management

Increased commercial use of networks such as the Internet has made it easy to collect, handle and manage large volumes of electronic data, including personal information about customers. The use of data security tools in the management of such information has become increasingly important to prevent leaks and protect privacy. While legislation to protect privacy is being enacted around the world, Sony Corporation formulated "Sony's Global Principles on Personal Information" in July 2000. These principles are designed to ensure the appropriate handling of personal information throughout the Group.

Sony Corporation has established an organization charged with promoting personal information management. This organization continuously provides training programs for all its employees on personal information management and monitoring compliance of its company rules.

Sony hopes that these activities will reassure customers that they can feel secure in providing Sony with personal information.

Game Trademark Registration Incident

In April 2003, the British press reported that Sony Computer Entertainment America Inc. (SCEA), the U.S. subsidiary of Sony Computer Entertainment Inc. (SCEI), had filed a trademark application for the term "Shock and Awe" in an attempt to capitalize on the tragic events surrounding Iraq.

In response, Sony Corporation and SCEI immediately reviewed the advisability of this trademark application, and concluded that it was an exercise of regrettable bad judgement in that it disregarded the context in which the term has been used. SCEA then promptly withdrew the application. Appreciative that its commercial activities are conducted within a global environment, Sony pledges to redouble its efforts to ensure the same thing does not happen again through implementation of the "Sony Group Code of Conduct."

Sony-Customer Communication Channels and Forums

Sony has several customer showrooms that allow people to enjoy the Sony product experience for themselves. Separately, Sony has also created a number of exhibitions that introduce Sony, Sony's environmental activities, and the joys of science to the community. A few of these sites are introduced below.

Sony ExploraScience (Tokyo, Beijing)

This science museum created by Sony allows children of all ages to have fun learning about scientific principles and digital technology through a range of exciting exhibits.

URL http://www.sonyexplorascience.com/english/

Sony ExploraScience

Sony Museum (Tokyo)

Examining various products used in different areas of life, the museum traces the history of Sony products over the five decades since the company was founded. The museum's home page also provides a glimpse of what visitors can expect (see below).

URL http://www.sony.net/Fun/the-museum/

Sony Eco Plaza

Sony Eco Plaza (Tokyo)

This permanent exhibition introduces Sony's environmental activities using multimedia and hands-on displays. Attendants are also available to provide explanations of Sony's environmental research and recycling technology.

URL http://www.sony.net/ecoplaza/

Sony Wonder Technology Lab (New York)

Open since 1994, the Lab is an interactive museum operated by Sony Corporation of America. Education, entertainment and technology are merged in exhibits featuring music, movies, videogames and digital technology.

URL http://www.sonywondertechlab.com

Sony Wonder Technology Lab

For Customers: Making Products Easier to Use

As products offer more advanced functions and gain in complexity, Sony has designated usability as a key element of product quality. Sony endeavors to make its products and services accessible and easy-to-use for all users, regardless of age or ability. Another key consideration is the accessibility of information provided to customers.

Enhanced Product Usability

Developers went back to basics during the creation of the CFD-A100TV CD radio cassette player. Comprehensive user surveys and interviews targeted senior citizens, who are an important group of customers for these products, asking a range of questions designed to find out what customers really want from radio players in terms of features, ease of use and other design points.

The ICF-A100V, another radio model in the same series, combines a high-quality design with outstanding operability: anyone of any age can use the product.

The *airboard* personal IT television is another example of a product that is extremely easy to use. Not only does it feature a portable LCD monitor that can be carried around, allowing viewers to watch in any part of their home, but it also provides simple, intuitive e-mail and Internet access through a touch-panel screen. Since no keyboard is required, it allows those not familiar with computers to enjoy the benefits of basic IT functions.

Radio tuning is much easier with the "radio card" designed for the CFD-A100TV CD radio cassette player.

Sony's easy-to-use *airboard*

Increased Accessibility of Information for Customers

Since 1992, Sony Marketing (Japan) Inc. has been producing and distributing audio product catalogs on CD to provide visually impaired customers with easy access to product information, including data on product usability. These CD catalogs are designed to allow quick access to this information through a special track-numbering system.

To make the Sony Corporation website easier to use and access, Sony compiled accessibility guidelines in December 2002. These guidelines covered items as specific as the need to design websites so that users can adjust text size to make it easier to read.

CD audio catalogs (issued every four months) give visually impaired customers access to product information.

The Sony Corporation website incorporates user-friendly design features, such as expandable text, without altering the original page design.

For Employees: Employment / Working Practices

Sony's goal is to provide a healthy and safe working environment for all its employees while all applicable national and local employment laws are complied with. A variety of communication channels have been established to support good relationships between employees and managers. Sony is also experimenting with the introduction of personnel systems and employment patterns designed to flexibly cater to different career preferences and lifestyles.

Staff-Management Communication

Close communication between upper-management and other employees at Sony helps upper-management thinking percolate throughout the company while also providing the opportunity for ideas and opinions to influence upper-management decisions in a bottom-up fashion.

Company intranets are an important medium for such communication. At Sony, these channels operate in an open and democratic fashion, allowing employees to submit their opinions and ideas for improvement directly to top management. Intranets and internal publications are used to distribute messages about company policies, news, and strategy from top management to all employees. Periodic meetings of managers and a variety of other communication opportunities supplement these methods.

In its various locations in Europe, where applicable, Sony has established Works Councils where labor-related negotiations are conducted, in line with legislation and labor customs. Since 1995, this system has been supplemented at the European level by another body, the EICC*1, which provides a forum for representatives of Management and employees from each EU-member country to meet and discuss issues. This system ensures that information on employment-, organization-, business- and employee- related issues that is applicable to multiple countries within Europe is shared between the employees and management, and that the opinions of the employees are heard and taken into consideration in major management decisions.

Sony EMCS Corporation Mizunami TEC, a Sony Group subsidiary in Japan, has established its own workplace consultation committee. This meets once a month for a direct exchange of views between managers and employee representatives who are chosen from each part of the workplace. Issues discussed at this forum include workplace environments and welfare.

EICC meeting in Europe

Meeting in progress at Sony EMCS Corporation Mizunami TEC

*1 European Information and Consultation Committee

Personnel Systems Designed Around Career/ Work Diversity

Sony uses a variety of personnel systems and policies designed to stimulate motivation in all employees. Sony Corporation and some Sony group subsidiaries have introduced an "expert system" for specific employees who work in areas such as research, development and design, where it is possible for individuals to organize their work at their own discretion. This system aims to allow such employees to decide how to arrange their time at work for maximal effectiveness in the achievement of specified goals, thereby extracting the most from individual ability and creativity.

The Intranet-based job posting system at Sony Corporation is designed to offer challenges to employees who wish to further develop their careers by finding jobs within the company that they feel best suit their experience and abilities. The system aims to encourage employees to develop their talents and succeed in what they do. Employees who have been in their current position for at least two years are free to apply for any of these positions.

Flexible Working Practices

Various Sony Group companies in the United States have started to introduce flexible working practices. These allow some employees to work from home or at other approved locations, while also giving them flexibility to arrange the days and hours when they work. Typical flex-time working arrangements are approved by management, require set minimum weekly requirements and spell out the days to be spent in the office. Such conditions are subject to approval at annual review meetings, taking into account business conditions and the abilities of each person. Sony believes that such arrangements not only help to boost productivity, but allow it to develop working practices that cater to different lifestyles.

Effect on Employment of Major Restructuring Programs

Amid increasingly fierce competition, Sony was faced with few options but to institute structural reforms necessary to improve business efficiency and enhance its competitiveness. Given the effect on employment, Sony has been supporting employees and retirees most affected by these reforms.

In December 2002, Aiwa was acquired by Sony Corporation. This move has been accompanied by a global restructuring of Aiwa operations, including the closure of certain manufacturing plants and the outsourcing of sales and customer service operations. Recognizing the major impact that such moves would have on employment at Aiwa and its affiliated companies, Sony implemented fair selection procedures to find positions for those who wanted to continue working and provided those taking early retirement with increased severance packages.

Elsewhere, as part of a global restructuring of production systems, Sony decided at the end of March 2003 to close the manufacturing site at PT. Sony Electronics Indonesia. An amicable agreement on severance packages and related issues was settled in May 2003 after negotiations between workers and local management.

For Employees: Human Rights and Equal Opportunities

A fundamental aspect of Sony's policies on employment, recruitment and promotion is that there must be no discrimination against any employee or applicant on the basis of race, religion, color, national origin, age, sex, disability, or other factor unrelated to Sony's business. Sony also prohibits any use of forced or child labor*1.

Human Rights Provisions in Group Code of Conduct

Respect for human rights is a key element of the "Sony Group Code of Conduct" issued in May 2003. Standards under the four general headings listed below provide the basis for human rights-related rules and activities throughout the Group worldwide.

(1) Equal employment opportunities
(2) Prohibition of forced or child labor
(3) Exemplary employment/working conditions
(4) Provision of safe, healthy, efficient work environments free from discrimination

These standards are based on international norms such as the United Nations Declaration on Human Rights and the basic human rights described in the articles of the ILO.

Equal Opportunity Non-Discriminatory Employment

Sony Group companies around the world observe local and national laws on equal opportunities in employment and the prohibition of any associated discrimination.

In Japan, for instance, a fundamental policy on human rights covers all Sony operations. In the year ended March 2003, a cumulative total of over 10,000 employees had attended over 400 seminars on various human rights issues. Sony also maintains hotlines and counseling centers to deal with human rights-related protests, complaints, inquiries and consultations, both from inside and outside the company.

In Europe, equal opportunity employment policies are implemented in all local Sony Group companies. The company has also issued guidelines on combating harassment at work. In the United States, equal opportunity employment policies are also in place across all business sectors, from electronics to movies and music. Each company has issued guidelines to make clear its policy against discrimination.

Sony intends to continue to work towards ensuring the fair and consistent application of equal opportunity and non-discriminatory employment practices across the Sony Group worldwide, based on the "Sony Group Code of Conduct."

Prohibition of Forced and Child Labor

Sony prohibits all forced labor undertaken by children or others made to work against their will, irrespective of the precise form it takes. Sony has also called on all its suppliers worldwide to adopt similar policies (see p.26).

Appreciation of Diversity

Sony does not permit discrimination on the basis of race, religion, color, national origin, age, sex, disability or other factor unrelated to the legitimate business interests of Sony Group. Sony promotes the employment of a broad range of people, with the greatest degree of emphasis placed on the skills and talent of the individual.

In particular, Sony is a keen proponent of making employment opportunities available for disabled people who want to work, so that they can better participate in society. In April 2002, Sony set up a special-purpose subsidiary*2, Sony Hikari Corporation, to provide employment opportunities for mentally challenged people desiring to enter the workforce. Sony Hikari is the second such firm devoted to this purpose, following the establishment of Sony Taiyo Corporation in 1978. Staffed by specially qualified instructors, these firms provide work challenges tailored to individual abilities. As of March 2003, disabled employees accounted for a total of 1.88% of the total workforce of Sony Corporation.

Gender-Neutral Employment

The gender composition of the Sony workforce has been a concern for some time. Improvements over the past decade or so in employment practices and changes in the rules governing issues such as maternity leave and shortened working hours are now translating into a gradual rise in the proportion of women working at managerial levels.

Composition of Sony Corp. Officers and Employees

	March 31, 2002		March 31, 2003	
	Male	Female	Male	Female
Officers	15	0	14	0
Management	4,468	75	4,683	109
Regular employees	8,536	4,011	8,611	3,756
Total	13,019	4,086	13,308	3,865

*1 The term "child" refers to a person younger than 15 years old (or 14 years old where a local law provides for a lower age) or the local legal minimum age for labor, if it is higher. This standard does not apply to work or service of performers or recording artists or that otherwise by its nature is reasonably necessary to be procured from a child, to the extent permitted by local law (for example, a child actor/actress).

*2 Employees working at subsidiaries specially created for the employment of disabled people may be counted as employees of the parent company for the purposes of calculating the proportion of the workforce that is disabled, provided the subsidiary meets certain conditions.

For Employees: Education and Training

Sony's education and training programs aim to develop the skills of employees working in different countries and areas of business. Besides Internet-based on-the-job training programs that aim to improve skills while working, Sony has also developed various unique programs designed to develop the next generation of company leaders.

Sony University: Developing the Next Generation of Leaders

Launched in November 2000, Sony University is an internal educational institution whose main focus is the identification and cultivation of future Sony Group business leaders. The university runs five different varieties of programs at which participants benefit from direct communication with members of Sony's top management, notably Chairman Idei and President Ando. The university also makes use of Internet-based programs, as well as research seminars designed to promote debate.

Sony University

Learning Centers in the U.S.

Employees at Sony Electronics Inc. (the United States) can benefit from the Learning Center, a personnel development and training program based at three separate sites. Learning Center programs cater to a wide variety of needs, from training programs for new recruits to development programs designed for managers and specialist staff. These programs make use of different modes of learning, including online e-learning courses, off-site management training courses, and special strategic development programs for future leaders designed in conjunction with prominent universities.

Sony Electronics Inc.'s Learning Center

Intranet-Based Education and Training Programs in Europe

Sony Europe is making use of an Intranet for personnel-related matters, called sonypeople.com. As of April 2003, this system had over 4,800 regular users. Besides a wide variety of information on internal rules and personnel matters, the sonypeople.com web site features various education and training programs. Through the site, users can easily access education programs designed for each country in Europe, key training personnel, and online learning programs available in different European languages through a special e-learning platform. In addition, to promote educational training and teamwork, the sonypeople.com site also contains the Sony Project Space, where employees may develop projects together online. Participation in these projects is open to all.

Personnel Development Initiatives

In February 2003, Sony EMCS Corporation (the electronics business segment's design, manufacturing and customer service platform) began running global leadership seminars designed to cultivate the next crop of leaders in its manufacturing businesses. Many key middle managers and potential leaders have participated in these seminars, which also provide a valuable opportunity for people to exchange views.

In China, the personnel system adopted at Sony Precision Devices Huizhou Co., Ltd. provides operators with the chance to boost their own career by providing access to a library and computer room where workers can sharpen their computing skills and gain knowledge for their personal enrichment.

For Employees: Occupational Health & Safety

Sony believes strongly in the importance of providing all who work at the company with a safe and healthy working environment. Sony adopted its Global Policy on Occupational Health & Safety (OH&S) in 1998. This sets OH&S reference standards for all Sony sites worldwide to guide management of this issue.

Sony Global Policy on Occupational Health & Safety

The aim of this policy is to bring an integrated global approach to an issue that previously had been handled differently by country and site. The policy designates the health and safety of employees as a critical aspect of business operations and stipulates two specific implementation principles: first, observance of applicable OH&S legislation is a minimum requirement, with actual activities expected to exceed this; second, OH&S management activities must be carried out at all Sony Group sites worldwide based on a Plan, Do, Check, Act (PDCA) cycle.

Application of OH&S Management Systems

Implementation of OH&S management systems (OHSMS) in accordance with the Global Policy on Occupational Health & Safety is overseen by one of the task force committees (OH&S and Environmental Risk Management) established under the Sony Environmental Conservation Committee*[1]. Sony has adopted the OHSMS used in Europe as its global standard for this type of management system. By the end of March 2003, a total of 45 Sony Group sites had received independent OHSMS certification.

OH&S Risk Management Guidelines

Sony has developed OH&S Risk Management Guidelines to standardize the OH&S management methods used at Sony Group sites worldwide. Based on the principles contained in the Sony Environmental Vision and the global OH&S policy, these guidelines provide general OH&S risk management methods designed to aid in the prevention of accidents, injuries or illness in the workplace. The guidelines are also used in OH&S audits at all Sony Group sites. They are therefore a particularly useful

Sony's Global Policy on Occupational Health and Safety

The policy applies to all organizations within the Sony Group companies and organization throughout the world.

<Philosophy>

Sony recognizes that occupational health and safety (OH&S) is an integral part of all business operations. Sony therefore secures a safe and healthy working environment for its employees.

<Policy Aims>

1. To observe all local OH&S-related laws, regulations and agreements, and to establish independent standards to improve management ability of OH&S to practice OH&S activities more than just what the laws require.
2. To establish and maintain an appropriate organizational structure that clearly defines responsibility for promoting OH&S activities in all Sony Group companies and organizations.
3. To perform an OH&S risk assessment to evaluate potential dangers and hazards with a proactive science based analysis in all areas of operation.
4. To respect the voice of employees with the recognition that their health and safety is ensured by good communication between employer and employee.
5. To conduct effective OH&S training to all Sony employees, and to exchange information with outside companies performing services on Sony locations in order to secure OH&S.
6. To undertake internal promotion and information activities to enhance safety awareness.
7. To undertake periodic OH&S audits and endeavor to improve the OH&S management system.
8. To participate in public OH&S activities of both government and the local community.
9. To develop and introduce new methods and technologies for protecting the OH&S of employees.
10. To invest relevant capital in enforcing this policy, and to undertake continuous improvement of the OH&S management system.

OH&S Risk Management Guidelines

Management Responsibility

↓

OH&S Risk Management System

- OH&S Risk Assessment
- OH&S Risk Management
- Emergency Preparedness
- Education, Training and Competency
- Injury Investigations and Recurrence Prevention
- Audits and Monitoring

*1 Please refer to p.43.

tool in countries and regions where relevant legislation has not yet been put into place.

Specific Risk-Reduction Areas

The OH&S Risk Management Guidelines list specific areas, such as management of chemical substances, ergonomics, and the use of personal protective equipment, where risk management measures can help to prevent accidents and injuries from occurring during daily work activities.

Ergonomics, for example, involves the management of aspects of work and workplace environments in such a way as to reduce the risk of harm to employees (see right).

The guidelines apply to all Sony Group companies around the world and are designed to lower the risks associated with individual daily work activities.

Lower Incident Rate in Injury Statistics

The establishment of OH&S guidelines and management systems has resulted in an incident rate for workplace injuries that is low relative to other Japanese companies. Regrettably, however, there were two fatal accidents during the year ended March 31, 2003, one at Sony Music Entertainment (USA), and the other at Sony DADC (Austria AG). Risk-reduction measures continue to be implemented to ensure that these kinds of accidents do not recur.

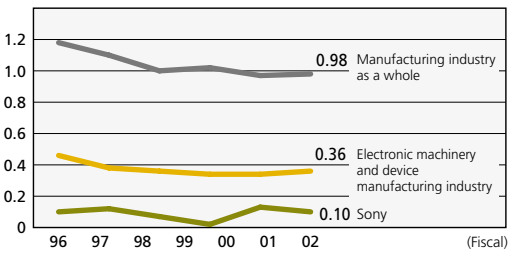
OH&S Risk Management Guidelines

1. Management of hazardous substances, radiation, noise and vibration.
2. Machine safety
3. Ergonomics
4. Housekeeping
5. Personal Protective Equipment (PPE)
6. Control of hazardous energy
7. Forklift safety

Ergonomic Risk Factors

- Awkward working postures
- Tasks requiring excessive use of force
- Repetitive tasks
- Stress caused by machine proximity
- Vibration in arms and hands
- Handling stationary heavy objects
- Extremes of heat or cold

Workplace Injury Statistics for Japan



The rate of incidence indicates the frequency of injuries sustained for every 1 million hours of actual labor.
Rate of incidence = number of cases of injuries requiring more than four days of missed work / actual number of hours worked X 1,000,000

OH&S Award for Sony Group Company in Thailand

In May 2002, Sony Semiconductor (Thailand) Co., Ltd. (SCT) received an award from the prime minister of Thailand in recognition of the excellence of the OHSMS developed and implemented at the company. This award is presented to companies that have made outstanding achievements in the fields of environmental protection, product quality and OH&S. The employees of SCT played an important proactive role in maintaining workplace safety, while local managers organized related meetings and participated in audits. SCT also worked to raise awareness of health and safety issues outside work.

Presentation of award to Sony Semiconductor (Thailand) by Prime Minister Thaksin Shinawatra

Management of Supplier Relationships

Creating greater value in the products and services that Sony provides to customers is not just a matter of increased efforts by Sony. Suppliers also play an invaluable role in achieving this goal, even in the environmental and social aspects of the process. Besides improvements in product quality, Sony requires all its suppliers to be serious about the reduction of environmental impact and the observance of related laws and regulations.

Sony Procurement Policy

Sony expects its suppliers to have high technical capabilities and a sound financial base, and to introduce environmental management systems. In particular, Sony requires that its suppliers observe all relevant laws, as well as rules and standards stipulated by Sony. If a supplier were found to be in violation of either labor laws (such as those governing child or forced labor) or environmental legislation, Sony would demand that improvements be made at once. Sony would be prepared to cease trading with a particular supplier if such improvements proved insufficient or were not forthcoming.

The specifics of Sony's procurement policy in terms of required supplier capabilities are summed up as "eQCDSE" where:

- **e** = e-commerce capability
- **Q** = ability to continuously supply items that consistently meet quality standards
- **C** = ability to supply cost-competitive items
- **D** = ability to deliver items on time and in the required quantities
- **S** = ability to meet expectations for the provision of a broad range of services
- **E** = ability to undertake initiatives that reduce the environmental impact of items

The eQCDSE total is then evaluated in terms of future value. Emphasis is thus not merely placed on past performance and current results, but on management policies and activities that underscore future competitive strength.

Support for Compliance Measures

Sony has established a number of systems designed to support compliance measures undertaken by suppliers and to share necessary information. One example of this in the year ended March 2003 was a new eco-procurement initiative (see p.51 for details on the Green Partner Environmental Quality Approval Program). Sony also organizes a number of regular events to deepen ties with suppliers and to share information: examples include conferences, the Green Partners Environmental exhibition, and an annual parts and technology exhibit.

Poster from an event featuring environmental exhibits by suppliers

Fair and Transparent Business Practices in Purchasing

Sony makes great efforts to treat its suppliers fairly and equally in accordance with all applicable laws and regulations. In Sony Corporation, personnel engaged in purchasing are forbidden from developing any personal relationships with suppliers and business partners that could lead to a potential conflict of interest. In Sony Corporation, such personnel receive training to ensure that it can maintain fair and transparent business practices in its purchasing transactions.

For the Community: Corporate Citizenship

Ever since its establishment Sony has been involved in educational programs and other activities that support the growth of the next generation. Amid a growing emphasis on the importance of the links between companies and society, Sony aims to build better relationships with communities as a good corporate citizen.

Corporate Citizenship Activities

In the Founding Prospectus, Sony founders Masaru Ibuka and Akio Morita described the enhancement of scientific literacy among the Japanese people as one of the missions of the new company. Their passion for promoting science education reflected their belief that this kind of educational focus was a critical part of rebuilding Japanese society in the aftermath of World War II. Sony established a science education program to support education for excellence in science in elementary and junior high schools in 1959. Today, the Sony Foundation for Education, established in 1972, carries on this work. During his lifetime, Mr. Morita was always a keen advocate of the importance of maintaining a global perspective and the promotion of better international relations. Under his leadership, Sony instituted various international exchange programs, including Sony Student Project Abroad (SSPA), a decade-long program that invited high school students from the USA to Japan. Continuing these traditions, Sony's current honorary chairman, Norio Ohga, is closely involved with Sony Music Foundation activities.

Through these and other activities, Sony is supporting the growth of the next generation as a good corporate citizen.

Masaru Ibuka (left) pictured at the inaugural gift-giving ceremony sponsored by the Sony Science Education Promotion Program.

Akio Morita (second from right) pictured with a group of SSPA participants.

Norio Ohga, at the International Oboe Competition

Promotion of Local Community Initiatives

The Sony Group has operations located all around the world. Sony community initiatives take place in many different parts of the world, and are therefore highly varied in terms of focus and activity, depending on the social, cultural and historical context. Sony embraces such diversity and encourages activities closely tailored to the particular needs of local communities. In addition, Sony has instituted internal programs such as the Matching Gift Program*1 to encourage employee participation in local community activities by employees.

Social Contribution Activities and Systems

Senior management determines the basic policies relating to Sony's social contribution activities. Reports on these activities from around the world are compiled and reported to management to inform these discussions.

The emphasis of these activities is on fostering closer relationships between Sony operations around the world and local communities by making good use of Sony's resources, such as technology and knowledge. Activities range from support for science, culture and the arts to participation by employees in local community projects. One program of particular note is SOMEONE NEEDS YOU (or Sony for short)*2, which aims to promote voluntary participation by employees in projects globally.

*1 Under this system, Sony makes matching contributions to non-profit organizations and charities to which employees have made donations.
*2 Please refer to pp.30-31 for details.

For the Community: Fostering the Future

Sony undertakes numerous activities around the world that help to foster the growth of the future generation in many different communities. Among these are programs designed to inspire an interest in science among children; programs that enable youth to develop their potential; and programs that support youth in developing specialized skills.

Science Education Programs

Product Disassembly Workshops (Japan)

There is an anecdote that, as a child, founder Masaru Ibuka took apart relatives' watches to see if he could put them together again, much to the owners' chagrin. In a similar spirit, since 2001, Sony has organized product disassembly workshops for parents and their children. Held in the Setagaya area of Tokyo, these workshops aim to build on the fun involved in such activities to cultivate within children an interest in the art of making things, and to allow them to meet professionals involved in the creation of the products. Sony provides products used at the workshop and engineers volunteer at the workshops to help the children take apart products supplied by the company.

Parents and children take apart products at this Sony workshop, aided by volunteer employees.

Sony Creative Science Award (Singapore)

Since 1998, Sony in Singapore has been organizing competitions for elementary school children to design toys based on scientific principles. These contests, which aim to foster creativity in children, attract close to 2,000 entries annually. Winners of the latest competition visited China as part of a special exchange program with Sony ExploraScience (Beijing).

Sony also organizes scientific education programs in other parts of Asia, including China, South Korea and Malaysia.

Sony Foundation for Education (Japan)

The Sony Foundation for Education works to foster creative and enquiring minds through science, aiming to promote education as a positive force for changing the world and inspiring people with a new spirit of challenge. The foundation supports a number of educational programs. These target different groups: elementary and junior high school children (The Sony Science Education Program for Children); those who teach science to children (The Sony Science Teachers Association); and children between the ages of 3 and 5 (The Sony Preschool Education Program). In addition, the Early Development Activity Center organizes activities designed to strengthen the bonds between parents and children.

This sponsored school project teaches children about the creatures living in rivers.

URL http://www.sony-ef.or.jp/

Youth Development Programs

Sony Marketing Student Volunteer Fund (Japan)

Established by Sony Marketing (Japan) Inc. in 2001, this fund aims to cultivate leadership in university students through voluntary participation in community activities. In 2002, the program attracted applications from over 100 student groups around Japan, and 20 groups won the funds for their activity. Each group submits a report and shares its experiences with other student groups at the share meeting at the end of the program.

Sony Australia Foundation (Australia)

Sony Australia Foundation was established as a non-profit charitable organization in 1991 to support youth education and development programs. Its activities include programs for young people with terminal illnesses, as well as scholarship programs across six fields

(including science and technology, music and economics) that target high school students. In the year ended March 2003, the foundation organized a camp for young people to experience moviemaking, at which a number of Sony employees helped as volunteers.

URL http://www.sonyfoundation.org.au/

Star Class Scholarship Program (USA)

Sony Electronics has been supporting this university scholarship program for high school students in the United States every year since 1991. These scholarships are awarded to four students each year based on a combination of good academic performance during the final two high school years and voluntary community activities.

Sony also awards university scholarships in other countries, including China (for science and technical subjects) and Canada (Sony of Canada Science Scholarship Foundation).

Sony Music Foundation (Japan)

Established in 1984, the Sony Music Foundation promotes international exchanges, supports up-and-coming artists, and organizes concerts, competitions and other activities to promote classical music, opera and dance in Japan. For example, the foundation sponsors nationwide exchange programs and competitions for the benefit of amateur college orchestras, and organizes special concerts for children.

URL http://www.smf.or.jp/

Local Community Programs

Employee Involvement in Local Communities (USA)

Healthy robust communities create opportunities that allow their residents to live deeper, richer lives. In the United States, Sony Corporation of America and all of its operating companies support a wide variety of programs that enhance the quality of life in local communities.

In 1992, Sony Electronics established the Community Involvement Award (CIA) to recognize contributions made by employees to local community organizations. Each year, five employees are chosen to receive this award by an independent external panel of judges based on the number of hours they volunteer to an organization, their position in the organization, and the number of years they have worked within that organization. The organizations with which these award recipients are involved also receive a donation from Sony Electronics.

Employees from Sony Music Entertainment regularly donate their time to a non-profit organizations' mentoring program. For the past six years Sony Music employees have participated in this educational, vocational and cultural activity program, which runs during the school year, and creates one-to-one relationships by matching employee volunteers with youth aged 12 through 15 from a local school or community center.

Sony employees take part in volunteer community activities.

In 1993, in conjunction with a non-profit organization based in Los Angeles, Sony Pictures Entertainment Inc. established the Sony Pictures Urban Green Fund to support tree-planting programs in southern California. Since 1993, company employees have participated in more than 25 major tree plantings in the region.

Sony employees involved in tree-planting activities.

Emergency Humanitarian Assistance

Supporting Measures to Combat SARS

Asia has been especially hard hit by the global outbreak of severe acute respiratory syndrome, or SARS. Sony has provided medicines and other material assistance to China, Hong Kong and Taiwan, the regions most affected by the disease, in addition to monetary donations and other forms of support.

For the Community: The SOMEONE NEEDS YOU Program

The SOMEONE NEEDS YOU program is a global volunteer program for Sony employees and includes a wide variety of voluntary activities designed to enrich the relationships of Sony companies with local communities in many countries. In the year ended March 2003, approximately 11,000 Sony employees participated in activities in 22 countries around the world.

Berlin, Germany

Sony employees visited a clinic for disabled children in northern Berlin. The employees did serious gardening and painting to repair the playground at the clinic. They also organized a workshop for the children that featured digital cameras, AIBO and music.

Visit to clinic for disabled children

Tree planting

Beijing, China

Tree-planting programs have become more prevalent in Beijing in recent years to combat encroaching desertification. A total of 111 Sony employees participated in various related programs. In addition, local clean-up programs were organized in various parts of China.

Bangkok, Thailand

Around 200 employees visited a care institution for the elderly on the outskirts of Bangkok. Besides enjoying singing, dancing and other recreational activities with the residents, the employees donated gifts, including clothes, medicine and stationery.

Visit to care institution for the elderly

URL For other examples from the SOMEONE NEEDS YOU program, visit the website at http://www.sony.net/eco/book/

Park facilities maintenance

Sendai, Japan

A group of around 300 people, including Sony employees and their friends and family, helped to clean up beaches and stretches of seashore while also completing a survey about the status of litter found at these sites. This formed part of an international campaign organized by an American environmental protection group to survey the global status of trash left in public areas, while also trying to combat this problem.

International beach clean-up activities

New York, USA

A total of 130 employees in partnership with a local organization undertook environmental facility maintenance work in Central Park. As well as repainting benches and fences, teams of employees planted flowers and shrubs.

Miami, USA

A total of 21 Sony employees participated in the project organized by a non-profit organization. The aim of the project was to build affordable housing for low-income families. Sony employees took part with other volunteers and the families in the construction process.

Construction of housing for low-income families

Sony and the Global Environment

Sony Environmental Vision

Sony recognizes that conservation of the global environment is one of the greatest tasks facing humanity in the 21st century.

Sony intends to contribute positively to conservation of the natural environment and the dreams of future generations.

Sony recognizes the utmost importance of a healthy global environment, and has made sustainable development the Group's top business priority. This entails utilizing Sony's environmental resources in a manner that will also allow future generations to achieve their potential in health, wealth and happiness.

Sony aims to show that it is possible to achieve a new balance between humankind and nature by doing more with less, reducing the environmental impact from its use of energy and resources while providing its customers with high-quality, high-performance products and services.

Sony employees will be encouraged to study constantly to learn about a broad variety of environmental issues. Sony will also cooperate with stakeholders in a joint quest to improve the world that we share.

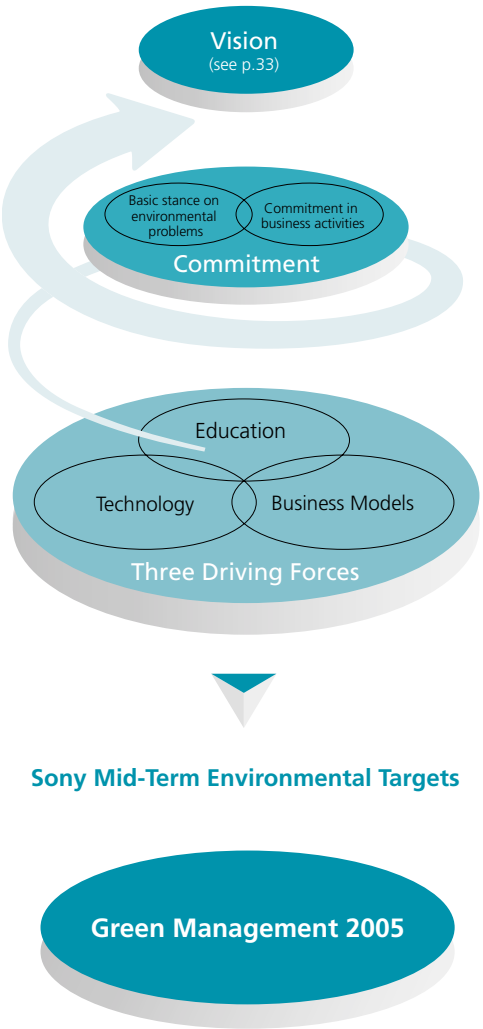
Excerpt from the Sony Environmental Vision

* The Sony Environmental Vision is an extension of Sony's environmental policy formulated in 1993.

Sony Environmental Vision

The Sony Environmental Vision was formulated in October 2000 to establish principles for environmental management activities throughout the Sony Group worldwide. Its constituent elements are vision, commitment, and driving forces. Sony's fundamental aim is the creation of a sustainable society built on continual improvements in eco-efficiency*[1].

Sony Environmental Vision



Sony Mid-Term Environmental Targets

Green Management 2005

Basic Stance on Environmental Issues

Sony's basic stance on key global environmental issues is summarized below.

- Climate Change
  Sony is working to help prevent global warming and other aspects of climate change that could possibly result from its business activities.

- Natural Resources
  Sony is promoting a continuous increase of resource productivity in its business process and the reduced use of virgin materials, energy and water whenever possible. Sony will thus promote the reuse and recycling of resources.

- Chemical Substances
  Sony is committed to the progressive and continuous reduction and, whenever possible, the phasing out of hazardous materials and chemicals in its business process.

- Natural Environment
  The biodiversity of the Earth must be maintained, and Sony actively supports protecting the biodiversity of the world's forests and oceans.

*1 Eco-efficiency equals sales divided by environmental impact. (See p. 38 for more on eco-efficiency)

Commitment in Business Activities

Sony is committed to reducing its environmental impact through the following initiatives.

1. Corporate Citizenship
Individual Sony employees will enhance their knowledge of environmental issues and act responsibly with respect to society.

2. Business Planning
Sony will continually encourage the development of innovative business models that can help to reduce environmental impact.

3. Research and Development
Sony will make ongoing efforts to develop new and original technologies that contribute to conservation of the environment.

4. Product Design
Sony will aim to apply "cradle-to-cradle" design principles in all its products and services in order to minimize impact on the environment.

5. Manufacturing Processes and Site Management
Sony will continuously improve environmental management systems at both manufacturing and non-manufacturing sites.

6. Distribution, Sales, Marketing and Aftersales Service
Sony strives to minimize the environmental impact of product packaging and business activities such as distribution and sales. Whenever possible, Sony provides environmental information to customers.

7. Post-use Resource Management
Sony will vigorously promote product collection, reuse and recycling, together with the application of resources recycled from post-use products to new uses.

8. Information Disclosure and Stakeholder Communication
Sony will continually provide fast and accurate disclosure of environmental information while maintaining a dialogue on environmental issues with all stakeholders.

9. Risk Management System and Occupational Health and Safety Management
Sony will apply rigorous risk management systems worldwide and maintain communication concerning risks with its stakeholders. Sony will also work to ensure safe and healthy working environments for all employees.

Three Driving Forces

Sony has designated the three driving forces of Technology, Education and Business Models to promote its Vision and follow through on its Commitment. These forces mutually reinforce each other, helping to drive progress in reducing environmental impact.

Sony Mid-Term Environmental Targets (Green Management 2005)

In March 2001, to outline a path toward the achievement of the Sony Environmental Vision, Sony formulated its Mid-Term Environmental Action Program, Green Management 2005. This established specific quantitative targets for the period to 2005. In July 2003, Sony revised this program to set more practical mid-term environmental goals.

Overview of Sony's Environmental Impact

Sony's business activities have an impact on the environment in various ways. Consumption of energy and resources is one example. This overview looks at Sony's environmental footprint from the perspective of product life cycles. Sony is undertaking numerous activities based on the Sony Environmental Vision to reduce its impact on the environment.

Understanding Environmental Impact Based on Product Life Cycles

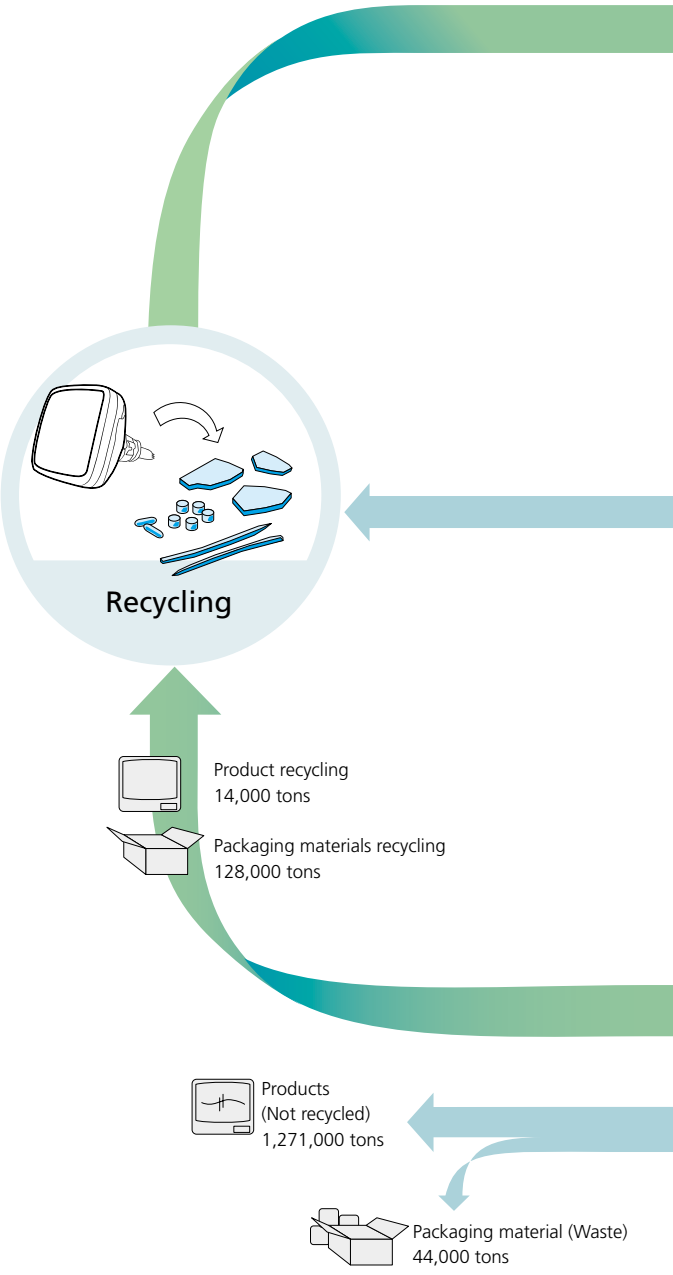
Sony purchases resources as materials and components and converts them into products at Sony sites through manufacturing processes using energy, water and chemical substances. A certain volume of waste is generated in the course of this process. The use of Sony products and services also consumes energy. By consuming energy and resources, Sony's business activities have an impact on the natural environment.

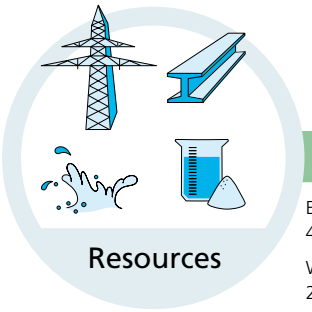
The aim of the overview is to look at the overall environmental impact of Sony's operations around the world. The focus has expanded to include the entire life cycle of products, encompassing the energy Sony products consume once they are in the hands of customers and the extent of recycling and waste disposal and energy and resources consumed through such business activities.

This overview looks at forms of environmental impact in the year ended March 2003 that Sony can recognize and manage directly. It is important to remember that Sony's business activities impact the environment in ways not covered in this report. For example, the manufacture of components and materials, recycling of end-of-use products and distribution processes place an additional burden on the environment.

Based on the principles set forth in the Sony Environmental Vision, Sony continues to implement various measures designed to reduce environmental impact, such as the formulation of new mid-term environmental targets contained in Green Management 2005.

For detailed figures, please refer to pp. 69–71.





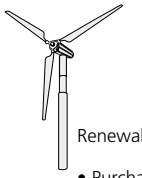
Resources

Energy*1
42,000 TJ

Water
26,390,000 m3

Chemical substances*2
165,000 tons

Other resources*3
1,680,000 tons
(including 120,000 tons of recycled resources and 6 tons of renewable materials*4)



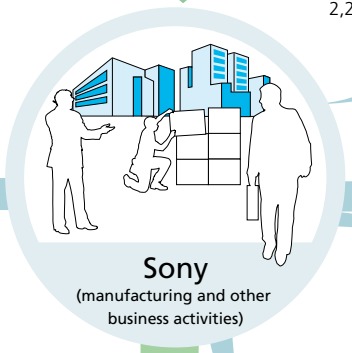
Renewable energy

- Purchased via deeds, other 63 TJ
- Self-produced 1 TJ

Greenhouse gases
(CO_2 equivalent)
2,214,000 ton-CO_2

Recycled/reduced waste from sites
187,000 tons

Recovered and recycled chemical substances
105,000 tons



Sony
(manufacturing and other business activities)

Waste from sites
(Disposal)
37,000 tons

Chemical substances
(Release and transfer)
9,000 tons

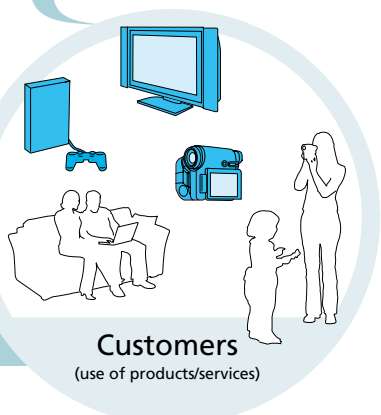
CO_2 emissions from energy use
15,300,000 ton-CO_2

Energy consumed
by products and services
276,000 TJ

CO_2 emissions from
product delivery*5
1,536,000 ton-CO_2

Products
1,285,000 tons

Packaging materials
172,000 tons



Customers
(use of products/services)

*1 Calculated based on the total amount of electricity, gas, oil and vehicle fuel used at sites.
*2 Total amount of class 2 through class 4 substances handled (see p.65).
*3 Total of amounts based on product weight and waste from sites.
*4 Total amount of vegetable-based plastics used.
*5 Calculated based on total transport weight and distance transported.

Eco-Efficiency

Eco-efficiency is the numerical indicator that Sony uses as a gauge of the degree of environmental impact caused relative to the scale of its business activities. Sony has established five indices to provide a quantitative assessment of the environmental problems associated with these business activities. The goal is to raise eco-efficiency in each of these five areas.

What is Eco-Efficiency?

Eco-efficiency is an expression of Sony's commitment to striking a more harmonious balance between ecological and economic demands, based on concepts such as those proposed by the World Business Council for Sustainable Development (WBCSD*[1]). Eco-efficiency rises if environmental impact falls as the scale of business activities expands.

Eco-efficiency is defined by the equation on the right, and Sony has set numerical performance targets for the specific environmental activities undertaken throughout the company, all of which are subject to periodic objective evaluation.

$$\text{Eco-efficiency} = \frac{\text{Sales}}{\text{Environmental impact (Environmental Index)}}$$

Five Environmental Indices

Based on careful consideration of the life cycle of its business activities, Sony has established its own unique set of five environmental indices. These are based on those aspects of operations that Sony can identify and improve internally. The indices provide quantitative measurements of environmental impact, with lower numerical values signifying reduced levels of impact. Eco-efficiency factors can be calculated for each index separately (the results are shown from p. 39 onwards).

Besides the goal of raising eco-efficiency, Sony's mid-term environmental targets, Green Management 2005 also contains detailed numerical targets related to each of these indices.

1 Greenhouse gas index (unit: ton-CO_2)

Total CO_2 emissions from Sony sites + Total CO_2 emissions from product use − Greenhouse gas offset contribution

2 Resource input index (unit: tons)

Total resource consumption − Total recycled material used − Total renewable materials used

3 Resource output index (unit: tons)

Waste from Sony sites sent to landfill + Total volume of products shipped (ex-factory) − Collected products

4 Water index (unit: m^3)

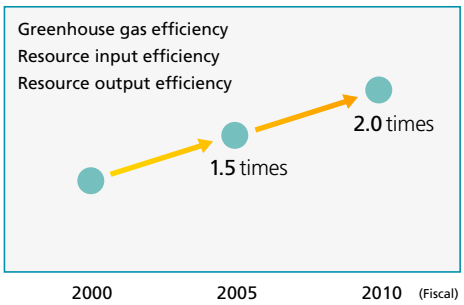
Water purchased from water suppliers + Groundwater used − Water conservation contribution

5 Chemical substances index (unit: tons)

Released into air, water and soil + Waste transfer volume + Chemical substances in products sold − Chemical substances in products collected

Specific Targets Within Sony Mid-Term Environmental Targets

By the years ending March 2006 and 2011, respectively, Sony aims to raise eco-efficiency with respect to greenhouse gases, resource input and resource output by 1.5 and 2.0 times, compared with those levels achieved in the year ended March 2001. Sony has set numerical targets related to its products and business activities. Steady progress continues to be made towards these goals.



*1 Consisting of over 160 multinational corporations from around the world, the mission of the WBCSD provides business leadership as a catalyst for change toward sustainable development. Sony has been a member of the WBCSD since its establishment.

Eco-Efficiency in the Year Ended March 31, 2003

Eco-efficiency levels achieved by Sony in the year ended March 2003 and in previous years are shown on the accompanying charts. While resource input and output efficiency showed slight improvement, further efforts are still required to raise greenhouse gas efficiency in order to achieve targets set out in Green Management 2005.

Greenhouse Gas Efficiency: 1.05 Times

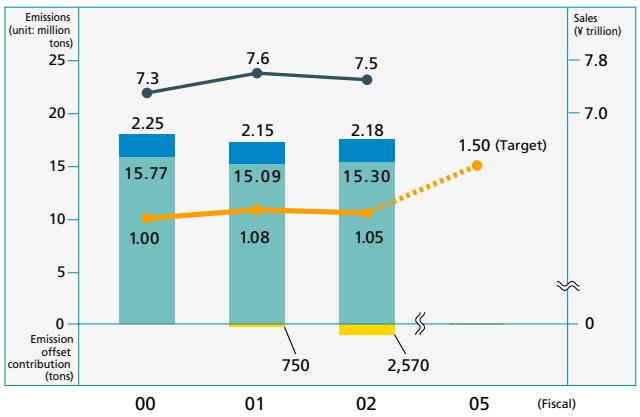
Total greenhouse gas emissions in the year ended March 2003 were calculated as 2.18 million tons*1 due to activities such as energy consumption at business sites and 15.3 million tons due to emissions from product use. Helping to offset this, contributions from emission reduction activities such as electric power generation from renewable energy sources totaled 2, 570 tons.

As a result, the greenhouse gas index for the year was 17.48 million ton-CO_2, generating a greenhouse gas efficiency of 1.05 times, compared to the year ended March 2001. Despite ongoing progress in reducing greenhouse gas emissions from most business sites, a slight increase was noted in emissions from semiconductor and liquid crystal manufacturing sites. At the product use stage, higher shipments of televisions, which are the main source of greenhouse gas emissions, and home videogame consoles, which continued to sell extremely well, also pushed overall emissions higher.

Please refer to pp. 70-71 for more data and explanations of calculation methods.

Eco-efficiency in FY02 (Greenhouse gases)
↓
1.05 times
(compared with FY00)

$$\left[\frac{\text{FY02 calculations}\quad ¥7.5\text{ trillion}}{15.3\text{ million tons} + 2.18\text{ million tons} - 2{,}570\text{ tons}}\right]$$



- Sales and operating revenue (¥ trillion)
- Eco-efficiency (times)
- CO_2 emissions from business sites (unit: million tons)
- CO_2 emissions from product use (unit: million tons)
- Emission offset contribution (unit: tons)

*1 CO_2 emissions from vehicle fuel use not included, as no emissions figures existed when eco-efficiency was compiled in fiscal 2000.

Resource Input Efficiency: 1.18 times

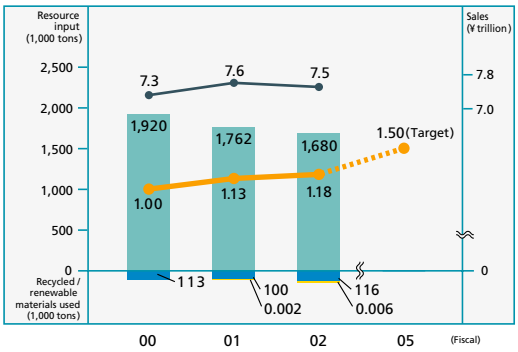
The total volume of materials used by Sony in the year ended March 2003 was 1.68 million tons, including a total volume of 120,000 tons in recycled materials and 6 tons of renewable, vegetable-based plastics. This resulted in a resource input index of 1.56 million tons and eco-efficiency of 1.18 times, compared to the year ended March 2001. This modest improvement is largely attributed to greater resource-saving features incorporated into computer monitors and recording media.

*Please refer to pp. 70-71 for more data and explanations of calculation methods.

Eco-efficiency in FY02
(Resource input)
↓
1.18 times
(compared with FY00)

FY02 calculations

$$\frac{\text{¥7.5 trillion}}{\text{1.68 million tons} - \text{120,000 tons} - \text{6 tons}}$$



- Sales and operating revenue (¥ trillion)
- Eco-efficiency (times)
- Total volume of materials used (unit: 1,000 tons)
- Total volume of recycled materials (unit: 1,000 tons)
- Total volume of renewable resources used (unit: 1,000 tons)

Resource Output Efficiency: 1.18 times

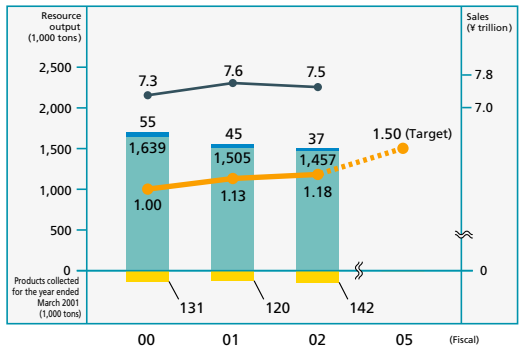
The total volume of product packaging produced by Sony in the year ended March 2003 was 1.46 million tons. Of the waste generated by business sites, 37,000 tons was deemed non-recyclable and marked for disposal. Post-consumer use products collected and recycled amounted to 142,000 tons. This resulted in a resource output index of 1.35 million tons and eco-efficiency of 1.18 times, compared to the year ended March 2001. Increased collection and recycling of home appliances in Japan and of Sony products in the U.S. are credited for this slight improvement.

*Please refer to pp. 70-71 for more data and explanations of calculation methods.

Eco-efficiency in FY02
(Resource output)
↓
1.18 times
(compared with FY00)

FY02 calculations

$$\frac{\text{¥7.5 trillion}}{\text{37,000 tons} + \text{1.46 million tons} - \text{142,000 tons}}$$



- Sales and operating revenue (¥ trillion)
- Eco-efficiency (times)
- Waste from business sites (unit: 1,000 tons)
- Total volume of products produced (unit: 1,000 tons)
- Total volume of products collected (unit: 1,000 tons)

In contrast to the year ended March 2001, eco-efficiency for water in the year ended March 2003 was 1.11 times. For chemical substances, eco-efficiency for volatile organic compounds (VOCs), the most common class of chemicals used by Sony, was 1.41 times.

Environmental Accounting

Environmental accounting was used to determine the cost of environmental conservation measures implemented during the year ended March 2003 and to calculate the year-on-year reduction in environmental impact achieved. Quantification of the effects achieved provides an evaluation of activities undertaken in the year under review and allows plans for future years to be adjusted accordingly.

Environmental Conservation Costs in Fiscal 2002 (Fiscal 2001 figures in parentheses)

(¥ million)

Category	Investment		Expenses		Main Activities
Product design Product recycling cost	717	(46)	2,903	(1,871)	Design of environmentally conscious products
	0	(0)	37	(45)*1	Collection and recycling of discarded home electronics goods, packaging materials and batteries
Production and service activities cost	1,885	(2,250)	5,549	(5,129)	Pollution prevention (Maintenance of environmental facilities, environmental research etc.)
	1,245	(1,601)	4,460	(5,223)	For reducing environmental impact (Energy conservation, resource conservation, chemical management etc.)
	77	(3)	302	(83)	Green purchasing
Administrative costs	667	(205)	5,558	(5,192)	For environmental promotion organizations within Sony, and building and maintaining environmental management systems
R&D costs	0	(62)	1,768	(1,637)	R&D focused on products and manufacturing technologies designed to reduce environmental impact
Communication and community relations activities	89	(14)	203	(246)	For site environmental reports and greenification as well as other community activities for environmental conservation
Environmental remediation costs	1	(6)	35	(7,101)	For cleanup of soil contamination and other forms of environmental damage
Total	**4,681**	**(4,187)**	**20,815**	**(26,527)**	

Environmental Conservation Costs

Environmental conservation costs in the year ended March 31, 2003 were split between capital investment totaling ¥4.7 billion (an increase of ¥0.5 billion compared with the figure for the previous year of ¥4.2 billion) and expenses of ¥20.8 billion (a decrease of nearly ¥5.7 billion compared with the figure for the previous year of ¥26.5 billion). A notable decrease was recorded in the cost for environmental remediation, which decreased from ¥7.1 billion in the year ended March 31, 2002 to ¥35 million. As a result of consistent measures to prevent the recurrence of problems surrounding certain chemicals used in Sony products, Sony realized reductions in costs at the environmental remediation phase from the year ended March 2002 to the year ended March 2003. In line with its commitment to avoiding future problems of this nature, Sony made capital investments for infrastructure associated with lead-free solder, purchased equipment for analyzing chemical substances, and incurred costs for Green Partner Environmental Quality Approval Programs. These actions led to higher costs related to product design, green procurement and management activities.

Environmental Conservation Effects

In the year ended March 31, 2003, greenhouse gas emissions (CO_2 equivalent) increased by 420,000 tons year-on-year from product use and by 50,000 tons from emissions related to production and service activities. In terms of resources, the total amount consumed in products and production declined by approximately 50,000 tons, with waste from business sites down nearly 7,000 tons. Water consumption rose by approximately 410,000 m^3, while the use of chemical substances marked for reduction or elimination decreased by almost 2,900 tons. Separately, the category "environmental risk," included as part of data presented in the previous year, has been excluded for the year ended March 2003 due to difficulties in accurately calculating the figure. Total environmental conservation effects for the year totaled approximately ¥10.4 billion on a monetary conversion basis.

* Please refer to pp.70-71 for more data and explanations of calculation methods.

*1 Due to insufficient accuracy, recycling costs for Europe in fiscal 2001 were omitted from calculations.

URL Please refer to the Sony CSR website for a full explanation of environmental conservation costs and effects.
http://www.sony.net/eco/book/

Progress Report on Mid-Term Environmental Targets, Green Management 2005

To outline a path toward achievement of the Sony Environmental Vision, Sony formulated the Mid-Term Environmental Targets, Green Management 2005 plan. This sets individualized targets for both business activities and products. Below is an overview of progress made by the end of March 2003, with more detailed information on each target found on the pages in related-articles.

Environmentally Conscious Products

In the year ended March 2003, the management processes applicable to the chemical substances contained in products provided one major focus. Sony established a new management system for these chemicals, in the process revising management policies and standards. Sony also sought the cooperation of all its suppliers in the effective upstream management of this issue at the raw material and component stages through the introduction of the Green Partner Environmental Quality Approval Program (pp.50-51). Sony was able to progress in digitization for its audio system amplifiers, as well as in improving the energy-saving design for its televisions sold in Japan. Despite such efforts, increased production and other factors led to product-related CO_2 emissions in the year ended March 2003 totaling approximately 15.3 million tons, with emissions due to products and packaging materials reaching 1,457 thousand tons. This resulted in a year-on-year increase in CO_2 emissions of 210,000 tons, while resource consumption declined by 50,000 tons (p.47). Further progress was made in the development of vegetable-based plastics (p.55), a new type of renewable material. Walkman models and other products using this material were launched. In Europe, Sony joined forces with three other leading manufacturers to establish a pan-European recycling platform. This initiative will help Sony prepare more efficiently with the WEEE (Waste Electrical and Electronic Equipment) Directive (p.57).

This Walkman makes use of vegetable-based plastic.

Environmentally Conscious Business Activities

Total CO_2 emissions related to business activities at Sony manufacturing sites and offices amounted to approximately 2,214 thousand tons in the year ended March 2003. Starting operation at semiconductor plant in the year ended March 2002 relative to the previous year was one source of higher emissions. Per unit of sales, emissions were flat compared with the year ended March 2001. Sony aims to continue to raise output efficiency through the more efficient operation of existing facilities. Other ongoing efforts to prevent global warming include reductions in greenhouse gas emissions from production processes and the increased use of renewable energy through the purchase of power under the Green Power Certification System in Japan (pp.60-62). Sony has achieved significant reductions in total waste generation through revision of various internal processes (pp.63-64). Use of chemical substances is also on the decline, with reductions in the use of Class 2 and Class 3 substances. Use of Class 4 substances rose in the year ended March 2003 due to changes in data-gathering methods. Finally, Sony revised the environmental risk management guideline to prevent the occurrence of on-site environmental incidents (pp.65-66).

Environmental Management

The year ended March 2003 involved a revision of Sony Group rules on environmental management, including adjustments to the Green Management 2005 (pp.43-44). Each region organizes its own green procurement program, such as extending the purchase information system to cover green procurement activities with non-production materials such as office supplies as well as production materials. A total of nine pre-construction site assessments at locations in Japan, China, Thailand and Malaysia were carried out in accordance with the Environmental Guideline, Construction Edition, which ensure that all environmental considerations have been taken into account prior to site development. Meanwhile, June 2002 was designated as Environment Month within the Sony Group. Many different events took place at Sony sites to raise environmental awareness among employees, to promote relations with local communities, and to undertake specific conservation projects (p.46). Sony is actively disclosing information on its various environmental activities through channels such as the Internet and social & environmental reports. In addition, the Sony Eco Plaza (p.18) is a permanent exhibition about the environment.

Environment Month exhibition at Sony EMCS Corporation, Nagano TEC

Environmentally Responsible Management

Sony regards the environment as one of the main elements that governs the management of the Sony Group. Sony has enhanced its environmental management systems, both to strengthen environmental policy planning capabilities and to ensure the comprehensive implementation of such policies around the world.

Sony Group Environmental Management

Environmental management practices at Sony are based on the rationale of the PDCA (Plan–Do–Check–Act) cycle. Each business division, subsidiary and affiliate within the Sony Group conducts environmental management activities in line with established Group rules and mid-term targets. The Group headquarters monitors compliance and performance status using environmental audits and evaluation, the results of which are used by management to modify policy as necessary.

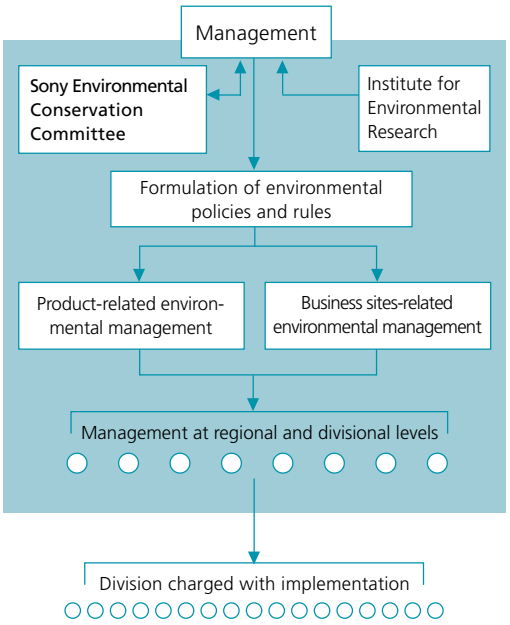
Improved Environmental Focus

Sony enterprises span a variety of fields and are global in nature. Sony has recently modified its environmental management structures to ensure that environment-related activities are deeply ingrained throughout its business.

The sources of environmental impact within the Group can be divided between products and business site activities. Separate departments based at the Group headquarters apply specialist expertise to implement the most effective management methods to tackle these two causes of environmental impact. The "products" department manages the environmental aspects of product life cycles, from procurement and design to after-sales services. The "business site activities" department focuses on the management of environmental issues common to all business sites, such as disaster prevention and occupational health and safety.

At the local operational level, other departments have been established to oversee environmental management activities by region and business area. The Sony Environmental Conservation Committee continues to provide a forum at which managers from different parts of the Sony Group can meet to discuss environmental issues.

Sony has also established the Institute for Environmental Research to coordinate the details of its environmental vision over the medium to long term.



Regional-Level Environmental Management

Five regional environmental conservation committees (Japan, Europe, Americas, Asia, and China) have been established under the Sony Environmental Conservation Committee to oversee environmental activities throughout Sony. These regional committees promote all environmental management activities conducted at business sites within each respective region. Each committee covers issues such as compliance with national legislation, environment-related demands with products from markets within the region, recycling, site management and audits, and ISO 14001 certification programs.

System of Environment-Related Rules

ISO 14001 certification is an ongoing process throughout Sony. To align environmental management activities at each business site more closely with Group environmental policies, Sony is formulating internal regulations that are based on the ISO 14001 rationale. In the year ended March 2003, Sony made revisions to the system governing the types of environment-related rules.

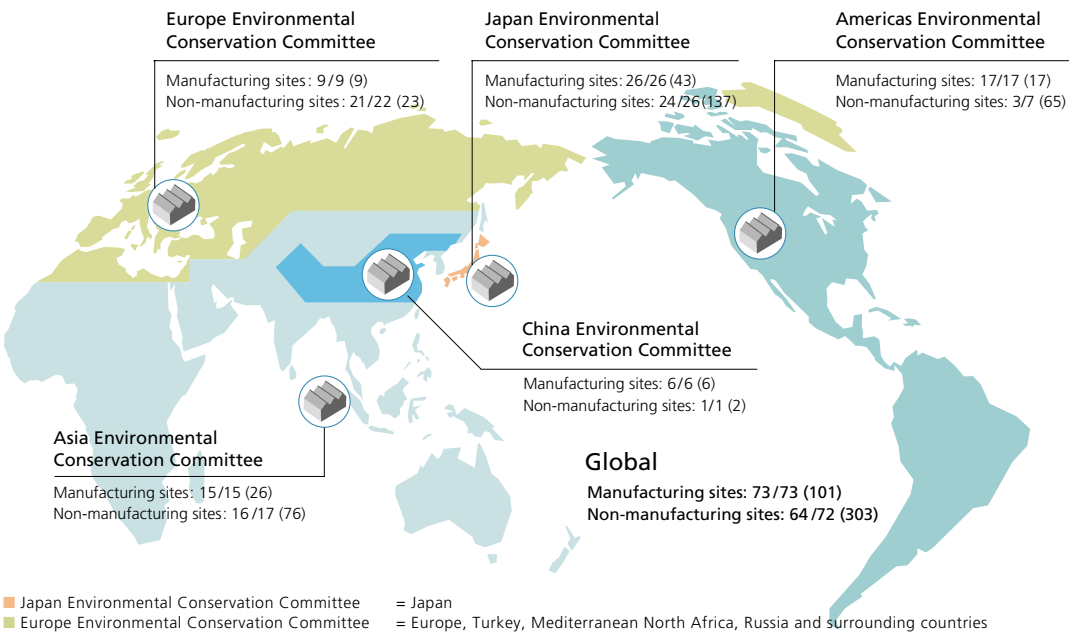
Formulation of Corporate Environmental Audit Rule

The formulation of corporate environmental audit rules provides one example of environment-related internal rules at Sony. Besides ensuring that environmental audits check compliance at each business site with all relevant environment- and OH&S-related legislation, these rules also check that environmental management at each business site is in conformity with all Sony Group environmental management policies. The overall structure provides Sony with a coherent internal system of regulation formulation and compliance.

ISO 14001 Certification Status

During the year ended March 2003, 4 certifications for manufacturing sites and 4 certifications for non-manufacturing sites within the Group were obtained. As of June 1, 2003, a total of 73 certifications for manufacturing sites and 64 certifications for non-manufacturing sites had completed the certification process.

Sites Overseen by Regional Environmental Conservation Committees and Status of ISO 14001 Certification
(As of June 1, 2003)



Japan Environmental Conservation Committee	= Japan
Europe Environmental Conservation Committee	= Europe, Turkey, Mediterranean North Africa, Russia and surrounding countries
Americas Environmental Conservation Committee	= North and South America
Asia Environmental Conservation Committee	= Asia (excluding Japan and China), the Middle East, Africa (excluding Mediterranean North Africa) and Oceania
China Environmental Conservation Committee	= China

See p.69 for more information on sites eligible for ISO certification.

* The numerator denotes sites that have received ISO 14001 certification, while the denominator denotes the total number of business sites eligible for certification. Numbers in parentheses denote the total number of sites included within the scope of ISO certification. A number of sites have received collective certification, resulting in discrepancies between the figures listed above. For example, 62 non-manufacturing sites and 2 manufacturing sites in the Americas respectively have collective certification. The result is that while there are a total of 3 certified sites, 65 sites are included within the scope of ISO certification.

Evaluation and Award Programs for Environmental Performance

Sony conducts environmental audits to check that environmental management practices across the Sony Group are in conformity with company policies. As additional parts of the system, status evaluations are used to confirm that progress is being made toward environmental targets, while awards are given for outstanding achievements.

Environmental Audits and Incidents (Fiscal 2002)

Environmental audits are a key part of Sony's continued efforts to improve environmental and OH&S management at business sites, and to prevent environmental incidents and accidents from occurring.

These audits mostly fall into one of three categories: internal audits, which are self-checking exercises by business units; corporate environmental audits, conducted at business sites by the regional environmental conservation committees; and third-party audits, which are evaluations carried out by certified external bodies. In addition, Sony has asked PricewaterhouseCoopers (PwC) to provide independent verification*1 of the collection of environmental data from business sites. The results of the various audits play a useful role in improving environmental management practices across the Sony Group. For instance, they can sometimes highlight the need for new internal rules to tackle a problem common to the Group.

Environmental incidents (fiscal 2002):

Sony did not have any significant environmental incidents that resulted in a release of hazardous materials impacting any surrounding properties. Further, Sony did not receive any material notification of an enforcement action or violation for the unlawful or prohibited release of hazardous materials into the environment.

Presentation of the Sony Environmental Award using materials produced during processing of vegetable-base plastics

Evaluation of Environmental Activities

Sony undertakes a company-wide evaluation of its environmental activities on an annual basis. Evaluation of environmental performance focuses on the progress made in terms of actual environmental impact reduction over the course of the past year, in accordance with targets in Green Management 2005. Performance is evaluated in quantitative terms wherever possible. Starting in the year ended March 2003, with the aim of generating better results for the Group as a whole, specific evaluation criteria were stipulated in key areas, taking into account the varied business characteristics of different parts of the Group.

Key evaluation criteria for environmental activities (fiscal 2002):

Products:	Comprehensive management of chemical substances
	Progressive shift to use of lead-free solder
	Progressive shift to energy-conserving products
Business sites:	On-site energy conservation
	Site environmental risk management
	Greenhouse gas reductions (semiconductor manufacturing sites)

Environmental Award Programs

Sony has a system of environmental awards that recognize outstanding achievements in environmental conservation, both by parts of the Sony Group organization and by individuals within the organization.

Sony Environmental Award

Launched in 1994, the Sony Environmental Award is presented annually in recognition of exceptional achievements in environmental conservation activities. The Sony Environmental Conservation Committee selects winners from a list of regional candidates.

Special Environmental Contribution Award

This award is presented in recognition of outstanding contribution to the environment. The Chairman of the Sony Environmental Conservation Committee chooses the recipient of this award.

Environmental Excellent Performance Award

Based on the results of business performance evaluations, this award is presented in recognition of outstanding environmental performance within different parts of the Sony Group.

Aside from those listed above, individual regions and business divisions also operate their own award programs.

*1 Please see pp. 75-77 for more details on the independent verification process and results provided by PwC.

Environmental Education

Education is one of the three driving forces in the Sony Environmental Vision. Sony regards a comprehensive in-house environmental education program as the first step towards promoting conservation of the environment. The year ended March 2003 saw the introduction of educational programs designed to promote environmental activities as part of core business functions and to encourage individual employees to act voluntarily on environment conservation activities.

Applying Environmental Education to Work

Training courses tailored to specific work functions supplement existing ISO 14001-based environmental training for all Sony staff. Separately, in the year ended March 2003, Sony introduced more advanced environmental education programs that target different activities and types of participant. Employees are free to attend these programs, which aim to teach staff how to reduce environmental impact in their daily work and to encourage voluntary participation in environmental management activities.

Sony supplies employees with environment-related information on a continuous basis. These media include in-house publications, such as the *"Sony Environmental Update"* environmental newsletter and internal Sony websites, as well as the in-house *Sony Times* corporate newsletter, *Scope* video broadcasts, and a variety of local newsletters published in overseas locations.

In the year ended March 2003, Sony also organized a number of in-house conferences to share information on topics such as product-related environmental issues and lead-free solder.

Examples of Environmental Month activities

Sony Group tree planting and cleanup activities (Malaysia)

Environmental exhibitions inside the Sony Europe headquarters building (Germany)

Information sessions at the Oita Technology Center, Sony Semiconductor Kyushu Co. regarding environmental activities (Japan)

Sony Group "Environment Month" Initiated

The year ended March 2003 marked the launch of "Sony Group Environment Month" on a worldwide basis. Throughout the Group, one month was dedicated to various environment-related activities designed to raise environmental awareness among employees. In-house events conducted during this month included award ceremonies to mark exceptional environment-related achievements and lectures given by outside experts. Events designed to secure the cooperation of people outside the company in reducing environmental impact were also held, such as community environmental conservation programs and award ceremonies for business partners.

Participants at the in-house Product Environmental Conference held during Environment Month ranged from product design engineers and production personnel to staff from support departments and sales, together with various people from around Japan and the rest of the world. The meeting encouraged lively debates on topics such as the construction of a system to manage chemical substances contained in products.

- Principal "Environment Month" in-house activities
  - Environmental meetings/exhibitions
  - Environmental lectures/training courses/training sessions
  - Educational events

- Principal "Environment Month" external activities
  - Green Partners exhibitions and award ceremonies
  - Environmental conservation programs targeted at site environs
  - Seminars involving members of local communities
  - Company site tours for local schoolchildren
  - Environmental exhibitions

Environmental Impact of Products and Services

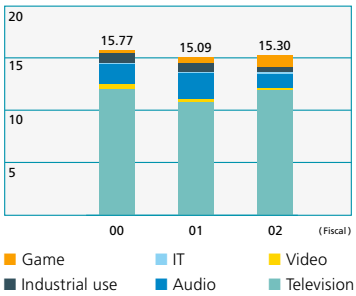
Sony, in addition to consumer electronics, is involved in the provision of games, music and an assortment of other products and services. The main part of Sony's impact on the environmental results from the use and disposal of its products. For this reason, Sony sets medium-term objectives to guide it in reducing the environmental footprint of its products and services.

Green Management 2005 Targets for Products and Services

Target	Base Fiscal Year	Target Fiscal Year	Progress in Fiscal 2002
Reduce operating power consumption by 30%*1.	2000	2005	Reductions targets were achieved for 40% of Sony's latest products, and progress is gradually being made for the remaining 60% of products.
Reduce standby power consumption to 0.1W or less*2.	—	2005	Approximately 50% of Sony's latest products have a standby power consumption below the target 0.1W range, with particular success in compact product models. Focus is now shifting to reducing standby power consumption in larger devices and the internal components of tuners.
Reduce product weight and number of parts by 20%*3.	2000	2005	Few difficulties were encountered in reaching reduction targets in 40% of Sony's latest products. The ongoing digitization of audio system amplifiers also contributed to this success. Attention is now shifting to reducing the weight of glass in CRT televisions and on containing the weight of mobile phones and PCs despite the addition of new functions.
Increase percentage of recycled materials in products (by weight) by 20%.	2000	2005	New applications for recycled materials continue to be developed, with materials adopted for use in television speakers and as shock-absorbing materials. To further promote the use of recycled materials, attention is now focused on preventing contamination by hazardous materials.
Shift to environmentally conscious packaging materials, such as recycled materials.	—	2005	Nearly 70% of latest product models already incorporate environmentally conscious materials. Shock-absorbing materials for lightweight products now consist of paper-based cushioning. Polystyrene foam recycled through Sony's limonene reconstitution process is being used as cushioning for heavier product models in Japan, with attention also shifting to increasing usage elsewhere.
The ban, phase-out and control of chemical substances*4.	—	—	Sony is instituting the extensive management of chemical substances in its products worldwide through its Green Partner Environmental Quality Approval Program and other initiatives. Through the ongoing adoption of lead-free solder and a complete switch to this alternative in solder-intensive television models sold in Japan, Sony has reduced its use of lead by nearly 48 tons.

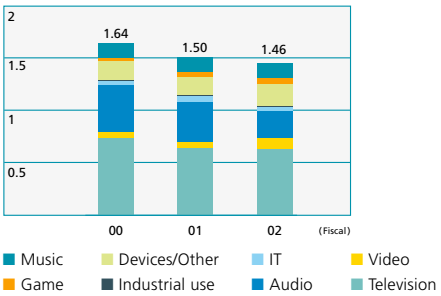
Greenhouse Gas Emissions From Product Use

(Unit: million ton-CO_2)



Total Volume of Resources Used in Products

(Unit: million tons)



During normal use, Sony products consume energy, leading to the indirect emission of CO_2 gas at power generation facilities. In the year ended March 2003, CO_2 emissions from use over the life cycle of Sony products rose 1.4% year on year to approximately 15.3 million tons. This increase is attributed mainly to higher shipments of consumer electronics, notably televisions and increasingly popular home videogame consoles. Televisions are the largest producers of CO_2 emissions, with far higher power consumption than other consumer electronic products. Televisions also have a higher frequency of usage (average of 4.5 hours/day) and longer product life cycles (average of 10 years).

Resources consumed in the manufacture of Sony products declined 3.2% from the previous year to 1.46 million tons. This is attributed mainly to the ongoing shift to LCDs for use as computer monitors. Televisions, which are comparatively large compared to most of the products created by Sony, consumed nearly 40% of resources allocated to the manufacture of products. However, Sony collected and recycled televisions totaling nearly 12,000 tons in Japan during the year ended March 2003.

*1, 2 From fiscal 2003, this will apply only to AC drive equipment.

*3 From fiscal 2003, the objective will be to reduce the total volume of resources used in products by 20%. Total volume of resources used in products = total weight of products and accessories – total volume of recycled / renewable materials used.

*4 See pp. 50-51 for more information.

Environmental Impact Reduction of Products and Services

Sony is working to reduce the environmental impact of electronic products not just at the manufacturing stage, but also during use and disposal. Sony believes that the majority of its products' life cycle environmental impact is already determined at the stage of product planning and design stages. Sony is therefore focusing efforts on ways to design more environmentally conscious products and services.

Product Assessment

Product assessments entail the study of how to reduce the environmental impact of products throughout their life cycle—from manufacture, to customer use (through methods such as reduced power consumption) and final disposal. At Sony, chief product designers are responsible for applying the results of such assessments to develop products that consume less power, are lighter, and contain less chemical substances and packaging materials. The aim is to use such product assessments to achieve significant reductions in the environmental impact of products at the planning and design stages, particularly with products whose impact is large.

Introduction of Life Cycle Assessment (LCA)

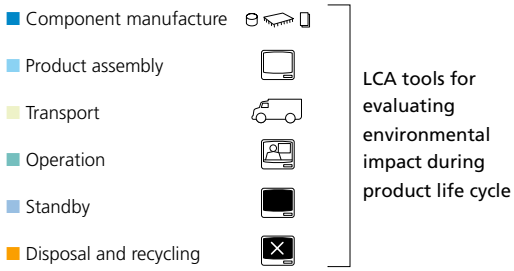
LCA methodology provides a way of making an objective, quantitative evaluation of the environmental impact of a product over its entire life cycle. This approach spans parts production, final manufacture, transport, operation, disposal, and recycling. Practical LCA tools have been developed internally for use at each Sony product design department to help create products with minimal environmental impact. These tools estimate the total life cycle CO_2 emissions of products based on input data such as product characteristics, composition and logistics details. During the year ended March 2003, LCA analytical tools were introduced across the whole of Sony for the quantitative analysis of product environmental impact. As the diagrams on the right illustrate, the stage at which environmental impact occurs varies from product to product. As a means of reducing environmental impact more efficiently, greater emphasis is being given to scrutinizing processes that have enormous impacts. Future plans also call for the extension of LCA-based design processes to more categories of Sony products.

During production…
- Energy conservation
- Resource conservation etc.

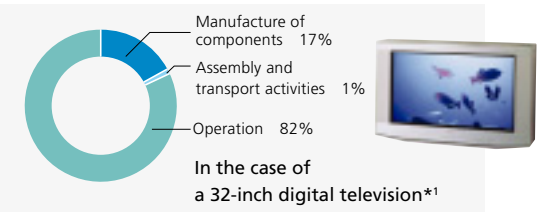
During use…
- Reducing power usage while operating
- Reducing power usage while on standby etc.

During disposal or when recycling…
- Making recycling easy
- Chemical compounds etc.

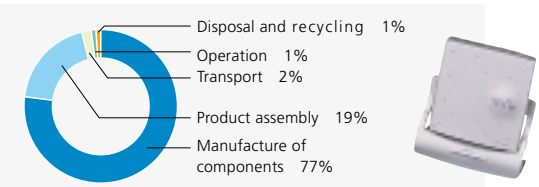
Verified during product planning and design stages



CO_2 Emissions During the Life Cycle Stages of Various Sony Products



In the case of a 32-inch digital television*1



In the case of an MD Walkman

*1 Created with a built-in display.

Shift to Lead-Free Solder

Solder is an indispensable component of many Sony products since it is used to connect numerous electronic parts together. Yet the lead used in soldering materials may cause serious environmental damage if products are improperly disposed. Sony continues to make good progress in utilization enhancement of lead-free solder.

Promotion of Lead-Free Solder in Parts and Manufacturing Processes

The solder used at Sony falls into two main varieties: solder used during manufacturing processes to join parts and circuit boards; and solder that is coated to joins on the various parts (to allow parts to be joined together by the application of heat). Sony aims to convert both types of solder to lead-free varieties by March 31, 2005, for the elimination of lead from all soldering materials used in Sony products. Steady progress is being made toward this goal.

Lead-Free Soldering Conference

Use of Lead-Free Solder in Manufacturing

Sony started the basic research behind lead-free soldering materials in 1995. Currently, in manufacturing processes Sony is using lead-free solder formulations that contain tin, silver and copper, which have become the standard in the industry.

Even once formulations have been developed, the adoption of lead-free solder requires a broad scope of expertise in production technology and equipment, as well as design modification of products. The challenge is to incorporate all this knowledge and expertise into the processes used at each Sony manufacturing site.

Sony has initiated a specific project for the introduction of lead-free solder throughout its manufacturing operations. In December 2002 a conference was held to further promote this project, which representatives from around the world attended. This meeting allowed different aspects of Sony to showcase lead-free solder technology, and promoted the sharing of technical and management expertise in tackling this important issue.

Promotion of Lead-Free Solder From Suppliers

Sony is also seeking the cooperation of its suppliers to convert the materials used in coated soldering joints for parts into lead-free formulations.

Development of Low-Melting Point Lead-Free Solder

Although lead-free solder has a reduced environmental impact, it typically has a higher melting point than the 183˚C common to traditional lead solder. Depending on the material formulation, this melting point can even exceed the heat-resistant limit of parts in process. This problem has complicated the introduction of lead-free solder varieties, necessitating the development of various solutions at the design and manufacturing stages, such as new design rules, materials and production processes for parts and printed wiring boards.

Through a joint development project with Nihon Genma Mfg. Co., Ltd., Sony has successfully devised a type of lead-free solder with a low melting point of 196˚C, based on a mixture of tin and zinc. This breakthrough has allowed a relatively simple shift to be made in the manufacture of various products: not only can the same printed wiring boards and parts be used, but no major changes in the production set-up are required. This variety of lead-free solder is therefore highly effective. During the year ended March 2003, this solder was introduced in the manufacture of MD decks, and tests were also conducted for its application in the soldering of printed wiring boards in certain mass-produced items.

This MD deck uses lead-free solder with a low melting point.

Management of Chemical Substances in Products

In October 2001, Dutch authorities determined that the level of cadmium was above the limit allowed under Dutch regulations for Sony's PS one game consoles. To prevent any recurrence of similar problems involving the use of chemical substances in products, Sony has revised its policies and rules that govern such matters. A management system has also been put in place across the entire company.

Chemical Substances in Products: Three Core Principles

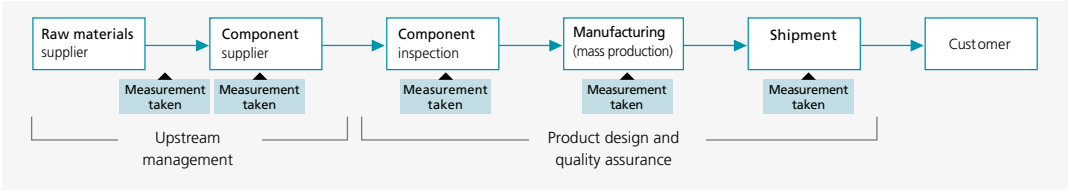
The cadmium contamination issue in 2001 generated a wide range of corrective and preventative measures within Sony. Related spending and losses have totaled approximately ¥10 billion by March 31, 2003. Besides replacement of the parts with excessive cadmium levels, Sony invested in measurement devices to prevent a recurrence of any problems involving levels of chemical substances in products. The company also revised internal rules and established the Green Partner Environmental Quality Approval Program to be implemented by all companies as well as manufacturing sites.

Three core principles now guide the management of chemical substances in products across the whole of Sony. The system is structured so that chemical substances are managed in line with these three core principles, all the way from upstream materials sourcing through product design to final QC/QA processes that involve the application of measurement rules defined for individual parts.

Management of Chemical Substances in Products: Three Aspects of Principle Application

1. **Upstream management of materials sourcing**
   Green Partner Environmental Quality Approval Program
   OEM Green Partner Environmental Quality Approval Program
2. **Management of product design and QC/QA processes**
   Multiple inspections of parts are conducted at the stages of delivery, manufacture and shipment, based on defined measurement rules.
3. **Application of measurement rules**
   Management is based on actual measurement data using internal standards that are common to Sony and to any parts suppliers.

Flow chart for management of chemical substances in products



Chemical Substances in Products: Management Regulations

Sony's Green Management 2005 plan establishes management criteria for those chemical substances contained in products that are judged—whether by Sony, or in line with legislative trends in individual countries, or according to scientific opinion—to have a significant influence on either the natural environment or on humans. Sony is seeking the compliance of all its suppliers with a new set of "Management Regulations for the Environment-related Substances to be Controlled which are included in Parts and Materials (SS-00259)" that stipulate environmental management regulations for chemical substances in parts and materials. An outline of this system is given found on the right.

Outline of "Management Regulations for the Environment-related Substances to be Controlled which are included in Parts and Materials (SS-00259)"

1. Clear common global standards on prohibited substances and usage
2. Clearly defined measurement standards and allowable concentrations
3. Ban/phase-out/reduction of substances and usage defined on a three-level temporal scale

   Level 1: Banned immediately
   Level 2: Phase-out by individually set periods
   Level 3: Reduced

URL For more details about the SS-00259 technical standards and Green Partner Environmental Quality Approval Program, please refer to the Sony website http://www.sony.net/eco/book/

Sony Environment-related Substances to be controlled

Heavy metals	Cadmium and cadmium compounds Lead and lead compounds Mercury and mercury compounds Hexavalent chromium compounds
Chlorinated organic compounds	Polychlorinated biphenyls (PCB) Polychlorinated naphthalenes (PCN) Chlorinated paraffins (CP) Mirex Other chlorinated organic compounds
Brominated organic compounds	Polybrominated biphenyls (PBB) Polybrominated diphenylethers (PBDE) Other brominated organic compounds
Organic tin compounds (tributyl tin compounds, triphenyl tin compounds)	
Asbestos	
Azo compounds	
Formaldehyde	
Polyvinyl chloride (PVC) and PVC blends	

Green Partner Environmental Quality Approval Program

Since the management of chemical substances in products under the new principles requires upstream materials sourcing, Sony has introduced this program to certify suppliers that meet the prescribed standards as approved "Green Partners." The approval process involves a 60-point environmental quality audit that covers the three aspects of environmental management systems, business processes and its management. Suppliers are required to meet all the SS-00259 technical standards for environmental management of chemical substances. A similar approval process is also applied with OEM products*[1].

After approval, suppliers are subject to periodic audits. Suppliers must also certify on the basis of measurement data that controlled environmental substances have not been used in the manufacture of supplied items.

Environmental Audits of Materials Suppliers Worldwide

By the end of March 2003, Sony had completed environmental audits of all its materials suppliers worldwide, nearly 4,200 companies, for the purposes of determining environmental quality for Green Partner approval. From April 2003, Sony began procuring all its materials, parts and product assemblies from these approved suppliers.

Chemical Substances in Parts Managed Using Database

Sony has created a database of environmental quality and controlled environmental substances to facilitate more effective searches of parts supplied by Green Partner firms at the product design stage. This database provides a common internal source for information about each part, including measurement data and the results of data audits conducted by Sony.

Reductions in Usage of PVC

Although excellent flame-resistance and insulation properties have made PVC a widely used plastic, it poses environmental risks because improper disposal may result in release of hazardous materials. Similar risks surround the use of various other chemical substances, such as plasticizers (some of which have a detrimental effect on natural ecosystems) and heavy metals used as stabilizers. Sony is working toward the abolition of the use of PVC in all its products by the end of 2005, pending the availability of a technically and economically comparable replacement material.

From the year ended March 2003, the power cable for the AC adapter supplied with this mobile phone was made using a cadmium and lead-free non-PVC material.

*1 OEM products are products made by other companies that display the Sony logo.

Environmentally Conscious Products and Services

To help customers make environmentally conscious purchases, Sony indicates explicitly and precisely the environmentally conscious aspect of products with a special "eco info" mark, which is used in product catalogs and on its website. Below are some of the environmentally conscious products released in the year ended March 2003.

Disclosing Environmental Information of Products Using "eco info" Mark

Sony's development of its own "eco info" mark aims to communicate the environmentally conscious aspect of products. Such information is becoming an increasingly important concern. To aid consumers further, Sony identifies alongside the mark exactly what features or qualities make the product an environmentally conscious selection.

- Lead-free solder is used for soldering certain parts.
- Halogenated flame-retardants are not used in main printed wiring boards.
- Power consumption can be reduced by adjusting image brightness in a power-saving mode.
- 100% recycled magazine paper is used for the carton's top layer.
- Pulp mold made from recycled paper is used for the packaging cushions.

Examples of use of "eco info" mark for liquid-crystal television KLV-17HR1

Environmentally Conscious Color Televisions

The KV-29/25DS65 and KV-25DA65 models of the *Wega* series of color televisions featuring FD Trinitron boast standby power consumption of just 0.07W, one of the lowest levels in the industry. This conforms with the annual power consumption level standards specified in recent amendments to Japanese energy conservation legislation.

None of the internal printed wiring boards use halogenated flame-retardant materials, and main soldering joins are completed using lead-free solder. Other environmental benefits include the use of shock-absorbing materials made from pulp mold in the packaging (with the 25-inch models). These are made from recycled paper. With the 29-inch models, polystyrene foam recycled using Sony's limonene reconstitution process*1 is also used.

Wega color television KV-29DS65

Environmentally Conscious Packaging Materials

Since the year ended March 2000, Sony has been undertaking a project in Japan to promote more environmentally conscious packaging materials by reducing amounts of polystyrene foam and polythene bags in its packaging. Sony is also gradually introducing recycled paper made from magazines and special vegetable oil-based offset printing inks that do not contain VOCs (volatile organic compounds). An example of this approach is the type of hexagonal packing carton pictured above, which is used for large-screen televisions. The carton design reduces the amounts of polystyrene foam and cardboard required. Sony is also shifting to CD-ROM cases made out of recycled paper sourced from magazines (see right), a move that promises to conserve fossil fuel based resources.

Five CD-R disks packaged in plastic cases, compared to five disks in a single paper based case.

*1 See page 56 for more details of polystyrene foam recycling.

The Network Walkman: Smaller and Less Power Consumption

In February 2002, Sony launched the NW-MS70D network Walkman, which has an internal memory capacity equivalent to approximately 11 CDs of music*1. This Walkman model is compatible with DUO Memory Stick miniature IC recording media. It is not just its dimensions (36.4 x 48.5 x 18 mm) that are small: this new Walkman uses an LSI-chip called the Virtual Mobile Engine™ based on newly developed semiconductor technology that minimizes power consumption. The product consumes significantly less power, and has a maximum continuous playback time of 33 hours*2.

NW-MS70D Network Walkman

Environmentally Conscious Digital Still Camera

The casings of nearly all of Sony's digital still camera models are now free of halogenated flame-retardant materials. The surfaces of the cardboard in the packaging cartons use 100% recycled paper sourced from magazine papers, and are printed using vegetable oil-based inks containing no VOC. Rechargeable long-life AA batteries are included with the *Cybershot* DSC-P72, enabling users to enjoy capturing their favorite moments again and again.

DSC-P72 digital still camera

Repeated-Use Products

Sony has been using a special "Re!" advertising campaign to promote the use of rechargeable long-life nickel metal hydride (Ni-MH) batteries in place of dry-cell batteries. These Ni-MH batteries can be charged approximately 500 times*3, and also last roughly twice as long as conventional alkaline batteries. It takes approximately 130 minutes*4 to charge two of these batteries (size AA). Overall, they provide an alternative with extremely low environmental impact.

Another repeated-use technology is the FeliCa contactless IC card. Designed with built-in high-security features, FeliCa IC cards permit the rapid exchange of data, and are highly reusable since data can be easily replaced or updated. The surface of these cards is made from PET which gives less environmental impact even if the cards are incinerated. FeliCa technology has been adopted not only for the "Suica" commuter pass / stored fare card of East Japan Railway Company, but also in other fields such as the prepaid electric money service "Edy," employee, and membership identification.

The "Re!" advertising campaign

"Suica" and Sony ID cards both use FeliCa technology.

*1 Assuming 60 minutes of music per CD, recorded in ATRAC3 plus mode at 48 kbps.
*2 Playback time in ATRAC3 mode; playback time in ATRAC3 plus mode is approximately 28 hours.
*3 Based on charging and de-charging conditions specified in JIS C8708 1997 (4.4.1).
*4 Performance varies depending on actual usage conditions.

Major Environmentally Conscious Products

Product name	Model code no.	Lead-free solder	Halogenated flame retardant	Packaging materials
 Video projector	VPL-HS10	■	—	■
 LCD television	ALV-15F1 • Standby power consumption: 0.9W Power-saving mode available	—	—	■
 Color LCD computer monitor	SDM-P232W • Eco-mode button equipped Eco-mode power consumption: 80% of normal operation	■	■	■
 VHS videocassette recorder	SLV-NX31	■	■	■
 Digital camcorder	DCR-TRV22K	■	■	■
 CD/DVD player	DVP-NS730P • Standby power consumption: 0.1W	■	■	■
 Component stereo hi-fi system	CMT-J500 • Standby power consumption: less than 1W	■	■	—
 Net MD deck	MDS-JE780 • Standby power consumption: less than 1W	■	■	■
 Car audio system (FM/AM/CD player)	CDX-L410	■	■	■
 MD Walkman	MZ-E10 • Standby power consumption: less than 0.1W	■	■	■
 CD Walkman	D-EJ2000 • Standby power consumption: less than 0.1W No PVC used in headphones and remote control cord (included)	■	■	■
 TV/FM/AM radio	ICF-R533V • Standby power consumption: 0.3W No PVC used in ear receiver cord (included)	■	■	■
 Notebook PC	PCG-R505W/PD	■	■	■
 Personal entertainment organizer	PEG-T650C	■	■	■
 Mobile phone	A1301S	■	■	■
 AIBO	ERS-311	■	—	■

Lead-free solder
■ Used in over 80% of soldering

Halogenated flame retardant
■ Not used in over 80% of printed wiring boards

Packaging materials
■ Environmentally conscious items used (e.g. recycled paper shock-absorbing materials)

Vegetable-Based Plastic

Vegetable based Plastic

Vegetable-based plastics are derived from vegetable starches. Sony has developed technology for its use in packaging and product casing applications. Use of such vegetable-based plastics can help to reduce CO_2 emission volumes because the vegetable materials are more renewable and contribute to the conservation of resources derived from fossil fuel.

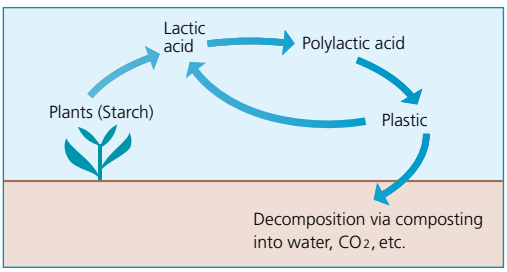
Benefits of Vegetable-Based Plastics

Vegetable-based plastics are more environmentally conscious than conventional plastics made from petro-chemicals for a number of reasons, summarized below:

- Consumption of non-renewable oil-derived resources is reduced.
- Plant starches can be cropped annually; also, since these raw materials are a result of photosynthesis, their production itself helps to absorb atmospheric CO_2.
- The plastics can also be broken down at composting facilities used in manure production.
- Expectations are high for a chemical recycle that may prove able to recycle the plastic to lactic acid.

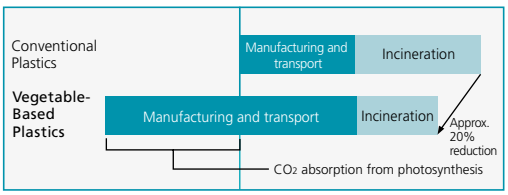
From Plants to Plastics

Vegetable-based plastics are made from plants, and decompose as follows.



The life cycle of vegetable-based plastics involves substantial absorption of atmospheric CO_2 due to photosynthesis. Even if they were disposed of by incineration, these plastics would still contribute to a net reduction in CO_2 emissions relative to oil-derived plastics.

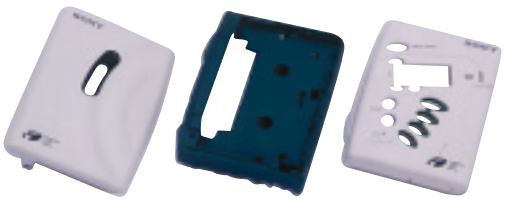
Total CO_2 Emissions Over Product Life Cycle



(Sony data)

Incorporation in Walkman Stereos and Other Products

Launched in November 2002 in Japan, the WM-FX202 Walkman stereo uses vegetable-based plastic for approximately 90% of its casing by weight. Sony estimates that this plastic uses only 45% of the oil-derived resources of conventional plastics, producing a reduction in CO_2 emissions of approximately 20%.



WM-FX202 Walkman stereo casings created using vegetable-based plastics

Currently Sony uses vegetable-based plastics for the products illustrated below. Sony also plans to extend the use of these plastics to more products.

1. "NEIGE" blank MD 5- and 10-pack (wrapping film)
2. ICR-P10 portable radio (blister packaging)
3. DVP-NS999ES DVD player (front panel)
4. ERF-210AW06 AIBO entertainment robot software (marker base)
5. WM-FX202 Walkman (casing)

Product Recycling

Sony is actively promoting collection and recycling of post-consumer products to ensure the most effective usage of limited resources. In the year ended March 31, 2003, a global total of approximately 14,000 tons of Sony products were recycled. Sony continues to develop recycling systems tailored to the requirements of each area and country.

Recycling Activities in Japan

The Home Appliance Recycling Law that came into force in Japan in April 2001 covers four major types of home appliance: televisions, refrigerators, washing machines and air conditioners. As part of a broader effort to create a recycling-oriented society, this legislation defines the separate recycling responsibilities of consumers, retailers, local governments and appliance manufacturers. The only products in this list that Sony manufactures are televisions (defined as those containing a CRT, and including Aiwa-branded sets). A total of approximately 460,000 Sony-manufactured television sets were recycled in the year ended March 31, 2003. (Please refer to pp. 58-59 for more details on the recycling processes involved).

Under the provisions of separate Japanese legislation aimed at promoting more effective use of resources, Sony Corporation started to recycle all business-consnmer computers from May 2002. In the year ended March 31, 2003, Sony collected approximately 1,200 such post-use computers*1 and sent them for disassembly and materials recycling. This process generated various metals and plastics, as well as secondary batteries. Sony plans to commence a recycling program for post-use home PCs in October 2003 in Japan.

Television Recycling in Japan (Fiscal 2002)*2

Sets received at collection centers:	458,125 units
Sets entering recycling process:	457,535 units
Total weight of products processed:	12,008 tons
Total weight of recycled products/materials:	9,728 tons
Recycling ratio:	81%

Television Recycling Technology

Sony has been developing recycling technology for its large televisions since the year ended March 1992. In October 1997, Sony established the Recycling Research Center to further this work. Some plants that recycle Sony-manufactured television sets employ special machines developed by Sony as part of this recycling R&D program to handle tasks such as CRT disassembly and plastics sorting. Other work in this program includes market research on actual recycling conditions to provide feedback to television designers and engineers so that new products can be made more easily recyclable.

Recycling of Polystyrene Foam

Sony has developed a recycling system for polystyrene foam. Known as the "Orange R-net System," it is based on limonene, a substance derived from orange peel. Since January 1999, this system has been applied to the recycling of waste polystyrene foam generated by the Group companies. In the year ended March 31, 2003, approximately 130 tons of this foam was collected and recycled into new polystyrene foam for use as a packing material with nearly 290,000 large televisions. Sony has begun licensing out this technology and providing technical support to promote the wider use of this recycling system outside the company.

Limonene cars can liquefy polystyrene foam during transportation.

*1 Products collected include desktop and notebook PCs, CRT monitors and LCD monitors.
*2 Difference between numbers of sets received and processed represents work-in-process at the time of reporting.

Recycling Activities in Europe

A formal EU directive covers recycling of post-use electrical and electronic products throughout Europe. The WEEE (Waste Electrical and Electronic Equipment) Directive obliges manufacturers of such products to collect and recycle them from August 2005.

Some countries in Europe have already passed separate laws requiring the recycling of post-use home appliances. Such laws are now in force in five countries: Belgium, Sweden, the Netherlands, Norway and Switzerland. In line with the systems in each of these countries, Sony has contracted with third-party recyclers to ensure that its products are recycled in accordance with these laws. In 2001, Sony paid approximately 6.3 million euros for recycling services in Europe.

In conjunction with three other leading manufacturers—Braun (Germany), Electrolux (Sweden), HP (USA) and Sony are teaming up to establish a common waste management procurement platform, called the pan-European Recycling Platform (ERP). This initiative is designed to ensure that Sony has an innovative pan-European recycling strategy in the European market. In March 2003, this consortium of four companies agreed to the "Principles for the Implementation of the EU WEEE Directive" outlined below, to ensure that national legislation remains consistent with the WEEE Directive and to secure economies of scale and operational efficiency. The ERP initiative aims to construct the most efficient recycling system for consumers, for the environment, and for industry. The ERP plans to establish an operational taskforce to handle issues relating to procurement, take-back and recycling schemes.

Main Pillars of "Principles for the Implementation of the EU WEEE Directive"

- To implement the principle of individual producers' responsibility established by the WEEE Directive.
- To establish National Registers that record companies placing products on the EU market and their levels of responsibility.
- To develop guidelines on financing for future waste.
- The creation of a common logistics interface to ensure that competitive take-back schemes can operate.

Recycling Activities in the United States

Sony Electronics Inc. operates a program in the United States, which it refers to as "Shared Responsibility." Under this program, which aims to promote recycling by reducing the burden placed on consumers and local governments, Sony pays for the recycling of all own-branded products that are brought to designated collection points or to special collection events. In 2002, Sony supported over 100 collection events in 16 states, including California, Connecticut and Pennsylvania, which resulted in collection and recycling of a total of approximately 85 tons of Sony products.

As part of the "Shared Responsibility" program, Sony has also solely continued to support a recycling initiative in Minnesota following the completion of a demonstration project for electronics recycling in the state. Such support has helped to maintain a network of permanent collection points since 1998.

Sony has also played a pioneering role in the "eCycling" program undertaken by the U.S. Environmental Protection Agency (EPA) in the Mid-Atlantic region*1 (designated as Region 3 by the EPA). As an active partner in the "Plug-In to eCycling" program, a new initiative by the EPA to apply the "eCycling" program nationwide. Sony is cooperating with local governments, retailers, recyclers and consumers to raise awareness of this program.

Other Sony recycling initiatives in the United States include efforts to expand secondary markets for recycled materials by developing televisions and packing materials for VAIO computers that use 100% recycled plastics.

Products gathered at a post-use product collection event

URL Plug-In to eCycling program
http://www.epa.gov/epaoswer/osw/conserve/plugin/

URL eCycling program
http://www.epa.gov/reg3wcmd/eCycling.htm

URL Sony programs in Minnesota
http://www.moea.state.mn.us/plugin/sonyevents.cfm

*1 Includes the District of Columbia and the U.S. states of Delaware, Maryland, Pennsylvania, Virginia and West Virginia.

Product Recycling

Television Recycling Process

Photos from Green Cycle Corporation and Ichinomiya Recycling Research Center (Japan)

Transport to plant

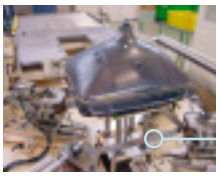
Directed to recycling line

Manual disassembly

Cabinets

Plastics separated by identification

CRTs



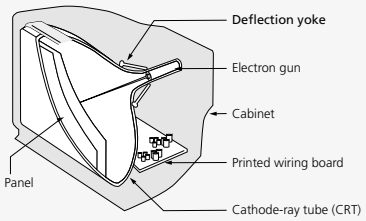
Separation of anti-explosion band

Anti-explosion band

Speakers, printed wiring boards, etc.

To smelter

Inside a Television



Recycling Rate of 81% Achieved With Televisions

The minimum recycling rate of 55% required by Japan's Home Appliance Recycling Law. For each television set recycled, the average yield of usable materials amounts to 21.3 kg of assorted glass, plastic and metals.

Plastics Recycling Achieved by Machine Processing

Sony has developed a specialized machine designed to locate black plastics, formerly difficult to distinguish from other plastic materials, and identify quickly the type of flame retardant they contain.

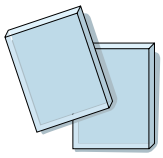
Reusable Materials Collected From Televisions

Iron	833
Copper	469
Aluminum	9
Mixed/non-ferrous compounds	73
CRT glass	7,306
Other materials of value	1,034
Total weight of materials of value*1	9,724

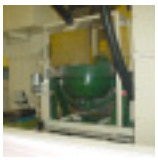
(Unit: tons)

*1 Differences in the total weight of materials of value and the total weight of recycled products listed on p.56 stem from a rounding of figures.

Pulverization



Recycled as plastic items



Cleaning of funnel glass

Cullet* from funnel glass

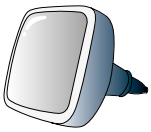
Return to funnel glass

Tapes separated out

CRT separater to sort glass that contains lead

Funnel glass (containing lead)

Panel glass (no lead)

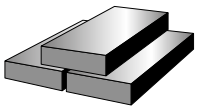


Recycled as CRTs

Fluorescent layer removed from inner panel surface

Cullet* from panel glass

Return to panel glass



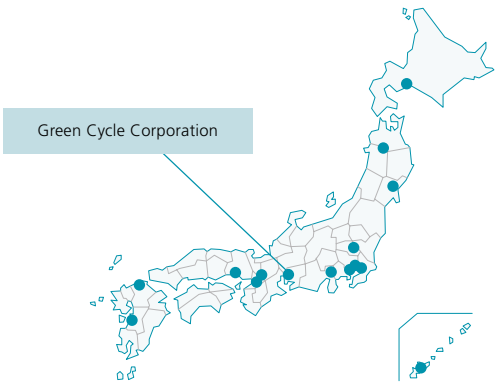
Recycled as metal items

* Cullet is a raw material for making glass.

Home Appliance Recycling Plants at 15 Locations Across Japan

Sony operates a network of 15 recycling plants across Japan that convert collected post-use TVs into valuable materials. Green Cycle Corporation, in which Sony is the principal shareholder, recycles four varieties of home appliance (TVs, refrigerators, washing machines and air conditioners), principally in the areas of central and north-central Japan. The flow chart illustrates how different types of discarded appliances yield varying types of recycled materials. Green Cycle Corporation undertakes plant tours on request.

Home Appliance Recycling Plants Across Japan



URL Green Cycle Corporation website (Available in Japanese) http://www.greenc.co.jp/

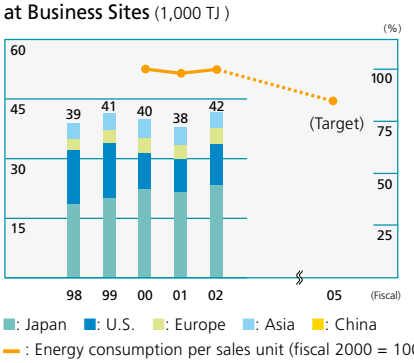
Global Warming Prevention Measures at Sites

Sony treats global warming as an important environmental issue. Through energy-saving programs and the adoption of renewable sources of energy, Sony continues to make efforts to reduce emissions of greenhouse gases in its business activities. This report focuses on the measures being taken at Sony manufacturing sites and offices to reduce greenhouse gas emissions.

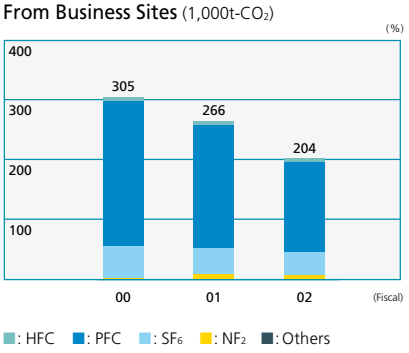
Green Management 2005 Targets for Greenhouse Gas Emission From Business Sites

Target	Base Fiscal Year	Target Fiscal Year	Progress in Fiscal 2002
Reduce CO_2 emissions from business sites by 15% or more per sales unit*1.	2000	2005	Emissions came to approximately 1,976,000 tons, about 40,000 tons more than fiscal 2001. Emissions per sales unit were roughly equal to those in the previous year.
Aim to increase the ratio of renewable resources to at least 5% of energy used at all sites*2.	2000	2005	Incorporated 64 TJ of renewable energy, accounting for 0.15% of the total energy consumed at all Sony sites, owing to the combined use of the Green Power Certification System and local renewable energy sources.
Reduce fuel consumption on CO_2 emission basis by 15% or more per sales unit.	2000	2005	Emissions from vehicles owned by Sony sites in Japan came to approximately 34,000 tons, a reduction of nearly 1,000 tons, or approximately 16% per sales unit, compared to fiscal 2001.
Reduce CO_2 emissions by at least 15% per sales unit from in-house and subcontracted logistics operations.	2001	2005	Emissions from products delivery came to 1,536,000 tons. Emissions from distribution in Japan fell approximately 5,000 tons, or nearly 16% per sales unit.
NEW Reduce greenhouse gas emissions from business sites by 30% (CO_2 equivalent)*3	2000	2005	—

Energy Consumption at Business Sites (1,000 TJ)



Greenhouse Gas Emissions*4 From Business Sites (1,000t-CO_2)



In terms of CO_2 equivalents, total energy consumption at Sony sites worldwide in the year ended March 31, 2003, was approximately 1.98 million tons, an increase of 4.1% over the previous year. Energy consumption per unit of sales was flat relative to the year ended March 31, 2001 (a reduction of approximately 0.2% was achieved). The increase in energy consumption in the year ended March 31, 2003 was primarily attributable to an increase in the number of sites from which data was compiled. Of these new sites, American Video Glass Company (U.S.), which manufactures CRTs, and Sony Semiconductor Kyushu Co., Kumamoto Technology Center, are particularly large consumers of energy, producing combined CO_2 emissions of approximately 160,000 tons.

Sony has established quantitative reduction targets of 30% by the end of March 2006 for emissions of greenhouse gases other than CO_2 emission related to energy consumption. Sony is also making progress in introducing the use of renewable energy sources through initiatives such as the Green Power Certification System.

*1 The target will be changed from fiscal 2003 to reduce energy consumption (CO_2 equivalent) by 15% more per sales unit.
*2 Due to anticipated time required until necessary supply infrastructure will be established, the target fiscal year initially slated will be pushed forward to fiscal 2010.
*3 A new objective effective from fiscal 2003.
*4 Excludes CO_2 emissions from energy consumption.

Energy-Efficient Air-Conditioning Systems

Besides their use in Sony offices, air-conditioning systems play a key role in quality control at manufacturing sites. Sony is working to ensure that such systems are as efficient as possible to minimize the energy consumed. In conjunction with Takasago Thermal Engineering Co., Ltd., Sony has developed a system that promotes energy saving by maximizing the thermal efficiency of heating and cooling processes.

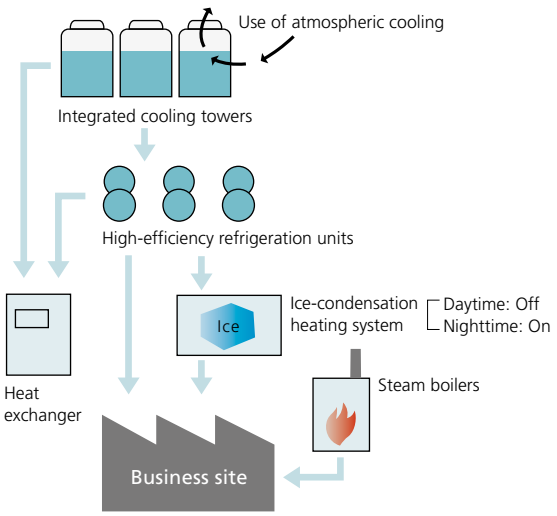
Such a system is now in operation at Sony Semiconductor Kyushu Co., Kumamoto Technology Center (or Kumamoto Tec). It has four key elements: an integrated system of cooling towers; highly efficient refrigeration units; heat exchangers that extract energy from water used for cooling; and high-efficiency boilers.

The integrated cooling tower system automatically regulates the volume and temperature of water within the cooling system to keep these variables at optimally efficient levels. The natural cooling effect of low external temperatures is harnessed in winter to reduce the need for extra cooling, thereby tapping into renewable energy sources. By responding to such seasonal changes, high-efficiency refrigeration units automatically maintain precise control while also saving energy. High-efficiency steam boilers powered by natural gas are used to supply heat to the system. Integrated control of each part of the air-conditioning system ensures that optimal efficiency is maintained at all times. Kumamoto Tec has already achieved energy savings of over 30% with this system, compared with the system previously used (see diagram).

Energy-Saving Measures and Proportional Savings Achieved with High-Efficiency Heating and Cooling System

Measure	Saving (%, relative to old system)
Use of atmospheric cooling	
From production cooling water	-6%
From cooling (refrigeration units)	-5%
High-efficiency refrigeration units	-17%
Ice-condensation heating system	-1%
Steam boilers	-1%
Total	-30%

High-Efficiency Heating and Cooling System



In terms of CO_2 equivalents, annual energy savings have so far amounted to about 1,290 ton-CO_2. Sony has sought the help of external bodies such as academic institutions in making an objective determination of the efficiency and energy-saving capabilities of this system. Plans call for its development for use at various other Sony sites.

Phase-Out of Use of Fuel Oil (Sony Corporation Sendai Technology Center)

Sony Corporation Sendai Technology Center (Sendai Tec) has been implementing a switch to fuels such as natural gas that generate fewer CO_2 emissions. In the year ended March 2003, the company completely phased out its use of fuel oil. As part of this move, the company has installed high-efficiency energy supply systems powered by natural gas, as well as equipment for neutralizing volatile organic compounds. The latter equipment is capable of neutralizing up to 99.5% of organic solvents used to manufacture magnetic tape, and contributes to an energy saving of over 50% for this process. Sendai Tec posted CO_2 emissions of approximately 49,000 tons for the year ended March 2003. This figure represented an overall reduction of about 30% in emissions compared with the year ended March 1999, when the company first began switching over to natural gas.

Greenhouse Gas Reduction Programs in Semiconductor Manufacturing

Sony manufacturing sites use greenhouse gases such as perfluorocarbons (PFCs) in cleaning, etching and other processes involved in the production of semiconductors and liquid-crystal products. Excluding CO_2 emissions associated with energy consumption, total greenhouse gas emissions in fiscal 2002 totaled approximately 200,000 tons, of which 80% derived from semiconductor manufacturing processes.

In fiscal 2000, Sony initiated various full-scale greenhouse gas reduction programs, including the development of optimized processes for cleaning semiconductor equipment and the introduction of abatement tools to reduce PFC emissions. Even though the total volume of PFCs purchased in fiscal 2002 was more than 60% greater than three years earlier as a result of increased production and differences in production processes, emissions were successfully reduced to levels below those recorded in fiscal 1998.

In line with the goal agreed at the World Semiconductor Council (WSC) of reducing greenhouse gas emissions to below 90% of fiscal 1995 levels by fiscal 2010, Sony plans to institute additional measures, starting in fiscal 2003. These include the replacement of heavily used C_2F_6 with alternatives such as COF_2, which has a much less potent greenhouse effect.

Promotion of Use of Renewable Energy

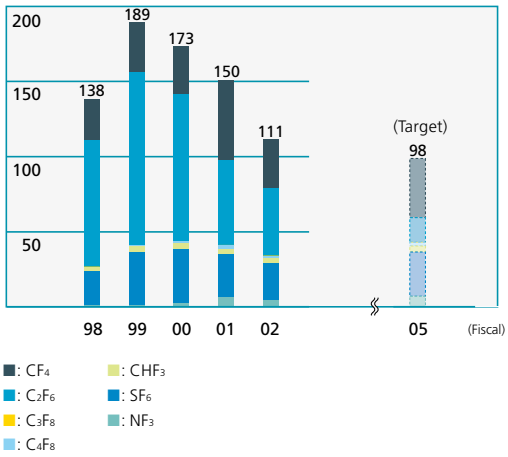
One method of promoting reductions in CO_2 emissions that the Sony Group has adopted is the greater use of renewable energy sources. Examples of this approach include the introduction of solar power generation systems and the Green Power Certification System, which promotes the greater use of environmentally conscious power sources. Sony has also begun purchasing electric power derived from renewable sources by means of similar third-party verification schemes in Germany and the Netherlands.

The Green Power Certification System promotes the use of wind-generated electricity in Japan by large-scale consumers, irrespective of the relative locations of power producer and consumer, by providing purchasers with certification of power generation from renewable energy sources. Using this system, Hall Network Inc., an affiliate of Sony Music Entertainment (Japan) Inc., has successfully sourced all the electric power used for its "Zepp" venues located in major cities in Japan from renewable sources. Thus all the concerts and other events held at "Zepp" venues are controlled by "Green Power."

As of the end of fiscal 2002, the total effect of the use of renewable energy sources around the Sony Group was equivalent to an annual reduction in CO_2 emissions of approximately 6,900 tons.

Total Greenhouse Gas Emissions From Semiconductor Production

(CO_2 equivalents, indexed at fiscal 1995 = 100)



Sites/companies involved	Year program initiated	Annual reduction in CO_2 emissions (ton-CO_2)
<Green Power Certification>		
Sony Corp.	September 2001	1,000
Sony Tower	September 2001	800
Sendai Technology Center, Sony Corp.	January 2003	370
Hall Network Inc. (Zepp)	January 2003	900
SME TV Inc. (Viewsic)	April 2003	300
Sony International (Europe) GmbH		
Stuttgart Technology Center	January 2003	2,000
Sony Logistics Europe B.V.	January 2003	1,500
<Solar power generation>		
Sony Chemicals Corporation, Kanuma Site	February 2000	30
Total:		6,900

URL For more information about the Green Power Certification System, please visit the website of Japan Natural Energy Co., Ltd.
http://www.natural-e.co.jp/index-e.html

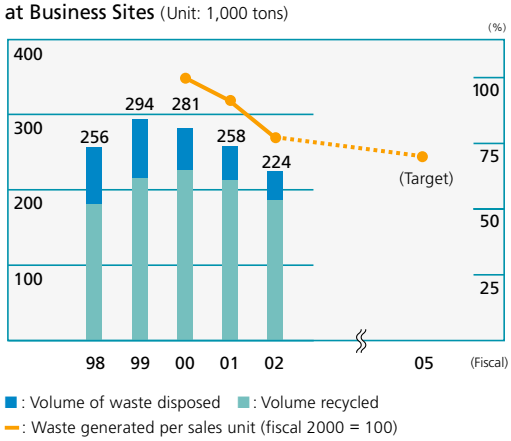
Resource Conservation at Sites

Sony sites are actively pursuing ways of making the most effective use of resources while also reducing the generation of waste. The goal is to promote these types of resource recycling to achieve "zero landfill waste," thus minimizing the amounts of waste sent to landfills for disposal.

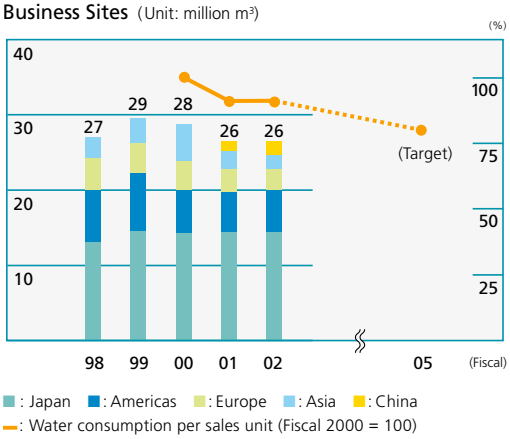
Green Management 2005 Targets for Resource Conservation at Business Sites

Target	Base Fiscal Year	Target Fiscal Year	Progress in Fiscal 2002
Reduce total waste generated at sites by 30% per sales unit.	2000	2005	Total waste came to 224,000 tons, about 58,000 tons less than fiscal 2001, representing an approximate decline of 22% per sales unit.
Waste reuse/recycle rate of 95% or higher.	2000	2005	The collective waste reuse/recycle rate for all Sony sites was 83%. 39 out of 87 manufacturing sites achieved waste reuse/recycle rates of 95% or higher.
Reduce the volume of water purchased or drawn from groundwater by 20% per sales unit.	2000	2005	Fiscal 2002 water use was about 26.4 million m³, a reduction of roughly 2.3 million m³. This represents a decline of approximately 10% per sales unit.

Total Waste Generated at Business Sites (Unit: 1,000 tons)



Total Water Used at Business Sites (Unit: million m³)



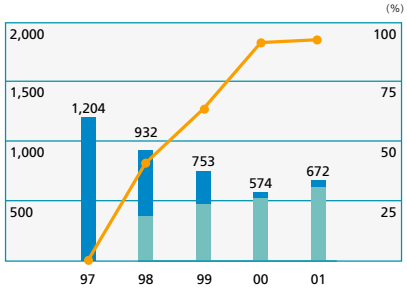
Total waste generated by Sony sites worldwide amounted to approximately 224,000 tons in the year ended March, 2003. This figure represented a reduction in waste generated by 22% per sales unit relative to the year ended March, 2001. Waste reduction achieved at semiconductor plants and consolidation of plants in Asia were the main contributors to the relative reduction in total waste generated. Total waste sent to landfills for final disposal amounted to approximately 37,000 tons in the year ended March, 2003, producing a recycling ratio of 83.4%. As of mid-2003, a total of 39 Sony manufacturing sites had achieved recycling ratios in excess of 95%.

Total water consumption in the year ended March, 2003, amounted to approximately 26.4 million m³. This represented a reduction of 2.3 million m³ relative to the year ended March, 2001. Although the most recent year's data represented a larger population of Sony sites, the increases in water consumption due to this broader scope were more than outweighed by reductions in water consumption achieved at semiconductor and CRT manufacturing sites.

Waste Reductions in CRT Production

Through the development of recycling technology and use of alternatives, American Video Glass Company, a U.S.-based Sony affiliate, has achieved significant reductions in the amounts of lead used and produced as waste in the production of glass for cathode-ray tubes (CRTs). During 1999 to 2000, the company achieved a total reduction in lead used in glass production of approximately 1,800 tons, despite a concurrent increase in CRT production volumes of 20%. The amount of waste containing lead was also reduced by over 95%. These efforts generated a total of over $500,000 in cost savings from reduced purchases of materials and lower waste processing costs. The success of this resource conservation program was recognized in October 2002 with an award from the U.S. Environmental Protection Agency.

Lead Recycling (1,000 lbs.)



■ : Waste containing recycled lead
■ : Waste containing lead for final disposal
— : Lead recycling rate

Recycling of Waste Plastics

Sony Tochigi Corporation has developed technology for recycling waste polycarbonate resin generated during the production of disk substrates. In a pelletized form, this resin can be reused as a material for the outer casings of MDs. Through careful control of the plasticity of the material (which determines the degree of shock resistance) and improvements in the molds used, the company was able to boost the proportion of resin in the collected waste as high as 90%, compared with a previous normal value of 20%. In the year ended March 2003, approximately 95% of the polycarbonate resin produced as waste in production processes was recycled.

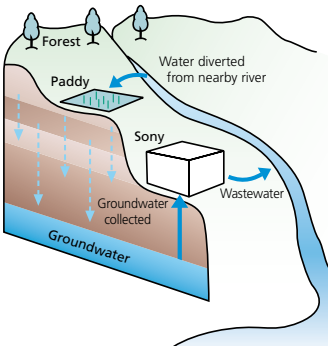
Waste polycarbonate resin produced from manufacturing processes

Polycarbonate resin for use in recycled shell casings

An MD made using the recycled resin

Groundwater Cultivation (Sony Semiconductor Kyushu Corporation)

Since the spring of 2003, Sony Semiconductor Kyushu Corporation, Kumamoto Technology Center has been working in cooperation with local residents, agricultural cooperatives and an environmental NGO to replenish the area's water table via local rice paddy fields. The Center uses approximately 700,000 tons of water each year at the facility for drinking and industrial applications. To provide the equivalent amount of water, the Center supported a project to draw water from a nearby river and return it to rice paddies. Since the soil under the paddies is highly porous, water diverted from the river is able to quickly return underground. Under this plan, water is currently drawn from the river twice yearly, once during the month prior to rice planting in the summer and once during the month following harvest in the fall. The center also plans to purchase the rice grown locally to supply the site's restaurant.



Chemical Substances Management at Sites

Considering the possible harm caused by their long-term environmental effects, Sony is striving to effect definite and sustained reductions in the used and emitted amounts of certain chemical substances, such as endocrine disrupters, that have a potentially hazardous effect on the environment or the human body. Sony is also continually looking for substances to use as alternatives. In the year ended March 2003, reflecting similar initiatives with products, Sony revised its methods for management of chemical substances used at business sites.

Green Management 2005 Targets for Chemical Substance Management at Business Sites

Target	Base Fiscal Year	Target Fiscal Year	Progress in Fiscal 2002
Class 2 substances: Phase out.	—	2005*1	203 tons of Class 2 substances were used in fiscal 2002, of which 175 tons were lead-based solder.
Class 3 substances: Reduce emissions by 90%*2	2000	2010	Approximately 22,000 tons were handled in fiscal 2002. Of that amount, about 1,900 tons were emitted or transferred, a decrease of approx. 7.2% per sales unit from fiscal 2000.

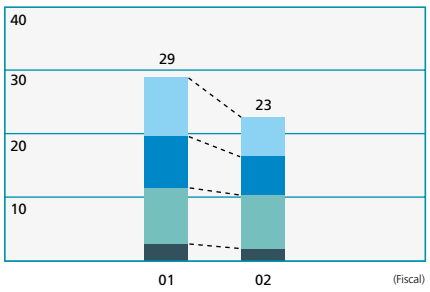
Management of Chemical Substances Used at Business Sites

The Sony Group has developed a common management approach targeted at chemicals used at sites whose use is either controlled by legislation, are designated as having a potentially harmful broad effect on the global environment, or that are used in large quantities within the Group. These chemicals are classified into four groups (Classes 1–4). In accordance with the PRTR (Pollutant Release and Transfer Register) rationale, Sony records and manages amounts of these chemicals that are consumed, transferred, or emitted to the air, water and soil. In countries where no legal reporting system exists, Sony sites apply internal standards to the management of these chemicals to reduce the emission into the environment.

Usage of Class 1 substances (prohibited) in the year ended March 2003 was restricted to substances for which there is yet no viable alternative: 14 kg of 1,1,1-trichloroethane, which is used in semiconductor manufacturing processes, and 354 kg of mercury, which is used as an additive in battery materials. The usage figure for mercury represented a year-on-year increase of about 35% due to a large rise in battery material production volumes. Total usage of Class 4 substances (controlled) amounted to 44,000 tons, also an increase over fiscal 2001. The higher figure in this latter case was the result of greater accuracy in the data collected from sites following the introduction of the chemicals management and reporting system.

Sony plans to introduce a new class of controlled chemical substance from fiscal 2003. Class 5 will consist of those substances that are exceptions to the Class 1–4 system. These arise due to the different regulatory regimes applicable to various regions and countries. The chemicals newly classified as Class 5 substances will include a large proportion of those chemicals listed in Class 4 in fiscal 2002.

Handling of Chemical Substances (Classes 1-3) (Unit: 1,000 tons)



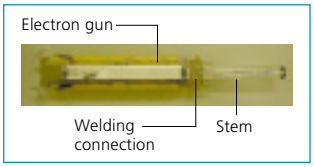
Classification of Controlled Environmental Substances*3

Class	Treatment
Class 1 (prohibited)	Use immediately prohibited
Class 2 (phased out)	Phase out by March 31, 2006
Class 3 (reduced)	Reductions in use, release and transfer
Class 4 (controlled)	Control of use, release and transfer
Class 5 (controlled regionally)	Control of use, release, and transfer of non-Class 1–4 substances regulated by national and regional laws and substances controlled by internal site rules.

*1 Target date for elimination of lead solder is March 31, 2005.
*2 Emission/transfer target for Class 3 substances will be revised in fiscal 2003 to reduce by 50% per sales unit by March 31, 2006, relative to the year ended March 2001.
*3 Please refer to p. 73 for an explanation of chemical names.

Measures to Reduce Use and Release of Chemical Substances

One key component of a cathode-ray tube known as the stem is responsible for maintaining the vacuum inside the tube and for supplying current to the electron gun. By re-designing the stem and by developing an alternative method to prevent oxidation of the leads, Sony Fukushima Corporation has found a way of completely eliminating the stem-etching process, once vital to maintaining the integrity between the electron gun and the stem, from CRT production. Previously, this step was indispensable in ensuring the strength of the welds used. This development has helped to reduce annual usage of etching acids, including hydrofluoric acid (0.6 tons), nitric acid (7.8 tons), hydrochloric acid (13 tons) and acetic acid (19 tons).



Electron gun stem

Manufacturing processes used at ST Liquid Crystal Display Corporation*1 to produce LCDs generate two types of liquid waste: a concentrated waste liquid and a dilute effluent. The company subcontracts treatment of the former to an external industrial waste recycler and processes the latter internally. After analysis of the composition of these wastes, the company made changes to the wastewater piping system to alter the balance between the two. This helped to reduce by nearly 10% the amount of concentrated liquid sent for processing.

Elimination of Fluorine Contamination Due to Leaks

A voluntary inspection conducted at Sony EMCS Corporation, Inazawa Technology Center (Inazawa TEC) in June 2001 revealed groundwater contamination due to suspected fluorine leaks. Besides taking measures to prevent reoccurrence of the problem, such as the installation of dual-wall drainage pipes equipped with sensors to detect leaks, Inazawa TEC has implemented a comprehensive groundwater decontamination program. As of the end of March 2003, the concentration of most fluorine-containing pollutants had been cut by more than 50%. At the most polluted test site, where a reading of 58 mg/l had been initially recorded, the concentration had been reduced to 5.3 mg/l, proving that the decontamination process is effective. Inazawa TEC has also reviewed its use of fluorine-containing acids. By switching to the use of caustic soda, an alkaline alternative, in the panel-cleaning process that was the suspected source of the problem, use of such acids has been reduced by 65%. The decontamination project is ongoing. Sony EMCS expects the site to be compliant with environmental standards by the year ending March 2006.

*1 A joint venture between Sony Corp. and Toyota Industries Corp.

Environmental Risk Management at Sony Sites

Sony has revised its existing rules for environmental risks and established "Regulations for Onsite Environmental Risk Management." The new rules lay down a common approach for all Sony sites worldwide to aid in preventing environment-related incidents. Areas where procedures were updated include the management of chemical substances and emergency response measures. The new rules were designed using non-technical language and clear, explanatory diagrams to avoid differences or errors in interpretation. On-site environmental risk management at Sony emphasizes a number of critical areas, listed below. Sony plans to ensure compliance with these rules using site environmental risk audits.

Critical areas for improvement:

1. Storage tanks and piping must not be situated underground; existing infrastructure must be upgraded to secondary containment of tanks and piping.
2. Special measures must be taken to prevent leaks in loading and unloading areas, particularly where chemicals are stored under vacuum.
3. Blockage valves must be installed to isolate rainwater and wastewater, with procedures established for operation.
4. Emergency response measures must be established, including communication procedures in the event of an emergency.

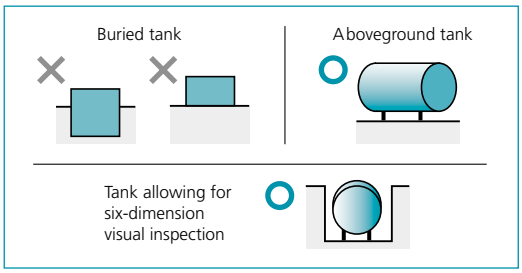


Illustration from "Regulations for Onsite Environmental Risk Management"


Storage tank with dual-wall fittings to prevent leaks
Shanghai Suoguang Visual Products Co., Ltd. (China)


Wastewater pit installed in trailer yard to prevent leaks from fuel oil tanks
Sony Display Device (Singapore)

Realizing a Sustainable Society Through Higher Eco-Efficiency

Sony's long-term goal of doubling eco-efficiency by the year ending March 2011 relative to the year ended March 2001 necessitates changes of a comprehensive and essential nature. By using the three driving forces of technology, business models and education identified in the Sony Environmental Vision, Sony plans to strive ceaselessly toward the goal of realizing a sustainable society, using gains in eco-efficiency as the central indicator of progress.

Three Steps Toward Higher Eco-Efficiency

Eco-efficiency is the main environmental management indicator that Sony uses to assess progress. Sony envisions a three-stage process of generating gains in eco-efficiency, powered by the three driving forces.

Stage 1: Product and Process Improvement

The first stage involves the implementation of continuous reductions in the environmental impact of current products and processes. Typical examples of such efforts with products include: reductions in operating or standby power consumption through more energy-efficient designs; conservation of resources through development of lighter, more compact products; and the use of recycled materials. Sony has made considerable progress in improving energy efficiency by reducing operating power consumption, particularly with products such as large televisions that consume large amounts of power and standby power which is wastefully consumed. Process-related improvements include energy-saving site installations of high-efficiency equipment or waste-reduction programs that target zero landfill waste through the greater recycling of materials.

Stage 2: Product and Process Innovation

The second stage involves the realization of products and processes with lower environmental impact through the development and introduction of innovative technologies that radically change their nature.

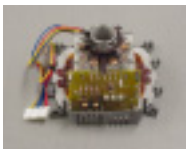
Major innovations are gradually occurring in the product sphere with the development of new digital and device technologies. For example, products such as televisions, display monitors and audio amplifiers tend to cause the greatest environmental impact within the Sony product range. Compared with their analog predecessors that contain CRTs, the new digital amplifiers and LCDs that have already been introduced boast considerable savings in terms of energy consumption and resources.

New semiconductor technology is also making a substantial contribution to the development of products

1: Product and Process Improvement

Continuous reductions in the environmental impact of current products and processes

- Improve the energy efficiency of deflection circuits by changing deflection yokes used in televisions from circular to angular shapes
- Adopt use of ultra-efficient heat pumps to reduce CO_2 emissions



Angular deflection yoke

2: Product and Process Innovation

Realization of products and processes with lower environmental impact through development and introduction of radically innovative technologies

- Ongoing digitization of analog amplifiers for improved efficiency in power consumption
- Introduction of vegetable-based plastics (p.55)
- Introduction of mini-lines at semiconductor manufacturing plants for greater energy efficiency

S-Master fully digital amplifier

3: Lifestyle and Business Style Revolution

Revolutionary change in business models, organization and consciousness

- Promotion of product recycling (p.56-59)
- Adoption of renewable energy (p.62)
- Groundwater cultivation (p.64)
- Internet music distribution, e-books, e-learning
- Encouraging leasing

that combine more advanced functionality with enhanced resource conservation. It is believed that semiconductor technology will play a more important role in products in future. But it is also widely acknowledged that chip-manufacturing processes impose a high environmental burden as a result of high clean-room power consumption and the copious use of water and chemicals in cleaning processes. Even in this area, technological innovations such as partial clean-room technology, re-engineered process flows and new types of cleaning equipment that help to conserve resources are expected to enable substantial reductions in the environmental impact of production processes. Sony has already developed, installed and begun operating technical process innovations of this type in its own semiconductor manufacturing plants.

Stage 3: Lifestyle and Business Style Revolution

Sony does not believe that the types of product and process improvements and technical innovations described above will be sufficient to realize a sustainable society. Our lifestyles will also need to change in terms of the paradigms that involve our use of products and services. Sony believes that new business models and structures that are fully compatible with the environment will need to be developed.

The first step in this stage toward a sustainable society is the conservation of resources through the use of products in such a way that it directly raises eco-efficiency. Wider use of leasing and rental arrangements for products are one way that this could happen. Shifts toward greater use of renewable energy sources (p. 62) and cultivation of groundwater (p. 64) are other examples of new business styles that can achieve the same objective.

The advent of the network society should also have positive environmental repercussions. Not only will it lead to improved products and processes, but it also promises to transform ordinary lifestyles through the distribution via the Internet of entertainment (music and movies) and greater access to online education (e-learning). This opens up the possibility of generating reductions in environmental impact that are not contingent on any change in service or product quality. Although the prospect of permanent network access as a mass utility raises valid concerns about large increases in power consumption, improvements in connectivity are expected to generate offsetting effects that will help to conserve resources, in part through reduced demand on non-virtual distribution processes.

Such lifestyle revolutions will be instrumental in helping the whole of society to understand and tackle environmental issues. The Sony Group is contributing to this process through its involvement in the media industry, which is closely concerned with the issue of content distribution that is driving many of these changes. For example, in April 2003, the inaugural issue of a quarterly magazine, *Lingkaran*, published by Sony Magazines, Inc., included an extensive discussion of the environmental implications of lifestyle changes, targeted at consumers.

Establishment of Institute for Environmental Research

In March 2003, Sony established its own Institute for Environmental Research to formulate a new business vision to help realize the scenario of sustainable society described above. As part of its activities, the Institute is engaged in the generation of ideas and business proposals for innovative environmental technologies and new lifestyle-related concepts that can help to reduce environmental impact.

Sony has been a consistent supporter of long-term environment-related research. In January 1993, Sony established a system of environmental funds aimed at financing long-term research into the development of important technologies related to environmental themes. The technology developed for the application of vegetable-based plastics in products is one example of environmental research supported by this type of funding. In the future, the Institute for Environmental Research will organize the fund with the aim of developing new breakthrough environmental technologies.

Site Environmental Data

Sony compiles environmental data from its business sites worldwide using an internally developed system. Below is a summary of the scope of this data and the collection methods used.

Scope, Collection Period and Accuracy of Compiled Data

Collection period:

April 2002–March 2003

- Data from some business sites contain estimates.
- Some values for greenhouse gas emissions other than CO_2 are for calendar 2002.
- Collection and recycling data for post-consumer products in the United States and Europe is for calendar 2002.

Scope of data collection:

All ISO 14001-certified sites as of March 31, 2002 (including manufacturing and non-manufacturing sites)

- Data is principally collected from consolidated group business sites. However, data has also been collected from several sites of joint ventures in which Sony holds a capital stake of 50%*1.
- Data has not been collected from some ISO 14001-certified sites located outside of Japan; some environmental data voluntarily compiled and submitted by certain non-certified sites was also accepted.
- Collective sales and operating income of certified sites accounted for approximately 75% of Sony Group consolidated sales and operating income.

Data accuracy:

The chemical substances and environmental cost data collected from certain sites may be slightly less accurate than others.

Sites with ISO 14001 Certification

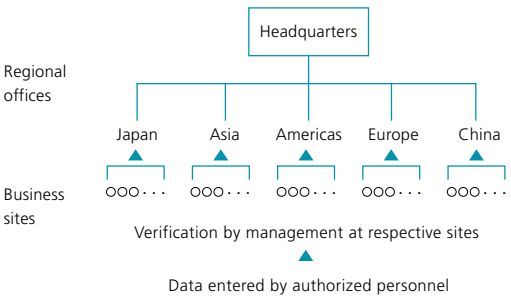
- The number of sites listed represents all sites that have received ISO 14001 certification.
- Sites eligible for ISO 14001 certification, in principle, refer to sites that have been operating for at least two years, excluding small-scale sites that meet the conditions outlined below.
- Conditions:
  Sites with less than 50 employees that are involved in hardware research, development or design, in distribution, in warehousing or in manufacturing.
  Sites with less than 100 employees that are involved in hardware sales, in software research, production or sales, in mail-order sales, in insurance or finance, or sites serving as corporate headquarters.

For a list of ISO 14001-certified sites, please refer to the following.

URL http://www.sony.net/eco/book/index.html

Global Data Collection System

Sony uses its own Intranet-based system, "ecos," to facilitate the collection of environmental data from Sony Group sites worldwide. "ecos" enables business sites to compile environmental performance data automatically. Internal data-input regulations mandate built-in checking procedures to minimize errors. During fiscal 2002, the system became operational at all Sony Group business sites worldwide.



Environmental data collected using ecos

Monthly: Energy, water, wastes, chemical substances, environmental costs

Yearly: NOx (nitrogen oxides), SOx (sulfur oxides), BOD (biochemical oxygen demand), COD (chemical oxygen demand)

*1 Includes America Video Glass Company (U.S.) and ST Liquid Crystal Display Corporation (Japan).

Environmental Data Collection Methods and Rationale

Greenhouse Gas Emissions

CO_2 Emissions at Business Sites

CO_2 emissions associated with energy consumption

CO_2 emissions for Sony business sites are calculated by multiplying total consumption of electricity and fuels (including gas and oil) at each site by a CO_2 conversion coefficient.

For sites in Japan, the conversion coefficient used is one recommended by a Japanese government committee for the calculation of greenhouse gas emissions, for the year ended March 2003.

URL http://www.env.go.jp/earth/ondanka/santeiho/h1408/index.html (Available only in Japanese)

For sites outside of Japan, the CO_2 conversion coefficient used is based on the GHG protocol.

URL http://www.ghgprotocol.org/

The conversion coefficient used for electricity consumption at sites in some countries is one developed through studies conducted by the Japan Electric Machine Industry Association. As a rule, electricity conversion coefficients are based on electric power measurements at the point of receipt, but in some countries this coefficient uses measurements at the point of transmission.

- Electricity conversion coefficients are zero for any electric power generated by or purchased from renewable energy sources.
- Any CO_2 emission contributions due to the Green Power Certification System can be used to offset total emissions.

CO_2 emissions associated with private vehicle use

CO_2 emissions related to private vehicle use at Sony business sites are calculated by multiplying total fuel consumption by a CO_2 conversion coefficient. For sites in Japan, the conversion coefficient used is the same government-recommended coefficient for the year ended March 2003. For sites outside of Japan, the GHG protocol coefficient is used.

Non-CO_2 greenhouse gas emissions

Emissions of non-CO_2 greenhouse gases at Sony business sites are calculated by multiplying emissions by a global warming coefficient, which is based on a coefficient proposed in the Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).

CO_2 Emissions in Distribution Phase

CO_2 emissions associated with shipments of products handled by Sony Supply Chain Solutions, Inc. (Japan) are calculated by multiplying total shipment weights and distances traveled by relevant CO_2 conversion coefficients. These coefficients are taken from a paper "Carbon Dioxide Emission Units for Freight Transportation Bodies," which was presented at a meeting of the Environmental Committee of the Central Environmental Council held in Japan on April 26, 2002.

CO_2 Emissions in Product Use Phase

CO_2 emissions associated with the use of Sony products are calculated by multiplying estimates of the total energy consumed over a lifetime of operation by all the Sony products manufactured in the year ended March 31, 2003, by relevant CO_2 conversion coefficients. Hence, the figures do not represent actual CO_2 emissions in the year ended March 31, 2003. The energy consumed by products is calculated using the following formula:

Production volume x (Operating power consumption x Estimated hours of operation per year + Standby power consumption x Estimated standby time per year) x Years used x CO_2 conversion coefficents

Average product operating and standby times and years of use are based on several research data.

For Japan, the conversion coefficients used are the same as those used for CO_2 emissions at Sony business sites. Outside of Japan, the conversion coefficients used vary according to the product's intended destination (if North America, coefficients for the United States are used; if Europe, coefficients for Germany are used; for other regions, coefficients for Singapore are used).

Resource Calculations

Resource Inputs

Resource input amounts are calculated based on data on resource outputs, according to the equation below.

Resource input amount = (1) Weight of products + (2) Total waste generated at Sony sites – ((3) Amount of recycled materials used + (4) Amount of renewable materials used)

(1) Weight of products
Total weight of all Sony-branded products sold, including all accessories and packaging materials

(2) Total waste generated at Sony sites
Total weight of all waste generated at Sony sites

(3) Amount of recycled materials used
Total weight of all recycled materials used in products, accessories and packaging materials

(4) Amount of renewable materials used
Total weight of all vegetable-based plastics used in products, accessories and packaging materials

Resource Outputs

Resource output amounts are calculated according to the equation below.

Resource output amount =
(1) Amounts of waste sent by Sony sites to landfills for final disposal + (2) Weight of products –
(3) Amount of products collected –
(4) Amount of packaging materials collected

(1) Amounts of waste sent by Sony sites to landfills for final disposal
Total weight of all wastes generated at Sony sites, less amounts for any recycled or compacted materials

(2) Weight of products
Total weight of all Sony-branded products sold, including all accessories and packaging materials

(3) Amount of products collected
Total weight of all home appliances, PCs, batteries and other products recycled in Japan, the U.S. and Europe; a portion of this figure is based on calculations from recycling expenses

(4) Amount of packaging materials collected
Total weight of portion of packaging materials for product shipments that Sony is legally obliged to collect and recycle, which includes cardboard and recyclable containers/packaging materials

Water Consumption

These figures include all purchased water and any groundwater drawn by each site.

Chemical Substances

Chemical Usage at Business Sites

Usage values represent amounts handled, less any amounts recycled. Usage data is not recorded for certain substances that are not subject to PRTR rules (including various metals, rare gases and atmospheric constituents) or that cannot be specified using conventional nomenclature.

Environmental Accounting

Calculation Method for Environmental Conservation Costs

- Aggregate total direct investments and expenses for environmental conservation activities during the year ended March 31, 2003.
- Expenses include labor costs, depreciation, leasing fees and other overheads.

Calculation Method for Environmental Conservation Effects

Environmental conservation effects are calculated by comparing total environmental impact for the years ended March 31, 2002, and 2003. To improve environmental impact data comparability between the two years, the following capacity utilization correction is applied to environmental impact for the year ended March 31, 2002, using the ratio of sales recorded in each year. This is based on an eco-efficiency rationale.

Capacity-adjusted value for FY2001 =
environmental impact in FY2001 (actual) x
FY2002 sales / FY2001 sales

(FY2001 sales = ¥7,578,258 million;
FY2002 sales = ¥7,473,633 million)

Items Included in Environmental Conservation Effects

The items included by Sony as environmental conservation effects cover the four major categories of greenhouse gases, resources, water and chemical substances. Monetary conversion of such effects using coefficients is described below.

Monetary Conversion of Environmental Conservation Effects

Greenhouse gases:	¥700 per ton of CO_2 Derived from market data on emissions trading in Europe
Resources:	¥11,600 per ton Calculated from waste management and recycling expenses
Water:	¥503 per cubic meter The average cost of piped water and drainage
Chemical substances :	¥1,300,000 per ton Calculated from historical data on environmental incidents at Sony

Main Points of Difference with Fiscal 2001 Report

- The greenhouse gas conversion coefficient per ton of CO_2 has been altered, from ¥3,100 to ¥700 to reflect the fall in prices in the emissions trading market over the year.
- Environmental risks are excluded from effects since relevant quantitative data on a fiscal-year basis are currently difficult to obtain.
- Chemical substances include class 2 and class 3 substances marked for reduction or phase-out. Class 4 controlled substances have been omitted.

Site Environmental Data

Environmental Data for Sony Business Sites

1 Terajoule = 1 trillion Joules

		Unit	Fiscal 1998	Fiscal 1999	Fiscal 2000	Fiscal 2001*1	Fiscal 2002
Energy*2	Electricity consumption	TJ	28,458	30,610	30,046	29,303	31,385
	Gas consumption	TJ	7,172	7,376	6,287	5,531	7,586
	Oil consumption	TJ	3,094	3,285	3,301	3,368	2,522
	Vehicle fuel	TJ					650
	Total	TJ	38,724	41,271	39,634	38,202	42,143
Water	Water consumption	m^3	26,907,650	29,420,871	28,624,900	26,364,288	26,389,755
Waste	Waste generated	t	256,450	293,652	281,450	257,769	223,726
	Waste recycled/ compacted	t	180,878	215,150	226,046	212,630	186,528
	Sent to landfills for final disposal	t	75,572	78,502	55,404	45,141	37,198
Controlled Environmental Chemical Substances*3	Class 2 substances	t	42	51	703	468	203
	Class 3 substances	t	10,799	11,222	17,042	19,221	16,292
	Class 4 substances	t	23,162	28,824	27,490	26,627	43,408
	Total		34,003	40,096	45,235	46,306	59,903

*1 Revised figures for estimates first reported in Sony Social & Environmental Report 2002.
*2 Crude oil equivalent of electricity, gas, and petroleum consumed.
*3 Total volume of chemical substances used calculated by subtracting the volume of chemical substances recycled from the volume of chemical substances handled.

Greenhouse Gas Emissions From Business Sites (Unit: t-CO_2)

	HFCs	PFCs	SF_6	NF_3	Others	CO_2 from energy consumption	Total
Fiscal 2000	7,823	242,580	51,947	2,780	235	1,937,564	2,242,929
Fiscal 2001	6,553	206,780	43,118	8,669	401	1,897,356	2,162,877
Fiscal 2002	6,754	150,996	39,351	5,988	932	1,975,715	2,179,736

*Some data includes calendar year figures
*Although NF_3 is a much less harmful alternative to PFC gas, Sony voluntarily lists this substance due to the large quantity it uses.

Environmental Data Available at Sony Website

The following additional data can be found on the Sony website.

- Business site environmental data by region (figures for Japan go back to fiscal 1990)
- Environmental data for products (p.47)
- List of ISO 14001-certified business sites
- List of business sites with OHSMS certifications
- Brief history of environmental activities
- External recognition received by Sony for environmental activities

URL http://www.sony.net/eco/book/

List of Controlled Substances

Class	Class 1 Prohibited	Class 2 Phase-out by March 2006	Class 3 Reduction	Class 4 Controlled
Greenhouse Gases			PFCs HFCs SF_6 N_2O CO_2 (excluding energy-derived)	
Ozone-Depleting Substances	CFCs (non-refrigerant) HCFCs (non-refrigerant) Methyl bromide	Halon CFCs (used as refrigerant in freezers installed by the end of March 1981)		CFC (used as refrigerant in freezers installed after April 1981) HCFCs (refrigerant) HFCs (refrigerant) (allowed in new freezers installed by the end of March 2011)
VOCs	1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,2-Dichloroethane 1,1-Dichloroethylene 1,2-Dichloroethylene Methylene chloride Chloroform Trichloroethylene Tetrachloroethylene Carbon tetrachloride		Methanol IPA MEK n-Hexane Toluene Xylene Ethyl acetate Butyl acetate	Acetone Cyclohexanone
Heavy Metal Compounds	Cadmium and its compounds Mercury and its compounds	Lead solder (phase-out by March 2005)	Chromium (VI) compounds Lead and its compounds (excluding lead solder) Antimony and its compounds Arsenic and its compounds Nickel compounds Zinc compounds Manganese and its compounds Cobalt and its compounds	Lead-free solder Chromium (VI) compounds (used as rustproofing materials for refrigerators phased out by the end of March 2011)
Carcinogenic Substances	Asbestos Vinyl chloride monomer PCBs Benzene			
Endocrine Disrupters and Substances Harmful to Reproductive Functions	Nonyl phenol Octyl phenol	Methyl cellosolve and its acetate Ethyl cellosolve and its acetate Dioxins and furan		
Toxic and Dangerous Substances			Chlorine Formaldehyde Hydrofluoric acid	Ammonia Acids and alkalis
Agrichemicals, Sterilizers, and Others	Aldrin Dieldrin Endrin Chlordane Heptachlor Toxaphene Mirex DDT Polychlorinated naphthalene (chlorine index of 3 or higher only) Hexachlorobenzene Bis (tributyltin) oxide Certain para-phenylenediamines			Effluent treatment agents

Glossary

AC-drive equipment
Any equipment powered directly from an electric mains socket.

Advisory board
A group that exchanges opinions with, and provides advice to, the senior management of a company. In the case of the Sony Group, this involves periodic discussions with top executive officers.

ATRAC3
A type of audio compression technology that enables the data on a music CD to be compressed by over 90% without any loss of quality.

ATRAC3 plus
A more advanced form of the ATRAC3 audio compression algorithm that boosts compression to 95%.

BOD (Biochemical Oxygen Demand)
The amount of oxygen consumed during the microbial disintegration of organic matter in water.

Business partner
Any company or venture that is involved with the sale of Sony products or services, but that does not supply parts or products to Sony (see also: Supplier).

Business site
Divided into manufacturing sites (plants where products are manufactured) and non-manufacturing sites (offices and other sites).

C_2F_6: hexafluoroethane

C_3F_8: octafluoropropane (perfluoropropane)

C_4F_8: octafluorocyclobutane (perfluorocyclobutane)

CF_4: tetrafluoromethane

CHF_3: trifluoromethane (fluoroform)

CO_2: carbon dioxide

COD (Chemical Oxygen Demand)
The amount of oxygen equivalent to the quantity of oxidant consumed during the oxidation in water of organic matter or non-oxidized inorganic matter.

COF_2: Carbonyl fluoride

CP: chlorinated paraffin

CSR: Corporate Social Responsibility
The responsibilities of a company by virtue of its being a corporate citizen of society.

Contactless IC card
A type of IC card with a magnetic strip whose data can be read or altered without the need to insert the card into a special slot for reading.

Compliance
Observance of legislation and regulations. Sony also includes observance of internal rules within the scope of this term.

Corporate governance
Internal systems and rules adopted by companies to govern how they are managed.

Eco-efficiency
An index obtained by dividing sales by an environmental impact figure (see p. 38).

e-learning
Training and other educational programs provided over the Internet or an intranet. As no classrooms is needed, e-learning allows individuals to study at any time and place.

Environmental accounting
Compares the cost of environmental conservation programs and corresponding reductions in the environmental impact (the combined burden on the environment caused by Sony's business activities and the use of its products.)

Ergonomics
The study of human engineering, often related to the effects on the human body of unnatural working environments.

Funnel glass
The funnel-shaped portion of a cathode ray tube behind the picture surface.

Greenhouse gases (GHG)
Gases that absorb solar infrared radiation reflected from the Earth's surface, raising air temperature. This category of gases typically refers to the following six compounds: CO_2, methane, nitrous oxides, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Green Power Certification System
A tradable system, introduced in Japan, of certified electric power sourced from wind-based generating plants. The system is designed to facilitate the use of wind power by facilities that are not situated close to the site of power generation.

Global Compact
A global forum initiated by the United Nations to tackle any of a variety of issues stemming from globalization.

Home Appliances Recycling Law
A law enacted in April 2001 to promote recycling of home appliances in Japan.

Halogenated flame retardants
Chlorine, fluorine and other halogen elements added to plastics to make them fire resistant.

Hexagonal carton
A shipping carton for large-screen televisions that is shaped to match the profile of the television.

HFC
A hydrofluorocarbon (an organic chemical containing fluorine, plus at least one hydrogen atom).

Intranet
A part of the Internet that can only be used inside a particular company.

ISO 14001
An international standard for environmental management systems. Certified systems must be based on a Plan-Do-Check-Act (PDCA) structure.

Lead-free solder
Solder that replaces lead-based solder formulations that could be harmful to the environment by releasing lead if disposed of improperly.

Life cycle assessment (LCA)
A method for determining environmental impact of a product or service beginning with the sourcing of raw materials and ending with recycling or disposal.

Limonene
Oil obtained from the peels of citrus fruit. Used mainly for fragrances in food products and cosmetics.

Limonene-recycled materials
Recycled polystyrene foam that has been reconstituted using limonene, as part of the Orange R-net system developed by Sony.

NF_3: nitrogen trifluoride

NOx: oxides of nitrogen

Nickel metal hydride batteries
A type of rechargeable dry-cell battery; smaller and more powerful than nickel-cadmium batteries.

OHSMS (Occupational Health & Safety Management System)
A system for managing occupational health and safety based on a "plan-do-check-act" (PDCA) structure.

Panel glass
Refers to the television screen onto which CRT-produced images are projected. Panel glass contains no lead.

PBB: polybrominated biphenyl

PBDE: polybrominated diphenyl ether

PCB: polychlorinated biphenyl

PCN: polychlorinated naphthalene

PDCA
Refers to the Plan-Do-Check-Act cycle.

PFC
A perfluorocarbon (an organic chemical in which all the hydrogen atoms have been substituted by fluorine).

Printed circuit board
A board created by attaching various components to the top of a piece of silicon onto which an electrical circuit pattern has been printed.

PRTR (Pollutant Release and Transfer Register)
A public system for tracking and recording the amounts of certain chemicals believed to be environmental pollutants that are emitted into the environment or else transferred in the form of waste.

Pulp mold
A cushioning component for packaging made from old newsprint or other reused materials.

PVC: polyvinyl chloride
A type of general plastic, often used for its excellent flame-retardant and insulating properties. Use of such plastics, and of PCV resins as plasticizers, is being discontinued because of concerns about the environmental harm caused by inappropriate disposal, which can generate toxic by-products.

Renewable energy
Forms of energy derived from non-limited, natural sources (such as solar or wind).

Risk management
Analyzing potential sources of risk prior to the occurrence of a problem and taking preventive measures.

Semiconductor wafer
A thin, circular piece of pure crystalline silicon that forms the base for IC-chip production.

SF_6: sulfur hexafluoride

SOx: oxides of sulfur

Site
Refers to manufacturing and non-manufacturing sites.

Sony Green Partner
A term used by Sony for a supplier that satisfies internal environmental management standards (see p. 51).

Stakeholder
Any party that associates with Sony. Examples include but are not limited to shareholders, other investors, suppliers, government agencies, mass media, research institutions, non-governmental organizations, customers, local communities, employees and children.

Standby power consumption
Power consumption of a product while power is switched off but it remains capable of receiving a power-on command from a remote control unit.

Supplier
Any party that supplies parts or products to Sony (see also: Business partner).

VOC
Volatile organic compounds, substances that have been used as solvents in ink and other products but contribute to air pollution and acid rain.

WEEE (Waste Electrical and Electronic Equipment)
A recycling directive issued by the EU for electrical and electronic equipment (see p. 57).

Zero landfill waste
At Sony, this is defined from fiscal 2003 as reducing to less than 1 percent the amount of waste sent to landfills through waste reduction, reuse and recycling programs.

Independent Verification Report

Since the year ended March 2001, to enable ongoing improvements in environmental management, Sony has asked PricewaterhouseCoopers (PwC) to provide independent verification of the reliability of the environmental data reporting.

Actions in Response to Feedback From 2002 Report

In its report in the Sony Social & Environmental Report published in July 2002, PwC confirmed that the process used to identify, collect and report significant environmental data and information included in the Report was reliable, and advanced certain recommendations for improvement in environmental pollutants and/or the environmental accounting process.

The results of the independent verification process were reported to Sony site managers, who conducted studies to consider what actions needed to be taken. In addition, several meetings were convened for personnel of Sony manufacturing operations around the world to explain the launch of "ecos," an online environmental data collection system that will help track reductions in impact and other aspects of environmental performance more precisely.

Unified international standards have yet to be established in the field of environmental accounting. Moreover, in some parts of the world, there is no equivalent of the PRTR (Pollution Release and Transfer Register) Law, which regulates the management of chemical substances in Japan. As a result, there is insufficient data on this topic from some regions. These problems require many issues to be addressed, and Sony continues to work to generate improvements in these areas.

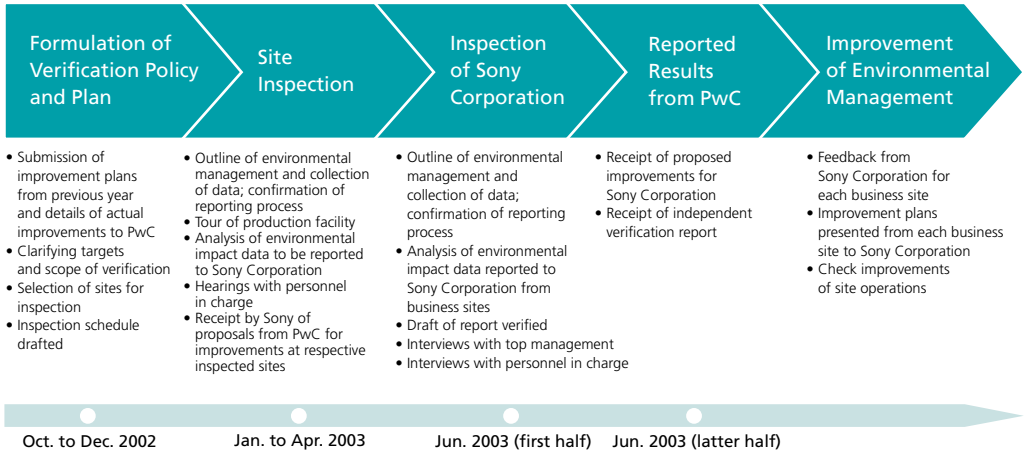
Scope of Verification in the Year Ended March 2003

Rising social concerns about the environment are creating the demand for increasingly precise data on environmental performance. With this in mind, for this year's report, Sony requested that PwC focus particular attention on the reliability of processes used for the collection and reporting of environmental performance data, and on the accuracy and completeness of greenhouse gas emission volumes.

Onsite inspection at Sony PCL Inc.

Inspection at Sony Corporation

Independent report verification procedure at Sony



Independent Verification Report

Independent Verification Report

June 6, 2003

To. Nobuyuki Idei

Chairman and CEO, Sony Corporation

Kunitake Ando

President and COO, Sony Corporation

PricewaterhouseCoopers("PwC")has been asked to verify and provide an opinion on significant environmental performance data and information (greenhouse gas, hazardous materials, wastes, water consumption and environmental accounting) presented in the Sony Corporation ("Sony") CSR Report 2003 ("the Report"). The preparation of the Report is the responsibility of Sony and the verification of the Report is the responsibility of PwC.

Objectives of Verification

The objective of this verification is to express an opinion on:
(a) The reliability of the processes used by Sony to identify, collect and report significant environmental performance data and information, related to greenhouse gas, hazardous materials, wastes, water consumption, and environmental accounting included in the Report: and
(b) The accuracy and completeness of data and information related to greenhouse gas ("GhG") emissions included in the Report (Associated only with manufacturing sites where our local verification took place.)

Basis of Opinion

Currently there are no generally accepted international environmental reporting and verification standards. Therefore, we have referred to emerging practices and guidance.

Summary of Procedures Performed

We conducted a verification of 10 sites, including Sony headquarters ("HQ"). Both at the corporate and site levels we:

- Conducted interviews with management and persons responsible for the preparation of the Report:
- Analyzed data:
- Inspected relevant documents: and
- Reconciled sample data to supporting documents.

We performed the following procedures on significant environmental performance data and information included in the Report:

At the Corporate Level
1. Environmental management of the entire Sony Group
We obtained an understanding and assessed the status of the organization and the overview of operation of the environmental management and data items collected.
2. Processes used by the Sony Group to identify, collect and report data and information on environmental performance
We obtained an understanding of the methods used by the Sony Group to identify significant environmental performance data and information, and to measure each data item. We assessed how and when the data is collected and reported.
3. Environmental performance information and data included in the Report
We tested a sample of data from the Report to assess consistency with supporting documents.

At the Site Level
1. Overview of environmental management
We obtained an understanding and assessed environmental management regarding significant environmental performance data and information included in the Report, at each site, for the following:

- The system to collect environmental performance data and its status:
- Information about material flow controls:
- Strategic goals and objectives, including environmental preservation programs: and
- Existence of environmental incidents.

2. Processes used by each site to identify, collect and report data and information on environmental performance
We obtained an understanding of the methods used by each site to identify significant environmental performance data and information, and to measure each data item. We assessed how and when data is collected and reported.
3. Data and information reported to HQ for the preparation of the Report
We tested a sample of data from the Report to assess consistency with supporting documents.

The scope of verification includes the following parameters and items:

- Energy consumption and GhG:
- Hazardous materials:
- Waste production, recycling and disposal:
- Water consumption: and
- Environmental accounting.

Environmental performance data and information included in the scope of our procedures performed are indicated with a symbol ✓ PricewaterhouseCoopers .

Opinion

On the basis of the above work, we have reached the following opinion:
1.At the locations where our procedures were conducted, the processes used to identify, collect and report significant environmental performance data and information included in the Report are reliable, except that there are some sites that need to improve processes on hazardous materials and/or environmental accounting. Although we raised a similar issue in the prior year's report, some improvements were observed.
2.GhG emissions data included in the Report for inspected manufacturing sites are accurate and complete.

PricewaterhouseCoopers

PRICEWATERHOUSECOOPERS

Sites Inspected

Name of Site	Country	Business Line
Sony Corporation Headquarters	Japan	HQ
Sony Semiconductor Kyushu Corporation Nagasaki Technology Center Sony Computer Entertainment Inc.'s Fab1	Japan	Electronics
Sony EMCS Corporation Inazawa TEC	Japan	Electronics
Sony EMCS Corporation Kisarazu TEC	Japan	Electronics
Sony Music Manufacturing Inc. Shinsuka Plant	Japan	Music・Games
Sony PCL Inc.	Japan	Others
Sony Semiconductor (Thailand) Co., Ltd.	Thailand	Electronics
Sony Electronics Inc. Sony Technology Center・San Diego	USA	Electronics
EMCS UK Technology Center, Bridgend Site	UK	Electronics
Sony Precision Devices Co., Ltd	China	Electronics

Our Recommendations to Sony

This year, our third consecutive year of providing Sony with environmental report verification services, we conducted more detailed procedures in order to provide an opinion on the reliability of processes used to identify, collect and report on significant environmental performance data and information included in the Report. During the verification process, we made a number of recommendations about Sony's environmental management. The following is a summary of our recommendations.

1. Hazardous Materials

Sony group has developed data management and reporting systems for hazardous materials to compile the following data:

- Types of hazardous material
- Inputs (use)
- Outputs (amount consumed, treated, discharged/transported, and recycled)

At some sites, due to the lack of clear and consistent guidance for calculating outputs, the data management and reporting systems for hazardous materials cannot be relied upon to deliver accurate and complete data.
However, compared to last year, some domestic sites have made progress in developing methods for the identification and calculation of inputs.

It is expected that regulations related to hazardous materials will become stricter globally. Therefore, we recommend that Sony have a better understanding of how hazardous materials are controlled, both domestically and internationally, and provide clearer guidance, which will lead to a more rigorous data management and collection system.

2. Environmental Accounting

Last year, we indicated that the data gathering procedure for environmental accounting data at some sites was incomplete. This year, Sony conducted a training session for site data collection that resulted in improved understanding of environmental accounting by persons in charge of data gathering for environmental accounting at domestic sites.

However, the environmental accounting system implemented at some sites was not comprehensive, so that at these sites which had not fully implemented Sony's "Environmental Accounting Guidelines," some data was not included in the aggregation.
Environmental accounting is still in middle of its development. The process for collecting and reporting environmental accounting data is evolving, and therefore it is difficult to have a consistent global methodology. Sony is reconsidering the effectiveness of the current environmental accounting process.
Environmental accounting is an efficient tool for assessing environmental conservation. Therefore, we recommend further improvement of environmental accounting to enhance not only the external report, but also internal management in general (e.g. environmental budgeting and project management etc.). This will promote a better understanding of aggregate environmental accounting data, and will result in a more accurate external report.

3. GhG

Calculation methods used for Greenhouse Gas ("GhG") emissions are as follows:

- The conversion of energy consumption to GhG is carried out by Sony Corporation using appropriate GhG coefficients, based on gas, electricity consumption and chemical substance-usage data collected from the individual sites.
- CO2 emissions associated with vehicular fuel use is calculated by fuel consumption data collected from the individual sites.
- CO2 emissions from product transport is calculated by transport volume and mileage data collected from the individual sites.

Sony has continued its efforts to have a comprehensive understanding of GhG emissions throughout Sony Group. At the inspected sites, we did not identify any significant energy and chemical consumption data missing from the reports. For further improvement, we recommend that Sony add quantities of CFC substitutes, which are used as refrigerants, to the scope of GhG aggregation.
Considering the high global warming potential ("GWP") of CFC substitutes, and their global use, we recommend Sony begin collecting and reporting such data.
As we observed last year, there are still different cut-offs, and calculation methods being used to aggregate GhG emissions associated with chemical consumption. We recommend that Sony adopt the same cut-offs and calculation methods for all GhG data generation.

Opinion and Feedback on the Sony Social & Environmental Report 2002

Sony has received various opinions and other feedback about its Social & Environmental Report 2002, which was published in June 2002. As of May 20, 2003, the total number of completed questionnaires received was 248.

To help make improvements to the report, Sony also sought the opinions of experts in relevant fields. All this feedback will be incorporated into Sony's social and environmental activities. Below are summaries of some of the opinions expressed, together with Sony's responses.

<From Questionnaire Responses>

On the environment

'Disclosure of environmental incidents is welcome owing to the negative nature of such information.'

— The 2003 report also discloses information about Sony's social and environmental activities that could be viewed in a negative light.

'I would like to see more detailed information about recycling.'

— The 2003 report features more case studies on recycling efforts in different regions and details of actual recycling processes (pp. 56–59).

'I would like to know Sony's attitude toward long-term product use from an eco-conscious perspective.'

— While Sony is increasingly recognizing the environmental value of long-term product use, it still remains difficult to accommodate the wishes of every customer in this respect.

On compliance activities

'Please supply more details about the Sony compliance system.'

— Sony approaches compliance in the broadest sense of the word. The 2003 report includes details of regulatory compliance structures and Sony's systems of internal regulations (pp. 11–13).

On community activities

'It warmed my heart to discover that many of the people at Sony are donating their time to volunteer programs out of a sincere desire to contribute to society.'

'Please tell us more about the social contributions made by Sony.'

— In line with the importance of community activities, the 2003 report dedicates five pages to this topic (pp. 27–31). Further details are available at the Sony web site.*1

Other comments

'The text is small and hard to read.'

— Several people made similar comments. We have tried to address this issue in the 2003 report by enlarging point sizes and making text easier to read.

<Expert Comments>

On social activities

'The report contains virtually no data on social issues or related achievements.'

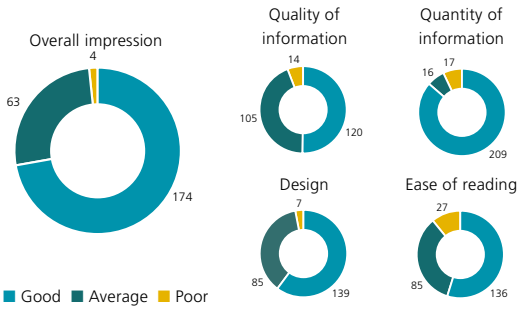
— Sony is currently using commonly accepted guidelines and the opinions of its stakeholders in this respect to revise its internal management system, which should soon allow the collection and analysis of meaningful social data.

On the Independent Verification Report

'An Independent Verification Report is included, but there are no clues as to Sony's thinking about this process or points for improvement.'

— These points have been addressed in the 2003 report (p. 75).

Aggregate Results of Received Questionnaires



*1 For more information about community relation activities, please visit the website.
URL http://www.sony.net/eco/book/

Questionnaire on the CSR Report 2003

Thank you very much for your interest in the Sony CSR Report. One of Sony's principle aims in compiling this report is to stimulate dialogue with our stakeholders. The overleaf of this page contains a questionnaire on the report. We would appreciate it very much if you would take the time to record your impressions and provide any advice, suggestions or criticism you feel may be useful.

The questionnaire can also be completed at the web address found below.

All feedback is highly valued and will be reflected, as appropriate, in Sony's CSR activities in the future.

Cut here

Corporate Social & Environmental Affairs
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Tel: +81-3-5448-3533 Fax: +81-3-5448-7838 email: eco@jp.sony.com
URL http://www.sony.net/eco/

Questionnaire on the Sony CSR Report 2003

Please fill in your name and address if you wish to receive a copy of the next edition of our CSR Report. You can also complete this questionnaire online at the following. URL http://www.sony.net/eco/book/

Q1. From what standpoint in relation to Sony did you read the content of this report?

• Shareholder • Business partner • Person in charge of CSR activities at another company • Member of an NGO
• Product user • Member of government/administrative body • Researcher/student • Member of the news media
• Sony Group employee • Other ( )

Q2. What is your impression of the report?

• Overall: Good Average Poor
• In terms of quality of information (on your areas of interest): Sufficient Too Much Too Little
• In terms of volume of information: Sufficient Too Much Too Little
• In terms of design: Good Average Poor
• In terms of readability: Good Average Poor

Q3. Please use the space below to list the sort of information you would like to see included in the next report.

Q4. Please use the space below to record your impressions, comments and any requests you may have concerning Sony's CSR activities.

Cut here

Readers who wish to receive a copy of next year's report are requested to provide the following information.
Readers 13 years of age or younger are requested to fill out the information in the presence of a parent or guardian.

Personal Information Policy

1. Collection, Use and Disclosure of Personal Information

Information provided below (including name, country, zip code, address and email address, hereunder "Personal Information") will be used only for the purpose of sending the report, with the exception of specific cases stipulated by law. The questionnaire, however, will be used as a reference for our next report. We may also disclose statistical data to third parties, but such data will not include any Personal Information.

We will contract with a third party, with whom we enter into a Non-Disclosure Agreement, for delivery of the report.

2. Protection and Disposal of Personal Information

We will make reasonable efforts to protect Personal Information from unauthorized use or disclosure. All Personal Information will be disposed of once the report has been dispatched to you.

Inquiries

Readers who have filled out the request for delivery of next year's report may address inquiries, including requests for changes to any information they have provided, to the following office:
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Name

Organization:

Address

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Sony homepage

English: http://www.sony.net
Japanese: http://www.sony.co.jp

Annual Report

For Sony's latest Annual Report,
please visit the following sites.
English: http://www.sony.net/IR/
Japanese: http://www.sony.co.jp/IR/

For inquiries regarding this report or Sony's CSR activities

Corporate Social & Environmental Affairs
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Sony CSR activities homepage

English: http://www.sony.net/eco/
Japanese: http://www.sony.co.jp/eco/

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For information on environmental activities at Sony business sites, please visit the following websites:

English: http://www.sony.net/eco/ book/
Japanese: http://www.sony.co.jp/eco/book/index.html

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Sony Corporation

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