Canon Sustainability Report

2004











Kyosei with the People of the World





To Our Readers

Canon published five *Environmental Reports* between November 1994 and August 2002. The publication of the *Canon Sustainability Report* in August 2003 marked a change from the past, as we expanded the scope of the report from environmentally conscious management to sustainable development, including information on our economic and social initiatives.

This second issue of the *Canon Sustainability Report* offers even more comprehensive coverage to satisfy the needs of our stakeholders and to fulfill the company's responsibility to explain its global measures for sustainability. To create a report that is easy to understand, Canon has systematically compiled information on the Group's approach to sustainability, and the daily activities we are undertaking to achieve our objectives.

The GRI Sustainability Reporting Guidelines (▶P. 20), along with two sets of guidelines from the Japanese Ministry of the Environment—the Environmental Reporting Guidelines and the Environmental Accounting Guidelines—were used as references to clarify the scope of each area of this report. SustainAbility Ltd.

helped us develop a more comprehensive third-party review including the views of two stakeholders, so our readers can develop a more informed opinion of Canon. More about this process can be found on page 67.

Finally, Canon has produced this report in order to allow as many of our stakeholders as possible to learn about our sustainability initiatives, and as part of this goal we have published both Japanese and English versions of the report.

(URL: canon.com/environment)

We welcome your feedback. Please e-mail your comments or send us a fax using the questionnaire at the end of the report. (FAX: +81-3-3758-8225, E-mail: eco@web.canon.co.jp)

- (1, a. 10, a. 5, a. 6223, 2 main eco-residentines.jp)
- *The product names used in this report are the names used in the United States/ Europe. For products not sold in the United States/Europe, the product names are those used in Japan.

*Throughout the report, (▶P. 00) indicates pages with additional reference

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IVision and Strategy Approach to sustainability and medium- to long-term environmental strategy

IHighlights of 2003

Major environmental activities and initiatives in 2003

IManagement

Putting vision into action



IPerformance Data

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IReference Materials/ Third-Party Opinion

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Participating in Revision of GRI 2005 Guidelines

Promoting Environmentally Conscious Technology and Products Worldwide

Period Covered

January 1, 2003–December 31, 2003

The report also covers some policies, goals, and measures for 2004 and beyond.

Reporting Scope

Environmental performance data are classified and compiled into the scope shown below as well as into the four regions of Japan, the Americas, Europe, and Asia/Oceania.

- Canon Inc. (15 operational sites), Canon Sales Co., Inc., manufacturing subsidiaries and affiliates in Japan (23 operational sites), manufacturing subsidiaries and affiliates outside Japan (14 operational sites), marketing subsidiaries and affiliates outside Japan (28 operational sites).
- "Operational sites" means administrative offices, sales offices, R&D facilities, and manufacturing plants that are owned by the Canon Group and are functioning.
- Data concerning only a specific region are indicated as such.
- For marketing subsidiaries and affiliates outside Japan, only data concerning product recycling and ISO14001 certification are provided.

In principle, all data not related to environmental performance are compiled on a consolidated basis (data concerning only a specific region are indicated as such).

Overview of Canon Inc.

Company Name: Canon Inc Establishment:

Capital:

¥168,892 million 198 consolidated subsidiaries

(as of December 31, 2003)

•	vianagement	
	Excellent Global Corporation Plan — 2°	1

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The Ambition: An Excellent Global Corporation Based on the *Kyosei* Philosophy, Using Cutting-Edge Technology to Support the Environment and Create a Sustainable Society

Returning Nature to its Original State with Technology

In the 20th century, technology proved itself to be a double-edged sword. Remarkable economic growth was achieved in the latter half of the century as advanced nations used their technology to greatly improve standards of living. But these economic improvements brought by new technology also generated serious air, water, and soil pollution problems around the world. By the end of the last century, global environmental problems like the destruction of the ozone layer and global warming had emerged as clear threats to humankind. It was equally clear that industry and technology had played a leading role in this environmental destruction. I firmly believe, however, that just as advances in technology and the establishment of social systems helped resolve local pollution problems, technology can also answer these global environmental threats.

I had the opportunity to live in the United States from 1966 to 1989, and the active movements I saw there to protect the environment made me all the more aware of the importance of environmental conservation. When I returned to Japan, earnest debate had begun over what kind of society was needed to ensure the sustainable development of humankind. I, too, was drawn to this debate out of a deep interest in what could be done to solve environmental problems.

This interest became for me, as a management representative of Canon, a major responsibility. I worked to put into practice the basic notion that corporate management could not be divorced from the environment.

The mission was evident: to preserve nature and limited resources for many generations to come. And the method appeared equally evident: use advanced technology to restore the damage to the environment caused by humankind. We at Canon eagerly accept the challenge of finding ways to use our technology to return the environment to its original state.

The Contribution of *Kyosei* in Building a Sustainable Society

In 1988, a year after the company marked the 50th anniversary of its founding and was looking ahead towards the next 50 years of business, Canon established *kyosei* as its corporate philosophy. It was around this time that "pollution problems" were newly recognized as "environmental problems." *Kyosei* was not a new concept, but in this case it embodied the beliefs of the founders of Canon, who sought to develop the company by cooperating with and contributing to society. Specifically, *kyosei* stated concisely is "living and working together for the common good," and a broader definition is "all people, regardless of race, religion or culture, harmoniously living and working together into the future." The ideal behind *kyosei* is the same as that for a sustainable society.

Corporations, and especially manufacturers like Canon, are in business to provide products and services that enrich people's lives, making them happier and more convenient. I firmly believe that at the same time, these products must be environmentally conscious, both in terms of manufacturing and marketing, to ensure that the environmental burden is reduced and the products contribute to the goal of establishing an environmentally and economically sustainable society.

Achieving Greater Resource Efficiency

Today, humankind does not have the luxury of surplus resources. Canon understands this, and in response we established Maximization of Resource Efficiency as a fundamental concept behind our



environmental activities from 2000. Maximizing resource efficiency means minimizing the amount of resources consumed throughout the entire business life cycle, from the procurement of materials, to production, use and disposal. Consuming fewer resources at each stage also offers economic benefits, thereby merging the goals of economic development and environmental conservation.

In accordance with our policies, in 2003 we became the first company in our industry to commercialize products in compliance with the EU's regulations on hazardous substances, the RoHS (Restriction of Hazardous Substances) directive. All of our policies are being supported by concrete action. The policy of maximizing resource efficiency, which is part of our environmental Vision for 2010, has been defined numerically by the Factor 2 concept. Factor 2 is an overriding indicator by which we plan to double the efficiency of all the environmental burdens associated with our businesses by 2010, as compared with 2000. New Mid-Term Environmental Goals, a milestone for Factor 2, have been set for 2005 as a way to promote the effort, with specific goals for each area.

Achieving these goals, and developing the kind of high-level environmentally conscious technology worthy of the investment of financial and management resources, will in turn create benefits that reverberate throughout the company and society. Environmentally conscious products will stand out from the competition; energy efficiency and resource efficiency will help lower costs; risk avoidance will be helped by reducing the use of designated chemical substances; and all of these benefits together will boost our competitiveness and sustainable development while also enhancing brand value. We are using environmentally conscious management to forge ahead with sustainable development of our Group, the global environment, and society at large.

A Company Admired and Respected Around the World

Canon sees itself as one member of society promoting its own environmentally conscious management. Communication with all of our customers, local communities, stockholders and investors, employees, industry and other stakeholders is a crucial aspect in fulfilling our responsibility as a member of society.

Realizing the need for action on the elimination of harmful chemical substances, Canon took the reins in the electronics industry by calling together manufacturers and impressing upon them the importance of taking joint measures. The result was the creation of the Japan Green Procurement Survey Standardization Initiative. The success of this initiative is being felt around the world: following cooperation with American and European associations of electrical equipment manufacturers, the green procurement survey used in Japan is now quickly becoming the

global standard. Canon was also the first major Japanese corporation to hold an investors' conference specifically on the theme of the environment, which enabled us to learn from the active exchange of opinions.

Canon will actively pursue this type of communication to create a mutual understanding with various stakeholders, and to contribute to the establishment of a society in which all people "live and work together for the common good."

This is the thinking behind the publication of the *Canon Sustainability Report 2004*. We look forward to the guidance and encouragement of our readers.

June 2004

Fujio Mitarai President and CEO

Canon Inc.

Corporate Philosophy

Kyosei

Achieve corporate growth and development while contributing to the prosperity of the world and the happiness of humankind

Corporate Goals

Establish a Truly Global Corporation

Transcend borders to actively fulfill our social responsibility to all humankind, in every region of the world

Accept the Responsibility of Being a Pioneer

Create products without rival in quality and service, and which contribute to the improvement of societies around the world

Ensure the Happiness of All in the Canon Group

Contribute to continuing prosperity by building an ideal firm

Concept for the Excellent Global Corporation Plan

Aiming to Be a Truly Excellent Global Corporation

In accordance with the *kyosei* philosophy, continue contributing to society through technological innovation, aiming to be a corporation worthy of admiration and respect worldwide

Imaging Technology that Benefits All Our Stakeholders

Canon continues to expand globally with a lineup of products incorporating proprietary technology. Our stakeholders are the beneficiaries of our firm commitment to advancing the field of imaging.

Development of the Canon Group

Canon Inc. was established in 1937 as a camera manufacturer, the first in Japan to develop a 35mm focal-plane-shutter camera and an indirect X-ray camera. Canon then expanded into the business machine field as we diversified our operations, which have grown to encompass imaging, spanning input and output devices, software, hardware, and services.

Global expansion followed with the establishment of a New York branch office in 1955 along with a marketing subsidiary in Europe in 1968. Production outside Japan commenced in 1970 with the founding of Canon Inc., Taiwan. Since then, Canon has gradually built a comprehensive global operation covering development, production, sales, and recycling in the Americas, Europe, and Japan/Asia.

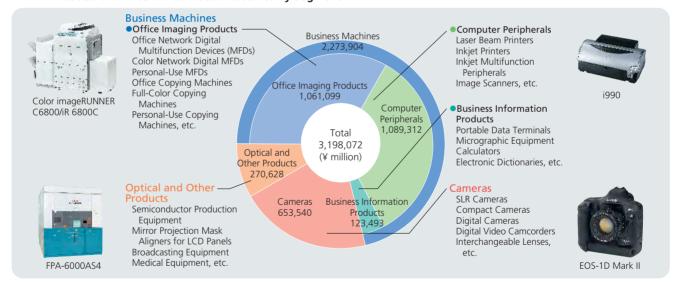
Information on Canon URL: canon.com/about

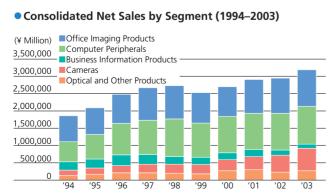
Business Activities and Society

Canon creates the imaging technology people need for communication. Our printers, copying machines, cameras and other products based on advanced proprietary technologies enable communication between people and businesses all over the world. The products can be found everywhere people need to communicate. Our high-precision equipment and a range of optical products play active roles in the manufacturing, medical, and media industries, and are even found in outer space as part of satellite systems. And we are looking beyond today and into tomorrow by pouring resources into research and development for new software and devices, along with next-generation nanotechnology.

Canon's business spans the globe, with 198 consolidated subsidiaries around the world, each operating with due consideration for local cultures and customs. Altogether, the Group provides jobs for more than 100,000 people and continues to make significant contributions both culturally and economically.

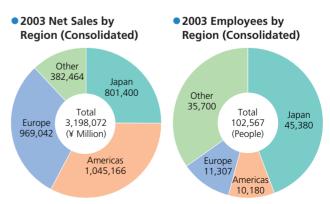
Main Products and 2003 Consolidated Net Sales by Segment







^{*}More detailed financial data are provided on P. 59





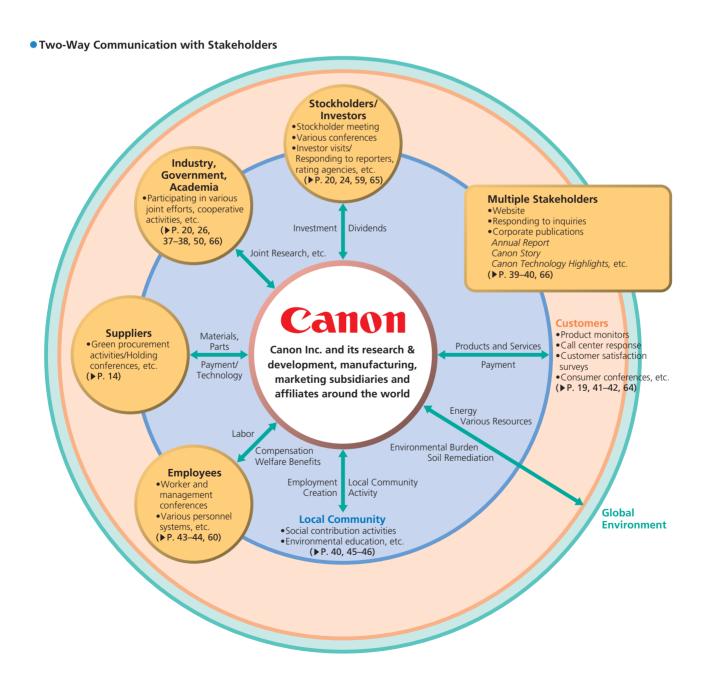
Stakeholder Relations

With its far-reaching global operations, the Canon Group depends on diverse and numerous groups of stakeholders. We depend on the stockholders and investors who contribute the funds (capital) to run a business. We depend on our employees and worldwide suppliers to provide the products and services that contribute to our goal of sustainable development. We depend on the various governmental, industrial, and academic organizations that support our efforts.

In addition, there are the end users within our three major cat-

egories of personal-use, business, and industrial products and services. Canon believes that throughout the world there are all kinds of people who should be considered "customers," including latent customers. In addition, the local communities and global environment affected by our business activities are major stakeholders in their own right.

The Group is striving to maintain two-way communication with different stakeholder groups, including direct forms of communication, and to have this communication reflected in all business operations around the world.



An Environmentally Conscious Management System Reflecting the Ideals of the Environmental Charter

Canon has put the philosophy of *kyosei* into practice with Factor 2 as the core of our environmental Vision for 2010. Factor 2 embodies our consideration for the global environment, our pursuit of environmental assurance activities based on the EQCD concept, and our drive to maximize resource efficiency.

Promotion of Environmentally Conscious Management

Established in 1993, the Canon Environmental Charter embodies the basic philosophy and fundamental policies of our environmental assurance activities. All of these activities are based on the EQCD concept*1 and are in accord with the *kyosei* philosophy. The charter was revised in 2001 to reflect the introduction of a new plan to maximize resource efficiency*2, ensuring it is possible for the Group to pursue both environmental and economic goals through technological development and the establishment of social mechanisms.

Our thinking on the environment continues to evolve, and in 2003 we set forth the overriding indicator Factor 2 as our Vision

for 2010. Factor 2 sets the numerical goal of more than doubling resource efficiency across the entire life cycle of business activities by 2010 as compared with 2000. Mid-Term Environmental Goals and an Environmental Evaluation System have been created to incorporate the vision into our business activities in planned stages and to support the operation of the environmentally conscious management system.

The Mid-Term Environmental Goals have been divided into product-related goals, goals related to operational sites, and common Group goals. For product and operational site goals, the three major focuses are on: global warming prevention and energy conservation, resource conservation, and elimination of hazardous substances. We have set down specific goals for each area to the extent possible (▶P. 11).

Canon Environmental Charter

established in 1993 revised in 2001

Corporate Philosophy: Kyosei

Achieve corporate growth and development while contributing to the prosperity of the world and the happiness of humankind.

Environmental Assurance Philosophy

In the interest of world prosperity and the happiness of humankind, pursue maximization of resource efficiency, and contribute to the creation of a society that practices sustainable development.

Fundamental Policies for Environmental Assurance

Seek to harmonize environmental and economic interests in all business activities (the EQCD concept); offer green products through innovative improvements in resource efficiency, and eliminate anti-social activities that threaten the environment or human health and safety.

- 1. Optimize the organizations for promoting the Canon Group's global environmental efforts, and promote environmental assurance activities for the Group as a whole.
- 2. In product planning and development, explore ways to minimize environmental burden and conduct environmental impact assessments.
- 3. Promote the development of technologies and materials essential for environmental assurance and share the achievements with society.
- 4. Promote energy and resource conservation and elimination of hazardous substances in all corporate activities.
- 5. When possible, practice green procurement and purchasing—give priority to selecting materials, parts, and products with lower environmental burden.
- 6. Establish Environmental Management Systems (EMSs) to prevent environmental pollution and damage, and steadily reduce environmental burden.
- 7. Actively disclose to all stakeholders information on environmental burden and keep them updated on the progress of environmental
- 8. Raise the environmental awareness of employees and educate them to take the initiative in environmental protection.
- 9. Maintain close relationships with governments, communities, and other interested parties, and actively support and participate in environmental protection activities.

*1	EQCD Concept	
	Environment ————————————————————————————————————	Companies are not qualified to manufacture goods i they are incapable of environmental assurance.
	Quality ———	Companies are not qualified to market goods if they are incapable of producing quality goods.
	Cost — Delivery —	Companies are not qualified to compete if they are incapable of meeting cost and delivery requirements.

- *2 Maximization of Resource Efficiency
 - "Maximization of resource efficiency" means achieving maximum efficiency in the use of resources—in other words, offering the highest quality standards for products and services, while minimizing resource consumption, and practicing reuse and recycling. The key objective is to add as much value as possible, using as few resources and as little energy as possible.



Every division in the company must practice environmental assurance in order to meet the goals. High added value can be generated no matter how small the amount of resources and energy. This thinking is the basis for maximizing resource efficiency, which is being pursued in many ways. For example, the cell production method has led to higher efficiency and innovations in production technology (P. 47) (P. 27). The introduction of environmental equipment and management systems has helped reduce our environmental burden (P. 34). In addition, we are promoting the development of environmental technology and widespread use of products incorporating that technology, along with new environment remediation businesses (P. 27). While these activities help lessen environmental burden, they also

provide the management benefits of raising brand value, differentiating our products as environmentally conscious, contributing to lowering costs through resource and energy efficiency, and helping to reduce risk through the reduction of the use of hazardous substances.

The introduction of the Environmental Evaluation System in 2001 has enabled us to manage the results of each division (P. 26). These results are incorporated into the Evaluation System on a Consolidated Basis, allowing management to directly evaluate the actual results of each division's environmental assurance activities. With this evaluation system, Canon has succeeded in creating a unified approach to the environment and economic achievement.

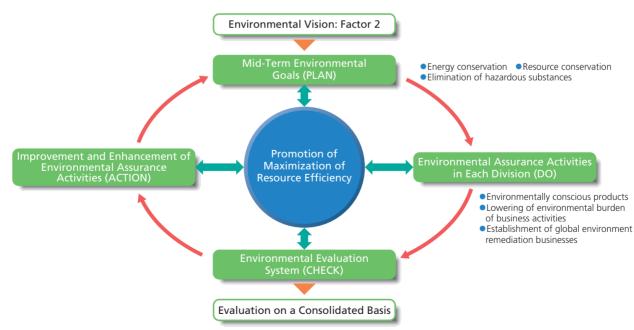
Vision for 2010

Overriding Indicator: Factor 2

(Increase by at least a factor of 2.0 the ratio of net sales*1 to life cycle CO₂ emissions*2, using 2000 as the reference year)

- *1 Annual consolidated sales of the Canon Group.
- *2 The environmental burden from the business activity life cycle—the flow of business activities from production of raw materials, to production and marketing by the Canon Group, use by the customer, and recycling/disposal after use—is converted into total direct and indirect CO₂ emissions.

Canon's Environmentally Conscious Management System



Canon's Goals for Environmentally Conscious Management

- Raise brand value Differentiate products based on environmentally conscious design
 - Reduce costs through energy- and resource-efficient production
 - Avoid risk through elimination of hazardous substances

Life Cycle Assessment for Worldwide Operations

Canon develops effective environmental measures by analyzing the environmental burden of products and services at each stage of business operations. The scope of this life cycle assessment was expanded in 2003 to reflect the Group's growing global operations.

Status of Environmental Burden

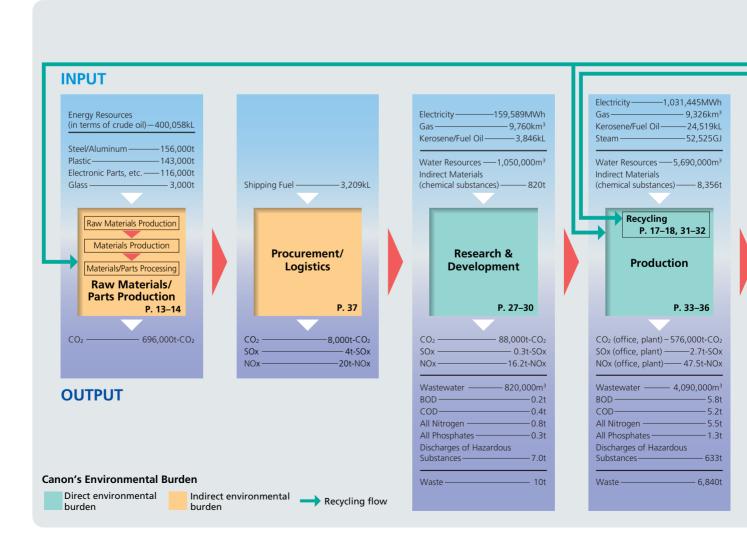
Canon's business begins with the procurement of materials and parts from suppliers via transportation companies. The materials are then processed and assembled for shipment to various retail outlets. After use by the customers, as many products as possible are collected and recycled into resources or reused. The chart below shows our analysis of the direct and indirect environmental burden*1 of Canon's business activities at each step in this train of processes, or the life cycle of business activity.

As for the direct environmental burden (from research & development, production, sales/logistics and collection/sorting), CO_2 emissions from all forms of energy usage totaled 1,358,000 tons in 2003. Discharges of hazardous substances into the atmosphere or waterways totaled 640 tons. The total amount of waste produced was 7,008 tons. Overall, discharges and emissions increased along with the expansion of our business. In addition, the indirect

environmental burden caused by upstream activities (raw materials/parts production and procurement/logistics) and downstream activities (product use, processing of used products) totaled the equivalent of 1,809,000 tons of CO_2 emissions in the year.

These data have reinforced the awareness that about 60% of Canon's environmental burden is indirect, and the emphasis on reducing the environmental burden should be placed more on the product itself than on the production and sales/logistics stages. In particular, the amount of electricity consumed by products at the use stage is large, and therefore the most important issue is to make products more energy efficient (P. 15–16) (P. 29). From the perspective of resources, steel, aluminum, and plastic are the most common types of materials used. As the recycling route of plastic has yet to be firmly established, a key issue is how to reduce the amount of plastic used in products and how to better recycle the plastics being used (P. 17–18) (P. 28–32).

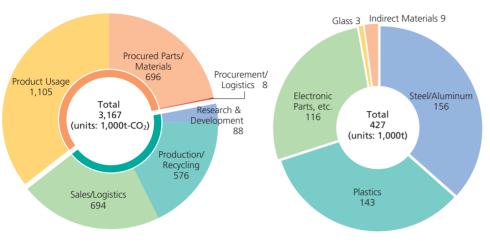
2003 Canon Group's Material Balance*2





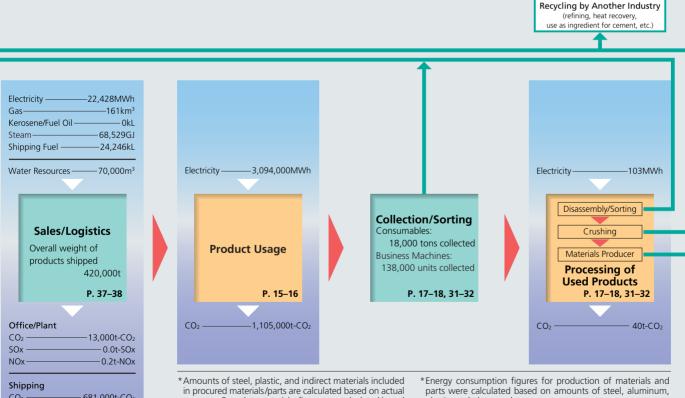
Energy Usage Breakdown (CO₂ equivalent)

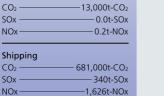
Procured Materials/Parts Breakdown



Regarding the material balance for 2003, the following new data have been added to increase the scope in accordance with the further globalization of our business activities

- Environmental burden data for manufacturing and marketing operational sites (Canon Zhongshan Business Machines Co., Ltd., Canon (Suzhou) Inc., Canon Vietnam Co., Ltd., Canon Sales Co., Inc. Shinagawa Headquarters).
- Data on logistics environmental burden of operational sites outside Japan, in addition to the previous data for logistics operations in Japan. Specifically, the international transport data for manufacturing and marketing sites outside Japan, including air and sea transport.
- *1 Environmental Burden Artificial impacts on the natural environment caused by the activities of comnanies and individuals
- *2 Material Balance The amount of energy and resources used in all business activities along with the discharges of substances acting as a burden on the environment (including wastes).





Wastewater Waste

-70,000m³ 158t

- amounts. For other materials, figures are calculated based on shipping weight and amounts of materials included in representative products (LCA data). Totals include amount of materials included in waste.
- *Energy consumption and CO₂ emissions associated with customer product usage were calculated based on usage estimates for products selected as representative of Canon's copying machines, laser beam printers, and inkjet printers. Usage periods employed were 5 years for copying machines and laser beam printers, and 3 years for inkjet
- plastic, and glass used.
- *Emissions figures for CO₂, SOx, and NOx as an indirect envi-ronmental burden include discharges related to the production of electricity, petroleum, and gas, as well as emissions
- related to product use.
 *Discharge figures for BOD, COD, phosphates, and nitrogen are for Japan only, and do not include discharges into sewers.
- Discharges of hazardous substances mean discharges and transfer into the air or public waterways, sewage systems, or as waste of about 2,200 substances (including PRTR substances) the Canon Group treats as controlled substances

Moving Towards New Goals as We Look Back at 2001–2003

In 2000, the Canon Group set Mid-Term Environmental Goals (2001–2003) as part of the promotion of its environmentally conscious management. With the conclusion of the third and final year of this initiative, we have compiled results for the period as we continue to strive towards newly established targets under our environmental management system.

Results of Activities in 2003

The focus of the goals was putting the maximization of resource efficiency into practice, with specific goals set for products, operational sites, and the Group as a whole. With 2003 being the final year of the mid-term plan, we have compiled our achievements for 2003 alone, as shown in the chart below, and summarized the major results for 2001–2003.

Major Environmental Results for 2001–2003

In terms of energy conservation, we were able to ensure that 100% of our new products consumed less energy during operation than the previous models. In particular, the on-demand energyefficient technologies incorporated into our copying machines and laser beam printers have resulted in a cumulative reduction in CO₂ emissions of 3,730,000 tons at the product usage stage based on the total sales volume of these machines, while at the same time saving our customers 117.3 billion yen in energy con-

In the area of resource conservation, Canon has achieved 100% recyclability for toner cartridges, with the collected cartridges result-

Canon's Mid-Term Environmental Goals and Achievements as of 2003

Evaluation symbols for goals: 100% achievement = 0, 70% or more = 0 (not applicable to long-term goals)

Goals		Deadline	Performance Assessment for 2003	Compared to Prior Year	Detailed Information		
		Product Goals					
Global Warming Prevention and	Have all business machine products qualify for Program (copying machines, printers, facsimile		2003	92% qualified (67 of 73 products)	0	P. 53 (P. 15–16)	
Energy Conservation	Reduced power consumption during operation	(for new products)		100% achieved	0	(1.13-10)	
	Gradually increase use of recycled parts and materials, and include them in the design of all products	Implement reuse of products/parts		 Expanded number of copying machine products using reused parts; Expanded use of recycled materials in inkjet printers 	0	P. 53–54	
Resource Conservation		Use of recycled plastic materials	2003	4,218 tons of recycled plastic used	0	(P. 17–18)	
	Plastic materials*1: Reduce number of plastic gr	rades to 1/3 of 2000 levels	67 of 103 grades		0	(P. 31–32)	
	100% recycling of collected used products*2	Copying machinesCartridges (ink, toner)		• Copying machines: 95% • Cartridges: 100%	0		
Elimination of	In 2001, began sales of products free of design to be eliminated from all products	ated substances*3. These substances	2004	Established Product Chemical Substance Assurance System; Held conference for about 3,000 suppliers inside and outside Japan; Commercialized the imageRUNNER C6800/ IR 6800C color MFD in compliance with the RoHS directive	0	_	
Hazardous Substances	Develop substitute technologies for PVC (polyvi retardants • Use olefin-based plastic instead of PVC for ele		2003	Started for some video camcorders	0	P. 13–14 P. 54	
	Use phosphate-based flame retardant V2 inste plastic	ead of brominated flame retardant		• Amount of brominated flame retardant used was reduced to 37% of all plastic procured	0		

		Operational Site Goals					
Global Warming Prevention and	Reduce CO ₂ emissions per unit of production by 25% compared to 1990 levels (production sites)* ⁵		2010	38.0% reduced	0	P. 55	
Energy Conservation	Reduce CO ₂ emissions per unit (production sites)*5	of production by 15% compared to 1999 levels	2003	28.5% reduced	0	(P. 33–36)	
	Reduce gross waste generation	by 30% compared to 1998 levels	2010	11.1% increased	_		
Resource Conservation	Reduce gross waste discharge by 50% compared to 1998 levels		2003	34.3% reduced	0	P. 56 (P. 33–36)	
	Achieve zero landfill waste at all operational sites in Japan		2003	Achieved zero waste at all 38 operational sites in Japan	0	1 (1.33 30)	
Elimination of	Reduce use or emissions of ma (compared to 1998 levels) (Usage Reductions)	terials in Canon's A, B, and C substance ranks Rank-A Substances: Eliminate use Rank-B Substances: Reduce use by 20%	2003	Rank-A Substances: Eliminated use in 2001 Rank-B Substances: Reduced use by 59%	00	P. 57–58	
Hazardous Substances	(Emissions Reductions)	Rank-B Substances: Reduce emissions by 90% Rank-C Substances: Reduce emissions by 20%	2003	Rank-B Substances: Reduced emissions by 86% Rank-C Substances: Reduced emissions by 72%	00	(P. 33–36)	
	Reduce emissions of PRTR Law	designated substances by 50% compared to 1998 levels		Reduced by 79%	0		

	Common Group Goals					
		Reviewed standards for Environmental Evaluation System at operational sites	0	P. 26		
Human Resource Development Enhance internal environmental education programs		2003	Established Web-based Environmental Education Fundamentals Course and Canon Ecology Person Diagnosis on test basis	0	P. 34 P. 50	
Social Contributions Enhance social contribution programs		2003	Participated in environmental events and local environmental programs	0	P. 45–46 P. 50	
Communications Expand and promote environmental communications		2003	Responded to comments and questions about the Sustainability Report; Disclosed eco-labels on products; Held conference for investors on environmentally conscious management; Held environmental conference for consumers (March 2004)	0	P. 20 P. 39–40 P. 64–66	
Environmental Businesses	Promote environmental businesses	2003	Started development of environment remediation equipment (prototypes completed for some products)	0	P. 27–28	

- *1 Excluding coloring agents.
- *2 Includes thermal recycling.
- *3 Hazardous substances designated by the European Union's Restriction of Hazardous Substances (RoHS) (lead, mercury, cadmium, hexavalent chromium, PBB, PBDE).
- *4 Prohibits use of soft PVC containing phthalic acid esters. Use of PVC packaging materials was halted in 1996.
- *5 Calculation based on overall greenhouse gas emissions.



ing in a reduction in CO₂ emissions of a cumulative 180,000 tons.

As for the elimination of hazardous substances, Canon has raced ahead of the rest of the industry by commercializing a product, the imageRUNNER C6800/iR 6800C color MFD, that fully complies with the RoHS directive. We have also established a Product Chemical Substance Assurance System to act as the foundation for the expansion of green procurement initiatives.

At production sites, in terms of energy conservation, the basic unit of CO₂ from production declined 38% compared with 1990. In the area of resource conservation, all 38 operational sites in Japan achieved zero landfill waste in 2003, in addition to other achievements

As for the common Group goals, to further our environmental communication efforts and to create more direct dialogue with stakeholders, we held a conference for investors on our environmentally conscious management and separate conferences for consumers.

The result of these efforts was that in 2003, Canon was ranked No. 1 of 599 companies in the 7th Environmental Management Survey (Manufacturing Division) conducted by the Nihon Keizai Shimbun. Outside of Japan, Canon was selected for the FTSE4-Good Global 100 Index and DJSI World, two influential sustainability investment indices. The Canon Group continues to receive recognition for its efforts within and outside Japan.

Strategy for the Medium to Long Term

In 2003, the Factor 2 concept was set forth as our environmental Vision for 2010 as a way to ensure that maximization of resource efficiency would be promoted over the long term. Factor 2 is an overriding indicator by which we plan to more than double the efficiency of environmental burdens associated with the entire business activity life cycle by 2010, as compared with 2000. New Mid-Term Environmental Goals to be met by 2005 have been established for each Product Group Operation and operational site, along with the Group as a whole, and we will strive to reach these milestones for 2010.



Yusuke Emura

Managing Director and Group Executive of the Global Environment Promotion Headquarters Canon Inc.

Vision for 2010

Factor 2: Increase by at least a factor of 2.0 the ratio of net sales Overriding Indicator Achieve by 2010 to life cycle CO2 emissions, using 2000 as the reference year

New Mid-Term Environmental Goals

	Product Goals	Deadline
Compliance with Standards for Environmentally	Achieve industry's highest degree of compliance with the Law Promoting Green Purchasing	2005
Conscious Products	Gain certification for all major eco-labels	2005
	Achieve highest level of qualification for International ENERGY STAR® Program	2005
Global Warming Prevention and Energy Conservation	Reduce energy consumption during operation and standby 30% compared with 2000	2005
Lifely conservation	Achieve 100% compliance with the Law Concerning the Rational Use of Energy (copying machines)	2005
	Create recycling systems for Europe, Japan, Asia, and North America	2005
	Recycle 90% or more (by mass) of collected products	2005
	Employ reused or recycled materials for all products (reused parts, recycled plastics)	2005
Resource Conservation	Reduce product size and weight by 15% compared to 2000	2005
	Increase designed-in recyclability to 75% or more of product mass (reuse, material recycling)	2005
	Increase designed-in use of recoverable materials to 85% or more of product mass (including thermal recycling)	2005
	Use green plastics (products and packaging)	2005
	Bring all products into compliance with RoHS	2004
Elimination of	Use fewer types of plastics for parts and chassis; Use 100% non-halogenated plastics for product chassis	2005
Hazardous Substances	Use substitute materials for circuit boards (non-halogenated)	2005
	Use substitute materials for PVC in AC/DC harnesses	2005
Protecting the	Meet principal environmental standards for noise	2005
Environment during Product Usage	Meet principal environmental standards for particulates, VOC and ozone	2005
Management	Implement LCA/LCC in design reviews for main products	2004

Operational Site Goals			
Global Warming Prevention and	Reduce CO_2 emissions relative to sales by 25% compared to 2000	2010	
Energy Conservation	Reduce CO_2 emissions relative to sales by 5% compared to 2000	2005	
Resource	Increase internal recycling percentage by 40% compared to 2000	2005	
Conservation*	Decrease waste by 25% compared to 2000	2005 2005 2005	
	Decrease landfill waste to zero (achieved in Japan in 2003)	2005	
Elimination of	Reduce hazardous substance discharges by 50% compared to 2000	2005	
Substances	Reduce discharges of PRTR Law designated substances by 60% compared to 2000	2005	
Logistics	Reduce CO ₂ emissions relative to sales by 20% compared to 2000	2006	

Common Group Goals			
Employee Training	Employee Training Restructure the Group's environmental education system (customize by job type and employee rank)		
Social Contributions	Implement new social contribution program	2005	
Communications	Establish interactive communication system	2005	
Communications	Disclose product environmental efficiency indices	2004	
	Gain ISO14001 consolidated certification	2005	
EMS	Develop Environmental Information Management System for global application	2005	
Environmental Businesses	Establish environmental pollution prevention and remediation businesses	2005	

^{*}Resource Conservation Activities

Internal recycling percentage = Recycling volume ÷ (Total volume [New definition] +

Recycled volume) × 100

Total Volume: Excludes recycled volume.

Recycled Volume: Refers to those materials sent to and properly processed by a recycler and then returned to Canon where they are used once again. Landfill Waste: Excludes waste processed by government sanitation departments.



Forging Stronger Ties with the Industry and Reinforcing Internal Systems to Eliminate Chemical Hazards

Responding to global developments in recent years, Canon has taken aggressive measures to eliminate hazardous chemical substances from our products, through the creation of a more comprehensive Product Chemical Substance Assurance System and closer cooperation with government and industry.

Measures to Eliminate Designated Chemicals

Canon is aggressively taking measures to develop products without using designated chemical substances that, on disposal, could harm the environment. Complete elimination of the use of these designated chemicals means approaching this issue on a wide front including the procurement, design and production stages for each product we develop, produce, and sell.

With regard to the procurement of parts and materials, Canon is ensuring some 3,000 suppliers both in and outside Japan understand the importance of environmental assurance activities as we provide them with technological and other types of assistance to help them meet our standards. Canon is also at the forefront of encouraging all companies in the electronics industry to standardize green procurement.

Topics Group Goal Aims to Have All Products RoHS-Compliant by End of 2004

As one of the Group goals, Canon aims to have all our products in all global markets comply with the European directive RoHS*1 by the end of 2004, or 18 months earlier than the enforcement of the directive. In 1995, we completed the elimination of specified brominated flame retardants such as PBB (polybrominated biphenyls) and PBDE (polybrominated diphenyl ethers) and have incorporated alternatives into our products since. We have also established alternative technologies to the four designated substances lead, mercury, cadmium, and hexavalent chromium.

These safer technologies are being introduced into actual products before the enforcement of laws requiring their use, enabling our products to maintain their competitiveness through differentiation from other products on the market. As of April 2004, Canon had preceded others in the electric and electronics industries by commer-

cializing the imageRUNNER C6800/IR 6800C series color MFD, EOS-1D Mark II digital SLR cameras and other products that were already in compliance*2 with the RoHS directive.

Other product lines are making progress towards the Group's goal. The i860/i865 and other inkjet printers, for example, are already 98% in compliance (proportionate to mass).

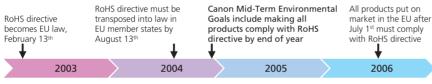
*1 RoHS Directive

Abbreviation for Restriction of Hazardous Substances, the RoHS is an EU directive concerning the use of hazardous substances in electric and electronic equipment and products. The directive bans the use of the six substances lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE, beginning July 1, 2006.

*2 Compliance with RoHS

Not including parts and materials excluded by RoHS directive. In areas where the law is not defined, Canon has set and ensured compliance with our own internal standards based on the End-of-Life Vehicles directive and other existing standards relating to chemical substances.

Timetable for Elimination of Designated Chemical Substances



Six Restricted Substances

- Lead
- Lead-free solder
- Lead-free lens*
- Lead-free wiring
- Hexavalent Chromium
- Hexavalent chromium-free screws
- Hexavalent chromium-free steel plates
- Mercury

- Cadmium
- Cadmium-free plastic
- Cadmium-free paint
- Cadmium-free wiring
- PBB, PBDE (Canon eliminated these substances in 1995)
- Plastic outer covers made of 100% PC-ABS

History of Lead-free Lenses

*Lead-Free Lens Lead has the ability to increase the refraction index of a lens, and therefore it has been conventionally used in products and interchangeable lenses for cameras and video camcorders. Canon has already eliminated lead from all lenses except some interchangeable lenses (EF lens).

, , ,	
1991	Development of lead-free lens begins in cooperation with glass manufacturer
1993	Lead-free lens developed, with the EF28-80mm F3.5-5.6II USM first to market
1997	100% of lenses for video camcorders lead-free
1999	100% of lenses for lens shutter cameras lead-free
End of 2004	Lead-free lenses planned for entire EF lens series

RoHS-Compliant Products



Color MFD imageRUNNER C6800/iR 6800C



Lens-interchangeable, high quality digital SLR camera EOS-1D Mark II

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Topics Establishing a Product Chemical Substance Assurance System

Canon established Green Procurement Standards in 1997. They have required suppliers to conduct a self-assessment of their environmental measures and a survey of chemical substances used in their parts and materials. Green procurement* was promoted on the basis of this information received from suppliers. In 2003, we decided to implement a Product Chemical Substance Assurance System as a way to comply with the RoHS directive and prepare for the possibility of increasingly strict regulations in the future. This new system strengthens the management of the survey on chemical substances in parts and materials in two ways:

Creating an Information Collection System on Chemical Substances (A standardized survey raising accuracy and efficiency)

In the past, Canon and other companies in the electronics and electric industries promoted green procurement initiatives based on self-assessments (chemical substance surveys) from suppliers. The burden on suppliers was great, however, because there was no common standard in the electronics industry of what chemical substances to cover in the survey. The result was imprecise and inefficient assessments from suppliers.

Canon took the lead in 2001 by calling together companies interested in standardizing substances covered by the survey. The Japan Green Procurement Survey Standardization Initiative was created to debate the issues. The initiative brought together guidelines that standardized the survey format

and a core set of substances to include in the survey (29 substances as of March 2004). From 2003, all the companies in the initiative (57 corporations worldwide as of March 2004) began implementing the guidelines for their standardized survey. This survey on chemical substances is quickly emerging as a worldwide standard; major electronics industry associations in the United States (EIA) and Europe (EICTA) have agreed on a set of substances for their surveys on chemical substances.

Guaranteeing Chemical Substance Information from Suppliers (Strengthening the reliability of green procurement decisions)

Canon incorporated the items listed in the next column into our Green Procurement Standards and other initiatives in 2003 to increase the reliability of our green procurement decisions and establish fair and unified standards for the whole Group. Under this improved system, procurement decisions and survey results will be entered into a database used commonly by the Group and utilized effectively for the development of new products.

Canon also explained the Green Procurement Standards to Group companies along with all of some 3,000 suppliers around the world. In addition, staff members in the procurement divisions of Group companies around the world received training on making environmental procurement decisions.

Items Incorporated into Green Procurement Standards, etc.

- A positive decision that standards have been met is a prerequisite for purchasing from a supplier. When necessary, Canon will visit the supplier and confirm information in the survey.
- Primary suppliers will take the responsibility to guarantee that secondary and other suppliers comply with Canon's requirements. (In principle, Canon will make judgments only on primary suppliers.)
- 3. The management of chemical substances used in parts and materials is a prerequisite for the environmental management system of suppliers.
- Canon will introduce a system to inspect purchased parts and materials. (In 2003, we completed the introduction of analysis apparatus units at major sites.)
- Canon will introduce an audit system (judgment process) for our own procurement division making environmental judgments on suppliers.

Future Initiatives: Working Towards World Standards

Canon will continue to study ways to further the global standardization of the green procurement survey and other measures noted above. Proposed methods include listing the measures in the ISO standards, by working through the Japan Green Procurement Survey Standardization Initiative.

*Green Procurement Favor the procurement of materials and products that have a low burden on the environment.



Year	Main Activities by Canon	Main Activities by Japan Green Procurement Survey Standardization Initiative	
	Issued Green Procurement Standards		
1997	Held Green Procurement Standards conferences		
2001		Initiative begun based on Canon's proposal	
2002		Issued draft common green procurement survey guidelines, and companies implement on test basis	
	Established Product Chemical Substance Assurance System	Issued common green procurement survey	
2003	Revised Green Procurement Standards, etc.	guidelines, and all companies implemented	
	Held conferences on Product Chemical Substance Assurance System		

Information on Canon materials procurement URL: canon.com/procurement Japan Green Procurement Survey Standardization Initiative

URL: home.jeita.or.jp/eps/greenTOP-eg.html

(Shenzhen, China)

Supplier conference on Product Chemical Substance Assurance System

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Canon Sustainability Report 2004

Proprietary Technology to Save Energy and Enhance Efficiency

Canon has improved the energy efficiency of our products even further with the introduction of on-demand energy-efficient technology and other proprietary technologies. In 2003, Canon's technological advances were recognized by two prestigious energy conservation awards.

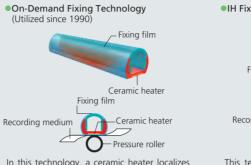
Topics Benefits of Energy-Efficient Copying Machines and Laser Beam Printers

Copying machines and laser beam printers use the most energy when they are in standby mode. Canon has adopted two types of on-demand energy-efficient technologies to reduce their energy consumption during this time. Both technologies have brought large energy savings over the conventional roller fixing technology, resulting in a reduced environmental burden through lower CO₂ emissions and economic benefits through energy cost savings at the customer's end.

We have now completed the development of a full lineup of technology that contributes to energy efficiency, from monochrome to color products. Efforts will continue to increase the offerings of products utilizing these new technologies.

Two kinds of energy-efficient technology URL: canon.com/environment/technology

On-Demand Energy-Efficient Technology

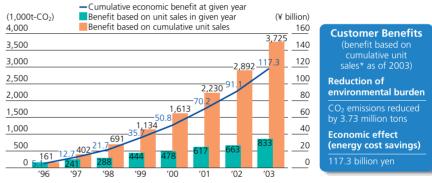


In this technology, a ceramic heater localizes the heating to a specific area through a fixing film during printing. Surplus energy consumption is avoided and energy efficiency realized

•IH Fixing Technology (Utilized since 2002) Alternating current Line of magnetic force Fixing sleeve magnetic force Recording medium Coil Pressure roller

This technology employs an electromagnetic induction heater in which an eddy current is generated when the magnetic field passes through metal coils, directly heating the fixing sleeve. Efficiency results because heating is unnecessary during standby time.

Benefits from Products Employing On-Demand Energy-Efficient Technology



*Assumes that previously sold copying machines and laser beam printers are used for 8 years.

Topics Benefits of Energy-Efficient Inkjet Printers

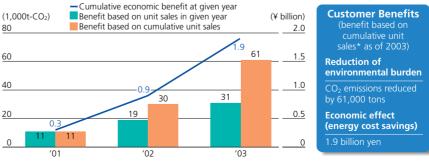
The energy efficiency of inkiet printers targeted mainly for the home market has been enhanced significantly through the reduction of energy consumption during standby and power-off times. In inkjet printers sold since the fall of 2001, Canon has attained one of the highest energyefficiency levels in the printer industry in terms of low energy consumption in the power-off and standby modes.

The key to the energy-efficient design for these products is the printer controller, which minimizes the energy needed in the standby mode. In the CPU of the printers, a clock stop function is used by the logic circuit to stop the operation of the memory controller, motor controller and other parts of the printer not needed during the standby mode. Instructions from the logic

circuit are sent to the power circuit so that when the CPU and the printer controller begin energy-efficient operation, the power circuit also begins the same operation. These

continual design efforts enable Canon to market new energy-efficient models every year and help customers reap new benefits.

Benefits from Inkjet Printers Employing Energy-Efficient Technology



*Assumes that previously sold inkjet printers are used for 3 years.

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Topics Energy Conservation Awards for Canon Printers

Canon's color laser printer LBP-2410 and our inkjet printers i860/i865 and i560 both received the Chairman's Energy Conservation Center Award at the 2003 Japan Energy Conservation Awards. This is the third

straight year Canon has been honored by the center, and we have garnered a total of six awards for energy conservation efforts in our products.

Information on Energy Conservation Awards (The Energy Conservation Center, Japan) URL: www.eccj.or.jp/index_e.html

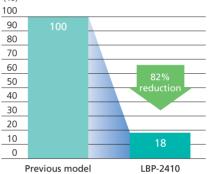
Color Laser Printer: LBP-2410

The LBP-2410 is a color laser printer with an output of 4 pages full color and 16 pages monochrome per minute. This is the first color laser printer to employ Canon's proprietary on-demand fixing method in which the fixing unit requires no warming up (fixing unit energy consumption OW) and the recovery time is 0 seconds. This technology improvement has reduced energy consumption by 82% under normal operating conditions, producing significant energyefficiency benefits.



LBP-2410

Energy Consumption Comparison with Previous Model as Base 100 (%)



Inkjet Printers: i860/i865 and i560

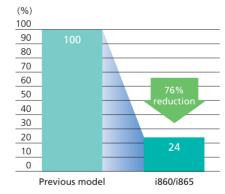
The i860/i865 incorporates a number of energy-efficient technologies. Compared with Canon inkjet printers sold just two years ago, the energy consumption per day of a i860/i865 has been reduced by 76% a unit, while the i560 has achieved 70% reduction in energy consumption.

Energy-Efficient Technology Incorporated into the i860/i865

- 1. Adoption of low energy consumption DC/DC power converter
- 2. Improvements in firmware
- 3. Clock stop function for logic circuit
- 4. Low energy consumption control system



Energy Consumption Comparison with Previous Model as Base 100



Resource Conservation through Comprehensive Recycling

Canon is aggressively promoting collection and recycling along with the reuse of parts that can meet the same quality standards as new parts. At the same time, the design of more compact products is also furthering the goal of resource conservation.

Topics Collection and Recycling of Toner Cartridges

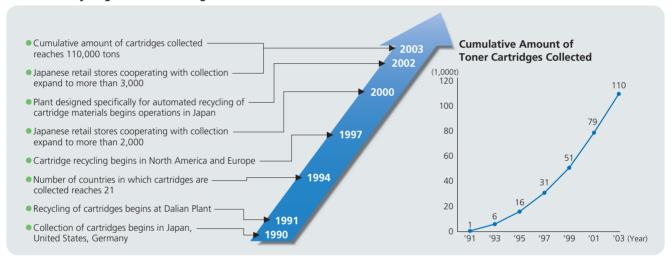
Canon revolutionized recycling of toner cartridges in 1990, when it posited the notion that a company developing, producing, and selling toner cartridges has the responsibility to collect and recycle the cartridges into new products on a worldwide basis. Since then, we have carried out collection and recycling of cartridges.

Since the inception of this program, the sales volume of cartridges has increased while users have become more conscious of the need to recycle them, leading collec-

tions to grow every year. By the end of 2003, the cumulative amount of cartridges collected had risen to 110,000 tons. Meanwhile, the amount of CO_2 emissions reduced through this recycling process totals 180,000 tons when calculated under the LCA method.

At Canon, collected used cartridges are brought to recycling centers for disassembly and cleaning before the parts are reused in new products. The plastics are also reformed as plastic parts in new cartridge products. Even parts of used cartridges that cannot be recycled into new products are recycled for other purposes (P. 32), ensuring the continuation of 100% recycling of toner cartridges.

Canon's Recycling of Toner Cartridges



Topics Digital Copying Machine Remanufacturing (REM)

Canon is making efforts to remanufacture used digital copying machines collected from our customers. In remanufacturing, the collected copying machines are disassembled, the reusable and worn parts separated, parts replaced, and the machine cleaned to create a final product meeting the same quality standards as a new product. We plan to further expand remanufacturing into a series of products that makes the most effective use of resources, all while maintaining our quality standards (P. 32).

• Example of Digital Copying Machine Remanufacturing in Japan



Product Name		GP405 (41 sheet)	GP605 (60 sheet)
Start of Sales		2002	2004
Ratio of Reused Parts	By mass	74%	82%
	By number of parts	80%	87%



Performance Data

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Topics PowerShot SD10 DIGITAL ELPH/DIGITAL IXUS i Digital Camera Gives New Meaning to "Compact"

More compact and lighter products are not only easier for customers to use—they also further the goal of making products more resource-conserving.

In 2003, Canon brought to market the world's smallest digital camera (at the time of the press release on September 12, 2003) in the 4 million-pixel class. The PowerShot SD10 DIGITAL ELPH/DIGITAL IXUS i boasts highly precise engineering and a sleek design featuring a new aluminum/magnesium composite alloy for its outer cover. The camera is but 18.5mm thick and weighs around 100g (▶P. 29).

In addition, to help conserve resources, the shock absorbent packaging for the camera is composed of tree-thinning wood materials and recycled paper.

In December 2003, Canon achieved for the first time system certification in the field of still cameras (conventional cameras and digital cameras) for the Type III Eco-Label*1, or Eco-Leaf Program, in which companies disclose quantitatively the environmental burden based on the LCA method*2. In conjunction with this certifi Environmentally Conscious Design of PowerShot SD10 DIGITAL ELPH/ **DIGITAL IXUS i**

Mechanical Chassis

- Elimination of Hazardous Substances
 - Hexavalent chromium-free metal

Printed Circuit Boards

- Elimination of Hazardous Substances
- •Lead-free solder

Lens and **Imaging Components**

Elimination of Hazardous Substances

cation, the PowerShot SD10 DIGITAL

ELPH/DIGITAL IXUS i discloses environmen-

tal burden information as a registered Eco-

The Japan Environmental Management Association

URL: www.jemai.or.jp/english/ecoleaf/outline.cfm

•Lead-free lens

Leaf product.

for Industry on Eco-Leaf



Display Unit

- Elimination of Hazardous Substances
- •LED (mercury-free backlight)

Power Supply

- Elimination of Hazardous Substances
- •Non-halogen flame retardant
- Energy Efficiency
- •Standby power consumption is 0.27W lower than the EU's voluntary standard for outer power supply (2005 standards)

Exterior Casing

- Resource Conservation
- •Aluminum/magnesium composite alloy
- Body minimization (100g) and ease of recycling
- *1 Type III Eco-Label

The Eco-Label is used to promote the use of superior products that have a low burden on the environment by indicating the effect of the product and other goods on the environment in the form of a label. The labels are classified into three different types under ISO definitions. The Type III label indicates quantitative environmental information based on the LCA method.

*2 LCA Method

LCA is an abbreviation for Life Cycle Assessment. An objective and quantitative method for evaluating the burden a product has on the environment over its entire life, from the raw materials to production, distribution, consumption, and disposal (recycling).

Topics Stepper Remanufacturing Begins at German Affiliate

Canon Giessen GmbH in Germany has begun to remanufacture steppers, one of its main products. The company is a base of production for copying machines, while playing a major role as a recycling center in Europe through its production of remanufactured copying machines and renewal of used parts (>P. 31).

The remanufacture of steppers began in fall 2001 with the repair of stepper units. Then in November 2003, employees in charge of copying machines took advantage of state-of-the-art technologies to build the first completely remanufactured stepper FPA-3000EX5.

The remanufactured FPA-3000EX5 represents a response to the joint needs of customers in Europe and Southeast Asia, with the overhauled stepper providing the same functionality as a new machine, while at the same time having its specifications customized according to the needs of new customers. The same approach is being taken in the Japanese market, and worldwide demand for remanufactured steppers of this type is expected to grow. Canon firmly believes that giving new life to onceused products will be a major contribution to a recycling-oriented society.



Canon's first remanufactured stepper undergoes adjustments to its specifications

Canon Sustainability Report 2004

Enhancing Social, Economic, and Environmental Management

Canon employees are more conscious than ever of ethical compliance through the establishment of "Compliance Week," while investors are better informed of our environmentally conscious management through a conference we held on the environment. These and other initiatives are part of our vigorous effort to expand and strengthen the management system.

Topics Compliance Promotion

In January 2004, Canon established a Corporate Ethics and Compliance Committee composed of the President and CEO as its chairman along with other executives of each operations. The purpose of this committee is to ensure that all executives and employees of Canon share the same values and maintain a common awareness of legal and corporate ethics. Another objective is to enhance the transparency and soundness of our operations by developing a common corporate spirit within which

employees act with recognition of legal and corporate ethics.

The committee debates issues regarding legal and corporate ethics, and plans a Compliance Week twice a year to raise executive and employee understanding of these issues. In the first such Compliance Week in January 2004, employees at all operational sites exchanged views on what attitude they should have in their dealings with society and the responsibilities they should fulfill



Poster for the first Compliance Week

Topics Privacy Mark Certification and Protecting Personal Information

Canon has always considered the protection of personal information to be a priority. As part of our efforts, we received Privacy Mark* certification in August 2003. In most cases, the certification is granted only to certain divisions of a company. In Canon's case, however, the certification applied to the entire corporation.

The protection of personal information has gained momentum throughout the Group. In November 2003, Canon Sales Co., Inc. and Canon Electronics Inc. also attained certification.

The certification is recognition of top management's awareness of the need to protect personal information and external confirmation that an internal compliance system to protect personal information has been established. The certification will prepare us for the full enforcement of the Protection of Personal Information Law in Japan from April 2005.

Further, as part of our efforts to ensure public trust in our business, Canon intends forming a highly secure system to protect personal information and avoid the risks of leaking private information.



* Privacy Mark (in Japan)

This mark is granted to businesses that have met the requirements of a compliance program for protecting personal information (JISQ15001). The evaluations are conducted and certification granted by the Japan Information Processing Development Corporation (JIPDEC).

Information on Privacy Mark® System URL: privacymark.org

Topics Superior Results from a Customer-Oriented Management System

Canon has developed a Call Analysis Tracking System (CATS) to leverage results of customer comments. Information from call centers worldwide is compiled at the Quality System Advancement Center. Data on customer feedback and enquiries on quality issues and trends from their perspective are analyzed on a global scale. Effective information is then fed back efficiently to respective divisions through CATS. The system enables Canon to compile the opinions of customers and analyze the information more speedily, leading to rapid improvement in product quality and customer satisfaction (PP. 42).

The success of this system garnered Canon's CATS Working Group the 2002 Japan Consumer-Oriented Business Achievement Award* in March 2003.



Receiving the Consumer-Oriented Business Achievement Award

*Consumer-Oriented Business Achievement Award
This award is presented by Japan's Ministry of Economy, Trade, and Industry to recognize individuals and
groups that have achieved demonstrable success in creating a consumer-oriented system, by grasping extensive customer needs quickly and reflecting these expectations accurately in corporate management.



Topics Conference on Theme of "Environmentally Conscious Management" Held for Investors

Canon held a corporate conference at the Shimomaruko Headquarters in June 2003 to explain our environmentally conscious management to the investment community (P. 24). The event, the first of its kind for a major corporation in Japan, was attended by 88 people, including stock analysts, institutional investors, think-tank representatives and others.

The conference was led by Yusuke Emura, Managing Director and Group Executive of the Global Environment Promotion Head-quarters, who explained the environmental strategy, including the 2010 Vision (Factor 2). Investors' individual concerns were addressed, and a question and answer period was followed by an exhibition and expla-

nation of Canon's newest environmentally conscious products and technology.

The conference enabled Canon to explain directly our environmentally conscious management in pursuit of both environmental assurance and economic activities. Investors were able to deepen their understanding of Canon's approach, while providing us with valuable opinions and requests (>P. 65).

Canon will consider further direct meetings with our stakeholders both in and outside Japan (P. 39).

Further, through these activities, Canon has received high praise from institutional investors and rating agencies worldwide (P. 47).



Investors' conference on environmentally conscious management

Topics Participating in Revision of GRI 2005 Guidelines

The Canon Group has undertaken the disclosure of information regarding sustainability*1 as a social responsibility, and this responsibility will be pursued vigorously in the future. As part of these measures, Canon became a GRI*2 (P. 1) Organizational Stakeholder*3 in December 2003, the first Japanese concern to have such a position on the European NPO. In this role, the Canon Group will support GRI activities and assist in drawing up the revised 2005 Guidelines.

The GRI Guidelines have been considered primarily from European and American perspectives, and there have been areas that

do not reflect the circumstances of Japanese industry. Canon will work to convey the measures taken by Japanese industry and to have the Guidelines represent the views of the global manufacturing industry.

*1 Sustainability

Sustainability is a way of thinking in which importance is placed on taking an integrated approach to corporate management by considering their economic, environmental, and social aspects, with the purpose of ensuring sustainable development of the global environment and society for future generations.

*2 GRI (Global Reporting Initiative)

A Netherlands-based NGO which announced the GRI Guidelines, a global standard for sustainability reports, in 2000. Since then, the organization has worked to revise the guidelines and have them accepted globally.

*3 GRI Organizational Stakeholder (OS)
A new support membership system for the GRI.
This is the basic structure of the GRI's global governance.



Topics Promoting Environmentally Conscious Technology and Products Worldwide

Canon is organizing and participating in environmental exhibitions worldwide as a way to publicize the importance of environmental conservation and our new environmentally conscious technologies and products (PP. 40).



Canon Asia Expo 2004 (Shanghai, China)

Worldwide Exhibitions between January 2003 and April 2004

Americas	2004 International Consumer Electronics Show (CES) (Las Vegas, U.S.A.)	
Europe	Canon Concerto 2004 (Frankfurt, Germany)	
Asia	Canon Asia Expo 2004 (Shanghai, China)	
Oceania Sustainable Business Conference 2003 (Auckland, New Zealand)		



Environmental corner at Canon Asia Expo 2004

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A Management Structure Befitting an Excellent Global Corporation

Canon remains committed to its goal of being admired and respected around the world as an Excellent Global Corporation. To this end, all employees of the Group are adhering to the company's Guiding Principles and Code of Conduct.

Fundamental Management Stance

The Canon Group as a whole aims to create new technologies and entire new genres of products, and through their commercialization, make new contributions to people and communities around the world. Moreover, our management stance emphasizes fair and sincere business operations conducted in full respect of all laws.

The most important value of a business is the pursuit of profit. This does not mean, however, simply pursuit of financial profits for the company. It means profit for the customer who benefits from using our products, profit for local communities that benefit from job creation and economic vitality, and overall, it embodies the wider meaning of "living and working together for the common good."

Corporate growth and development are essential to build the kind of company that can make these contributions. Canon believes the following requirements must

be met to ensure the maintenance of corporate value: 1) Provide stable livelihoods with upward potential for employees; 2) Return profits to shareholders; 3) Make contributions to society; and 4) Create equity capital (profit) for sustainable development of the company.

Canon's Management **Innovations**

Since its founding, Canon has pursued a fair method of profit return. In 1996, we embarked on our Excellent Global Corporation Plan to improve the quality of our company even more. The aim of this plan is not simply to increase sales and expand business operations, but to improve corporate value to a level necessary to ensure sustainable growth.

The foundation of our sustainable growth is a consolidated management system with a focus on cash flow and overall optimization. To this end, we implemented a Consoli-

dation Planning and Measurement System in 1997 to begin consolidating financial reporting and results evaluation based on each Product Group Operation. In addition, ROE* and other performance indices were introduced to improve capital efficiency. We are also promoting ways to add higher value to our products, reform production through the cell method, and better strategize our portfolio of patents and other intellectual property.

From 2001, Canon has embarked on the Excellent Global Corporation Plan Phase II, to further our aim of raising corporate value and achieve a place as a Truly Excellent Global Corporation.

*ROE: Return on Equity ROE (%) = After tax profit/shareholder's equity \times

A financial indicator showing how much profit a company generates using its investors' money.

Excellent Global Corporation Plan (1996-2005)

Vision

In accordance with the kyosei philosophy, Canon will continue contributing to society through technological innovation, aiming to be a corporation worthy of admiration and respect worldwide.

Goals

- 1. Becoming No. 1 in the world in all of Canon's major areas of business
- 2. Maintaining the R&D capability to continually create new businesses
- 3. The Group as a whole should have a strong financial structure that can operate and handle long-term investment without borrowed capital
- 4. All employees should be enthusiastically committed to achieving their ideals and take pride in their work

Change in Thinking

- Pursuit of overall optimum results
- Shift to profit focus

Advancement of **Consolidated Management**

- Implementation of the Consolidation Planning and Measurement System (1997)
- Consolidated financial results by **Product Group Operation**
- Performance evaluations for each **Product Group Operation**

- 100% implementation of 3D-CAD
 - Undertake "no-prototype

Four Purposes of Companies

- Stability of livelihoods of
- Returns to shareholders
- Contributions to society
- Investments for continued existence

Sales Innovations

- Restructure and consolidate
- marketing subsidiaries Emphasize solution businesses
- Construct Pan-European business
- Strengthen business in China and other parts of Asia

Pursuit of Company Innovation

- Cash flow management
- Withdrawal from unprofitable businesses

New Diversification

- Development of new businesses at headquarters
- Enhancement of basic research Group diversification
- Individual Group companies strengthen their own businesses
- Global diversification Establish a three-regionalheadquarters global management system

Production Reform

- Upgrade to cell production from belt conveyor system
- Foster multi-skilled production employees Chie-tech (wisdom-tech):
- Customize tools yourself Implementation of the just-in-time concept

Development Innovation

- Establish Color Technical Center and Color Stadium
- production"

Highlights of 2003
P. 19

Performance Data
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Management

Reformance Materials

Refo

Guiding Principles for Canon Employees

To realize our aim of becoming a truly excellent global corporation, Canon will require each and every employee to be a truly excellent person.

Since its founding, Canon has relied on Guiding Principles focusing on the "Three Selfs" concept, known as the "Three Js" in Japanese: *Ji-hatsu*, or self-motivation to do every job right; *Ji-chi*, or self-management; and *Ji-kaku*, or self-awareness of one's working environment and responsibilities. Group employees understand these forward-looking concepts and put them into practice daily in their work.

This basic concept fosters a corporate spirit that values enterprising employees. In turn, these employees continue to forge into new areas of business, expanding the Group globally and diversifying its operations for steady development. The pamphlet *Guiding Principles for Canon Employees* was published in 2003 to reaffirm our commitment to these principles and to ensure all employees understand them.

Canon Group Code of Conduct

The Canon Group aspires to become a truly excellent global corporation. For us this means maintaining excellent relations with stakeholders such as customers, business partners, and local communities in which we operate. At the same time, we will fulfill our social responsibilities. Achieving this goal means ensuring every executive and employee in the Group is aware of our values and carries out business in a fair, sincere and legal manner.

In 1992, Canon Inc. and Canon Sales introduced a Code of Conduct for all executives and employees in the companies. These were the rules all employees had to adhere to when performing their work. As a global corporation, however, it became necessary to widen these rules to the worldwide Group, and therefore the Canon Group Code of Conduct was instituted in August 2001 after substantial revision of the rules.

By the end of December 2003, the Canon Group Code of Conduct was available in nine languages including Japanese,

English, French, and Chinese. All Group companies are promoting this code among their employees.

Further, regular training is provided to new employees, newly appointed Managers and General Managers in order for the Canon Group Code of Conduct to penetrate deeper into the Group. In the spring of 2003, Compliance Meetings were held at every workplace to discuss specifically how employees should uphold laws and regulations and conduct themselves ethically in their daily business activities.



Canon Group Code of Conduct

Guiding Principles

Three Selfs

Adhere to the principles of self-motivation to do each and every job right, self-management, and self-awareness of one's working environment and responsibilities

Meritocracy

Make Vitality (V), Specialty (S), Originality (O), and Personality (P) daily pursuits

Internationalism

Become a sincere and active internationally minded person with cross-cultural communication skills

Familism

Trust and understand each other, and work together in the spirit of harmony

Health First

Live by the motto "healthy and happy," and work to cultivate character

Overview of the Canon Group Code of Conduct

Management Stance

Contribution to Society

Provision of excellent products • Protection of consumers

•Preservation of the global environment •Social and cultural contributions •Communication

Fair Business Activities

•Practice of fair competition •Observance of corporate ethics •Appropriate disclosure of information

Code of Conduct for the Executives and Employees

1. Compliance with Corporate Ethics and Laws

- •Fairness and sincerity •Legal compliance in performance of duties
- •Appropriate interpretation of applicable laws, regulations and company rules

2. Management of Corporate Assets and Property

•Strict management of assets and property •Prohibition against improper use of company assets and property •Protection of the company's intellectual property rights

3. Management of Information

- •Management in compliance with rules •Prohibition against personal use of confidential and proprietary information •Prohibition against insider trading •Prohibition against the unlawful acquisition of confidential or proprietary information pertaining to other companies
- •Appropriate use of confidential and proprietary information pertaining to other companies

4. Conflicts of Interests/Separation of Personal and Company Matters

•Avoidance of conflicts of interests •Prohibition against seeking, accepting or offering improper gifts, entertainment, or other benefits •Prohibition against acquisition of Pre-IPO shares

5. Maintenance and Improvement of Working Environment

•Respect for the individual and prohibition against discrimination •Prohibition against sexual harassment •Prohibition against bringing weapons or drugs to the company workplace

Governance Based on Canon's Own Set of Values

Canon has built a governance system covering our global business operations and incorporating our own principles, including measures for legal compliance, security, and information disclosure.

Good Governance

Continual efforts in the area of governance are raising the corporate value of Canon. We understand the importance of improving the transparency of management and strengthening corporate oversight to ensure that the Group achieves its management goals. Various efforts are being undertaken to make the governance system of our Group even more comprehensive

No one system of governance can meet the needs of all companies. Each company must pursue the most rational method based on its corporate culture and the culture of the country in which it operates. Canon bases our governance on a board of directors and a board of corporate auditors as required under the Commercial Law of Japan, along with our own internal auditing system, an information disclosure system regarding management, and other efforts. We believe this method of governance has been recognized as effective outside Japan as well as in Japan: by the end of 2003, 49.8% of our stockholders were from outside Japan.

Corporate Directors

There are 27 directors at Canon, and for the purpose of making rational and rapid management decisions, none are from outside the company. Important decisions are, as a rule, decided by fully attended meetings of the Board of Directors and Executive Committee. In addition, specialized committees to discuss major management themes are set up laterally across the Group. The committees are there to expedite decisions in a rational manner and also to complement and oversee the Product Group Operations.

Corporate Auditors

The Board of Corporate Auditors comprises four auditors, two of whom are external auditors. The corporate auditors carry out their duties according to the stipulated auditing policy and a division of areas covered in the audit, providing strict oversight of the management of the Group by receiving business reports from directors, attending the Board of Directors, Executive Committee and other meetings, reviewing corporate resolutions and other internal documents, and evaluating business performance and assets.

Internal Auditing

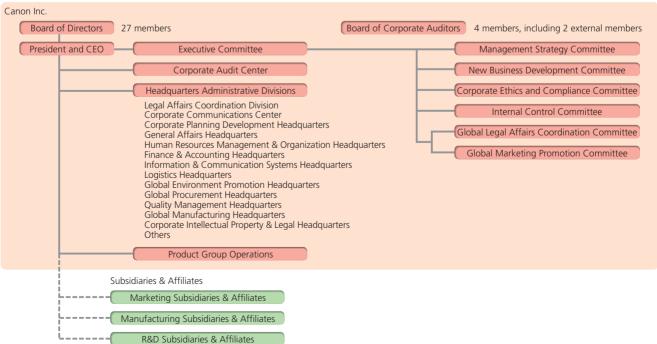
The Corporate Audit Center is responsible for Canon's internal auditing. It oversees the Group's legal compliance, risk management, internal control system, and other areas, providing evaluations and recommending improvements. The auditing of quality, the environment, information security, physical security, security assurance for export management and other areas is carried out in cooperation between the Corporate Audit Center and respective management divisions.

Internal Audits

Responsible Area	Audit Coverage
Corporate Audit Center	Management functions, specific job functions, accounting, compliance (focusing on compliance with laws, internal regulations, social customs and morals), etc.
Quality Management Headquarters	Quality assurance
Global Environment Promotion Headquarters	Environmentally conscious management and its results
Information & Communication Systems Headquarters	Information security for IT and other information processing
General Affairs Headquarters	Physical security
Logistics Headquarters	Security assurance for export management

Canon Governance Structure

(As of April 1, 2004)





Global Legal Affairs

The Global Legal Affairs Coordination Committee is tasked with analyzing legal trends in all countries in which the Group operates, determining ways for the Group to comply with the laws and regulations in its management and business operations.

Working groups are established as needed to dissect legal issues and tackle ways to respond. The most important matters are brought to the Executive Committee. In addition, for major legal issues, the committee compiles guidelines and guidebooks to increase awareness at all Group companies. Support on responding to legal issues is also provided by the committee to all Group companies and related divisions. Currently, the committee deals with nearly all legal issues related to Canon products.

Work of the Global Legal Affairs Coordination Committee

Monitoring and examining legal developments in the following areas: export regulations, dumping, anti-monopoly regulation, product liability, after-market service, the environment (RoHS, WEEE, etc.), IT, information management, disability, copyrights, international tax law and local law in the United States, Europe, China and other countries.

Security

The tragedy of September 11, 2001 in the United States forced companies to consider various risks around the world and take measures to ensure security. Canon

has increased security both in terms of protecting our information and the physical well-being of our operations and employees.

Various programs have been instituted to thoroughly ensure prevention management. The Information & Communication Systems Headquarters is taking measures for IT and related areas, and the General Affairs Headquarters is in charge of physical security.

Export Management

There is a risk that some of the many technologies in various electronic equipment may not be used for their original purpose. Laws have been enacted in many countries to counter this problem through the regulation of exports. They include Japan's Foreign Exchange and Foreign Trade Law, the US Export-Control Law, and the Catch-All Control used to prevent the spread of weapons of mass destruction.

As a major exporter, Canon has instituted a compliance program to ensure that export control laws are being followed. We assess items to be shipped and technologies to be exported, examine customer backgrounds, perform audits, undertake training, and perform other activities to comply with these laws. From the perspectives of risk management, adherence to related laws, and the execution of our social responsibilities, Canon has established strict internal controls including the Canon Compliance Program for Security Export Control.

Information Disclosure

The provision of accurate, fair, and timely information on management, business strategy, and financial results to capital markets is a top priority at Canon. The objective of these IR activities is to gain the trust of capital markets and improve the corporate value of Canon. IR functions are carried out based on Disclosure Guidelines, which are rules for information disclosure to capital markets intended to help the Group achieve these goals.

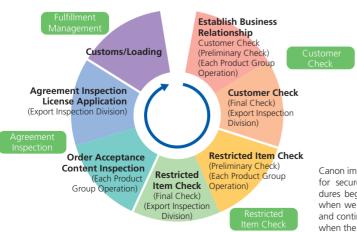
Some of the regularly conducted IR tasks of the Group include briefings to securities analysts and institutional investors on quarterly financial results, briefings on management policies by the President and CEO and updates on business strategies. IR operations have also been established in Europe and the United States to respond quickly to the needs of foreign investors (49.8% of all shareholders at end of 2003) in all regions. On the Canon website, corporate information is made available not only in Japanese, but also in English to the extent possible, including audio and video information as needed.

We carefully observe rules relating to information disclosure, strictly controlling undisclosed information and preventing the possibility of insider trading. Further, outside evaluations of Canon from the capital markets are reported within the Group whenever useful to management and operations.

In a survey of institutional investors on corporate IR programs (conducted by the *Nihon Keizai Shimbun*), Canon received the highest evaluation, reflecting the strong reputation we have in the industry for IR.

Information for Canon investors URL: canon.com/ir

Export Management Flow



Canon implements a thorough inspection process for secure export management. These procedures begin at the start of the export process, when we receive an inquiry from the customer, and continue through to the end of the process, when the products are shipped.

Thorough Environmental Assurance Developed under a Global **Promotion System**

Canon is continually striving to improve our environmental management. To support these efforts, and encourage prompt decision-making, we have implemented an Environmental Evaluation System and introduced new environmental performance analysis methods.

A Global Environmental **Promotion System**

Canon has established a multi-tiered environmental promotion organization to ensure that all areas of our business are environmentally conscious. The Global Environment Promotion Headquarters spearheads environmentally conscious management for the entire Group, and under this body, the Environment Management and Engineering Center has been established to plan and promote the environmental strategy, and to develop environmental technologies. In addition, the Environment New Business Center has been set up to promote the growth of green businesses. Every Product

Group Operation and operational site also has an environmental division to deal with environmental issues. In May 2003, Canon installed the Global Environment Expert Committee to plan strategy for environmentally conscious management.

The environmental management structure links with subsidiaries and affiliates in every region of the world in promoting environmental assurance activities on a global basis. This organizational structure enables all the Product Group Operations and operational sites to share the results of global environmental activities. At the same time, management can take a more proactive role in solving environmental problems through speedier decision-making.

Regulations

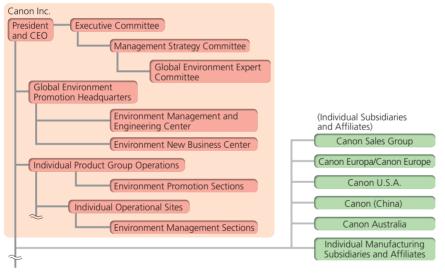
Environmental Assurance

Canon maintains various regulation systems to clarify the direction of environmental assurance within the Group. Environmental activities regarding products are pursued under the Product Environmental Assurance Rules, and the products quaranteed according to Product Assessments*. As for operational sites, environmental activities are carried out according to the Production and Product Environmental Assurance Rules along with the ISO14001 standards for environmental management systems (P. 33) (P. 49). Further, Environmental Audit Rules have been established to verify that the various regulation systems are being practiced. These auditing rules have clarified the authority to conduct audits independently or through internal and external experts.

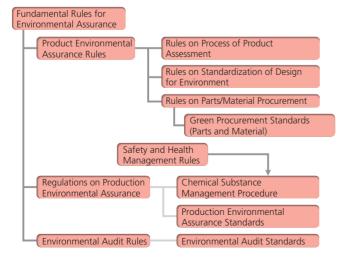
*Product Assessment

The product's burden on the environment is assessed at the development stage, and ways of lessening the burden are incorporated into the product design.

Global Environment Promotion Organization



Rules for Environmental Assurance and Related Areas



Fundamental Rules for Environmental Assurance	These are the primary guidelines that govern our environmental assurance activities, harmonizing rules for products and production, environmental audits, and Green Procurement Standards.
Product Environmental Assurance Rules	This group of standards includes our Product Assessment Guidelines and Environmentally Conscious Design Guidance, clearly identifying the issues to be considered in the development and design of our products. Our Hazardous Substances in Products standards ensure that our customers can use our products in an environmentally safe manner.
Regulations on Production Environmental Assurance	We have clearly spelled out the environmental standards that must be implemented at all our operational sites. We require all our operational sites, in all countries and regions. to meet the same standards.



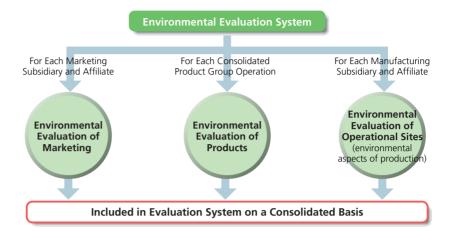
Environmental Evaluation System

The Evaluation System on a Consolidated Basis forms the foundation of Canon's consolidated management system (>P. 8), and also provides for an Environmental Evaluation System implemented from 2001. Under this evaluation system, the Global Environment Promotion Headquarters appraises consolidated Product Group Operations and major manufacturing and marketing subsidiaries and affiliates. The emphasis of the evaluations for Product Group Operations and manufacturing subsidiaries and affiliates is on environmental performance*, and for marketing subsidiaries and affiliates, it is on their maintenance of an environmental management system.

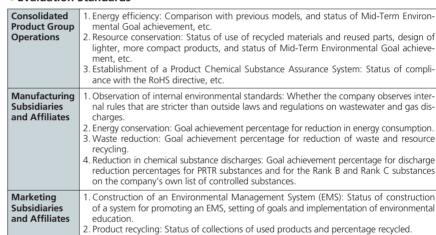
The environmental portion of the Evaluation System on a Consolidated Basis is about 10%, and the results are announced twice a year.

The results of the introduction of this system are that the Product Group Operations and Group companies have improved their environmental records and profitability. Canon will introduce new areas for evaluation in the future and strive to create an even more effective evaluation as part of the development of our environmentally conscious management.

*Environmental Performance
The effect a company's business operations have on
the environment (environmental burden) and the
results of related initiatives to reduce the burden.



Evaluation Standards



Topics JEPIX, a New Environmental Performance Method

JEPIX* is a new environmental performance index developed jointly by the Science and Technology Agency, the Sustainable Management Forum of Japan, and the Sustainable Management Rating Institute. Under this method, environmental factors at the base of Japan's environmental policy are evaluated as a single environmental burden unit. To promote the introduction of JEPIX among Japanese companies, a benchmarking project (International Christian University and Ministry of Education, Culture, Sports, Science and Technology's 21st Century COE Research Project) was started in 2003, after which Canon and other businesses from different industries began supplying data to support case study research

Using this method to evaluate Canon's performance from 2000 through 2002, for 2002, the overall environmental burden (JEPIX point) declined 11% compared with 2000, while the environmental efficiency (sales divided by JEPIX point) improved by 17%. Canon intends to continue research and implementation of environmental performance methods in order to improve our environmental efficiency.

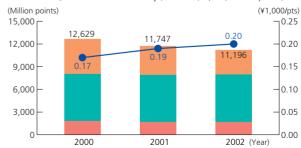
Environmental Burden and Environmental Efficiency

■ Sub (burden from production of raw materials)

Core (burden from production of fuel and electricity)

Site (burden from burning of fuel) Index equals total of sub, core, and site

-- Environmental efficiency (net sales (¥1,000) ÷ JEPIX points)



*JEPIX: Environmental Policy Priorities Index for Japan

An Environmental Entrepreneur

Development and utilization of new environmental technologies are key to our goal of reducing the burden on the environment. Environmental businesses are being established to widen the application of this technology as much as possible.

Development of Environmental Technologies at Canon

We have successfully developed a number of cutting-edge environmental technologies to alleviate the burden on the environment caused by both products and production processes. In the area of products, Canon has engineered and adopted technologies to make products more energy efficient, improve recyclability, and eliminate hazardous substances through the development of alternative materials. In production processes, Canon is putting various new technologies to practical use to reduce the environmental burden.

Some results of this research have been, for example, the development of decomposition equipment employing low-voltage plasma and photo-activated water. We are working to commercialize these new technologies so that the industry and society as a whole can benefit from them.

New Businesses Based on Environmental Technologies

Canon established the Environment New Business Center in July 2002 to facilitate our entry into new environmental businesses. An early success for this center was the creation of an engineering business to test and evaluate soil and groundwater contamination and implement remediation measures when necessary. Such an operation has become more urgent since the enforcement of Japan's Soil Contamination Countermeasures Law in February 2003. In addition, we are taking advantage of more than 15 years experience in environmental analysis technology to develop new businesses with products providing ultramicro analysis and analysis of product compliance with the RoHS directive. New environmental products have also been developed to render hazardous substances harmless, and we have launched businesses to sell these products.



Engaged in the development of a wide range of environmental businesses, the Environment New Business Center has been granted ISO/IEC 17025 accreditation (Guide 25), an international standard for environmental analysis and testing laboratories

Development and Introduction of Environmentally Conscious Technologies

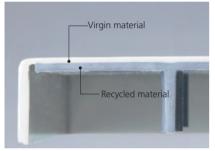
	Status of Technology Development and Introduction	Reference
■ Environmental Technologies as Businesses		
Technology for rendering VOCs harmless	Developed air quality remediation equipment based on atmospheric pressure plasma processing technology (improved performance over currently available equipment)	P. 28*
 Photo-activated water for decomposing soil contaminants 	Decomposition processing ability three times higher than another firm's product (prototype introduced)	P. 28*
 Environmental measurement and assessment 	Expanding analysis from worksite environment, water quality, air, soil, noise, vibration, odor, and designated building, to include analysis of products for existence of hazardous substances	P. 33
■ Minimizing the Environmental Burden of Products and Parts		
 On-demand energy-efficient technology (on-demand fixing technology, IH fixing technology) 	Completed lineup of copying machines, monochrome and color laser beam printers with on-demand energy-efficient technology	P. 15
• Lead-free lenses	Completed with exception of some EF lenses	P. 13*
● Lead- and halogen-free technology	Developed lead-free wiring cables (coating materials: lead—calcium, magnesium), and adopted for all copying machines and printers Developed halogen-free printed boards (halogen—phosphoric acid base) and achieved flame-retardancy using the boards	P. 13 P. 54
Hexavalent chromium-free technology	Adopted hexavalent chromium-free organic coated steel plates, and plan to use for all products by target of end of 2004	P. 13*
■ Product Recycling Technologies		
Plastics recycling technology	Developed molding technology in which recycled materials are wrapped in virgin plastic, and adapted for use in digital MFD imageRUNNER 3300/iR3300 and five other models in the iR series Started development of thin multilayer injection molding technology in which mass recycled plastics can be used	P. 28*
Resource conservation for packaging	Developed and introduced new packaging materials for toner cartridges	P. 38
Cartridge recycling technology	Developed and introduced fully automated recycling plant (Canon Ecology Industry Inc.) specifically for toner cartridges	P. 32
■ Minimizing the Environmental Burden of Production		
● Technology for halving glass sludge	In cooperation with optical glass manufacturers, developed lens moldings and lens polishing and processing technology that reduce the amount of glass sludge by 50–80% compared with conventional technology. Adapted for lenses for compact cameras	P. 36*
 Technology for eliminating special solvents and gases 	Elimination of substances that cause global warming (PFCs, HFCs, SF $_{\! 6}$) completed except for semiconductor manufacturing	P. 55
Wastewater processing technology	Introduced closed wastewater treatment system (Oita Canon Materials Inc., Utsunomiya Plant, Hiratsuka Development Center, Ayase Office, Fuji-Susono Research Park)	P. 36* P. 56

^{*}URL: canon.com/environment/technology



Plastics Recycling Technology

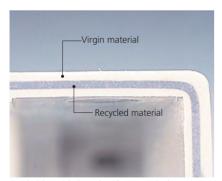
Japan's Law Promoting Green Purchasing and the revision of eco-label programs in various countries will mean an even greater demand for resource recycling. Anticipating this development, Canon has teamed with a manufacturer of molding machines to begin development of thin multilayer injection molding technology in which a large amount of recycled plastics can be used. The goal for this technology is to produce films of 1.8mm and thinner, with the ratio of recycled materials at least 80%. This will enable us to reduce even further the cost of parts being currently produced by sandwich molding*.



Thin multilayer injection molded product (cross section of sample material)

*Sandwich Molding

When molding a part, virgin plastic is used to cover the reused plastics and create a single molded item. Up to 30% of the part can be made of reused plastic.



Sandwich molded product (cross section)

VOC Decomposition Equipment Using Atmospheric Pressure Plasma

Various ways of rendering harmless hazardous Volatile Organic Compounds (VOCs) have been studied. We have found a method that is both the simplest and most efficient to date: atmospheric pressure plasma decomposition.

In a test plant in which barium titanium oxide (BaTiO₃) was used as a dielectric material, the decomposition rate was over 90% at any level of gas concentration. We are now analyzing larger scale experiments at a pilot plant, confirming and establishing appropriate processing methods for secondary matter produced while also developing a small-scale unit. Further, we began development of air remediation equipment for general users in 2003 with capabilities exceeding the currently available equipment.



VOC decomposition equipment using atmospheric pressure plasma

Photo-Activated Water Technology to Decompose Soil Contamination

In 1999, we developed a new method for decomposing trichloroethylene (TCE) using photo-activated water, and announced the discovery at an academic conference that year to great interest.

This technology relies on the two elements of activated water and light irradiation. Specifically, TCE is mixed with activated water and irradiated by light to decompose the TCE. With this technology, even a mixture of highly concentrated TCE of more than 1,000mg/litre decomposes to a level under environmental standards within 200–300 minutes. Analysis has shown that the processing performance of our apparatus is three times higher than that of another company's product. The studies will be confirmed with the introduction of a test plant using the technology. We are also confirming that the same technology can be effective in decomposing various other organic solvents like tetrachloroethylene, dichloromethane, and chlorobenzene.



Gas processing-type test equipment for photo-activated water processing



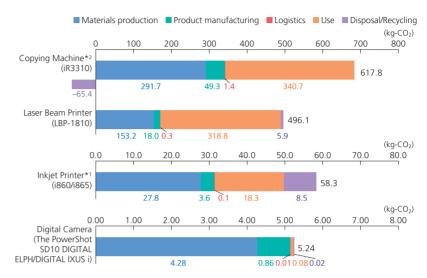
Environmentally Conscious Products to Reduce the Burden on Society

Environmental information on our products is being compiled on an intranet system in which the data are used for the environmental product strategy to conserve energy, conserve resources, and eliminate hazardous substances.

Our Products and the Environment

As the base of our product environmental strategy, Canon is focused on the three areas of energy efficiency, resource conservation, and the elimination of hazardous substances. Using the LCA method, we have been able to grasp accurately the environmental burden of each of our products (P. 18). The energy burden of copying machines, laser beam printers, and inkjet printers*1 is highest when the products are being used by customers. The next largest burden comes from materials and purchased parts. For cameras, the heaviest environmental burden comes from materials and purchased parts, followed by the production process.

LCA Data on 4 Main Products



- *1 The energy efficiency of inkjet printers has improved to the point where the latest models cause less environmental burden at the use stage than at the materials production stage.
- *2 Reduction in the amount of environmental burden due to the decrease in use of virgin materials was larger than the environmental burden created in the recycling and reuse stage. Therefore the burden at the recycling and reuse stage was a minus.

Environmentally Conscious Product Design (features described in this report)

		Energy Efficiency	Resource Conservation	Elimination of Hazardous Substances: RoHS Compliance by end of 2004 for all products
	Copying machines	On-demand energy-efficient technology (on-demand fixing technology, IH fixing	Remanufacturing (▶P. 17) Sandwich molding (▶P. 28)	Product in compliance: imageRUNNER C6800/iR 6800C (▶ P. 13)
	Laser beam printers	technology) (▶P. 15–16)	PET bottle recycling (▶P. 32)	_
Product	Inkjet printers	Energy-efficient technology for inkjet printers (P. 15–16)	Establishment of plastic materials recycling system (P. 32)	98% achieved for fall 2003 products (proportionate to mass) (P. 13)
	Cameras	Energy-efficient external power source (P. 18)	More compact; Metal materials used for outer cover (>P. 18)	Product in compliance: EOS-1D Mark II (P. 13)
	Steppers	_	Stepper remanufacturing (P. 18)	_
Consumables	Toner cartridges	_	Consumables recycling (▶P. 17) (▶P. 32)	_
Consumables	Ink cartridges	_	Consumables recycling (▶P. 32)	_

Topics LIME, a New Environmental Performance Method

Since 1999, Canon has used the LCA method to determine and disclose the burden on the environment of our products throughout their life cycles. The LCA project was created with the support of the Japanese Ministry of Economy, Trade, and Industry, and one of its achievements is the development of the LIME method* to provide a comprehensive measurement of the burden a product places on global warming and ozone layer destruction, acidification and other problems. As a test case, Canon used LIME to measure the effect of one inkjet printer model and

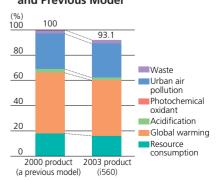
found the 2003 printer had improved by 7% compared with the 2000 model.

We plan to continue studying and implementing environmental performance methods.

*LIME: Life-cycle Impact assessment Method based on Endpoint modeling (Japanese version)

The LIME method was developed under the fiveyear LCA project begun in 1998. LIME compiles and integrates a set of environmental burdens affecting human health, social assets, biodiversity, and primary production. Canon is taking part in the LCIA research group studying the use and implementation of LIME, and we continue to carry out case studies using the method.

LIME Comparison between i560 and Previous Model





Managing Product Environmental Information

Environmental information on a product is efficiently managed at various stages planning, development, testing, procurement and production—with an intranet system that provides for external disclosure and is employed during product design. Particularly useful is the review of the prototype based on a 3D-CAD design during the product development stage, which includes a review from the perspective of the environmental burden. This review makes prototype development obsolete while enabling development collaboration, which in turn shortens the development cycle of the product considerably (▶P. 34) (Production Environmental Information Management).

Environmental System for Development Support

At the development stage, the design information in the 3D-CAD system is linked to a Digital Mockup Review*¹ (DMR) system. Here, the prototype is subjected to various types of evaluations, and feedback is sent rapidly to the design division.

A new feature of the DMR system is a

product evaluation that includes an automatic review of the product's suitability for recycling, its environmental impact (LCA/LCC), and the environmental qualities of the parts. This allows for a simulation at the development and design stages of minimizing $\rm CO_2$ emissions, checking for environmentally conscious parts, and optimizing the ease of assembly and disassembly, all prior to the Type III Eco-Label certification and product assessment that take place at the product testing and mass production testing stages.

These product development support tools have promoted even tighter compliance with the WEEE*2 and RoHS directives and other regulations (P. 13), while greatly improving the efficiency of the product development process.

Information Management for Green Procurement

All information regarding the environmental assurance activities of our suppliers is managed in the Green Supplier Management System. At the same time, the Green Material Information Management System organizes survey information regarding the chemical substance content*3 in procured parts and materials, data on the amount

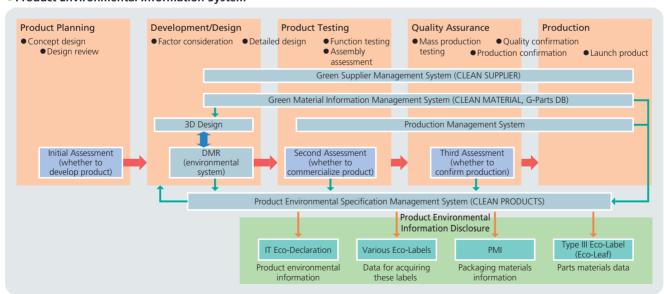
of six substances regulated by the RoHS directive, analysis results, advice on whether to procure or reject parts, along with other information. All Group companies have access to these systems.

Designers can easily choose environmentally conscious parts and materials as the green information systems are linked to various databases forming the foundation of the development and design system. They include the electric and electronic parts database, electric circuit design system, and the mechanical parts database.

Managing Product Environmental Specifications

Product assessment reflects information derived from the environmental review of the prototype and information from the environmental evaluation carried out on the final product. The product assessment information, parts and materials environmental information, development product information and production management information from the operational site are all managed under one unified Product Environmental Specification Management System. This system is used both within and outside the Group as a database for product environmental information disclosure.

Product Environmental Information System



- *1 Digital Mockup Review
 - A mockup is a full-sized model of a new product at the development and design stages. A DMR is a 3D digital mockup to verify assembly, disassembly, usability, safety, driving mechanisms and other features and functions.
- *2 WEEE: EU's Waste Electrical and Electronic Equipment directive (became EU law in February 2003)
 - The purpose of this directive is to establish new systems for collecting and recycling waste electrical and electronic equipment in the EU, with a focus on
- corporate initiatives. The directive requires companies to achieve certain levels of reuse and recycling, process materials properly, and disclose information. By August 13, 2004, each EU member nation must establish domestic laws to enforce the directive locally.
- *3 Survey on Chemical Substance Content
 The survey form is based on 29 substances designated by the Japan Green
 Procurement Survey Standardization Initiative (JGPSSI) in March 2004.

Realizing a Worldwide Recycling-Oriented Society

Canon has adopted Inverse Manufacturing with the goal of maximizing resource efficiency. The overriding objective is to contribute to the creation of a global recycling-oriented society.

Approach to Resource Recycling

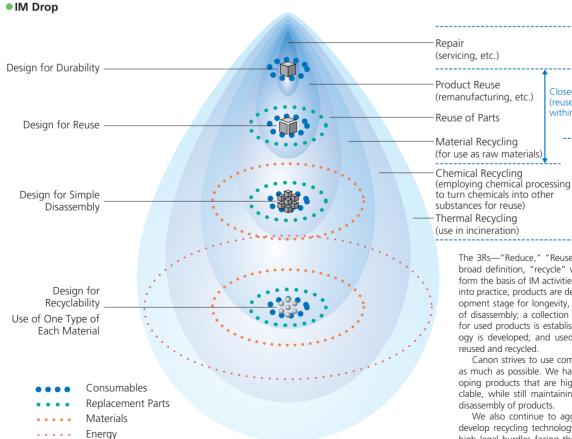
The Canon Group is aggressively pursuing Inverse Manufacturing* (IM) as part of our dedication to being a global corporation supporting a recycling-oriented society. The essence of this effort is the maximization of resource efficiency by implementing a high-level business activity life cycle system that considers resource recycling from both development and design stages.

Canon's IM has been implemented through a global structure for recycling, with centers in the Americas, Europe, and Asia. Sharing of information and resources between these regions makes it possible to realize global recycling. Collected products are reused as resources in order to conserve precious raw materials, making it possible to reduce the environmental burden and improve economic efficiency.



*Inverse Manufacturing

Conventional production methods consider only design, production, and use of a product, while little attention is paid to disposal, reuse, and recycling. Inverse manufacturing solves this problem by approaching production not just from the forward process, but from the "inverse" process as well.



The 3Rs—"Reduce," "Reuse," and "Recycle" (in a broad definition, "recycle" would include reuse)form the basis of IM activities. To put this approach into practice, products are designed from the development stage for longevity, compactness and ease of disassembly; a collection and processing system for used products is established; recycling technology is developed; and used products are actually reused and recycled.

Closed Recycling

(reuse of resources within the Canon Group)

Open Recycling

resources outside

the Canon Group)

(reuse of

Canon strives to use common parts in products as much as possible. We have succeeded in developing products that are highly reusable and recyclable, while still maintaining the safety and easy

We also continue to aggressively research and develop recycling technology in order to clear the high legal hurdles facing the use of reused plastic materials. The fruits of this research are being incorporated into more and more products.



Product Reuse and Recycling

Remanufacture of Copying Machines

The Canon Group has expanded its copying machine remanufacturing program globally since 1992. Remanufacturing begins with the collection of used products and the selection of parts according to rigorous criteria. Selected parts are thoroughly cleaned and worn parts replaced to ensure that the reused materials meet the same high quality standards applied to new parts. We guarantee that each reused part is as good as a new one (P. 17).

Parts Reuse through TREE

We initiated the TREE recycling program in 1999 as a way to effectively reuse machine parts. Short for "Technology of Reusing for Environment with Economy," the TREE program doesn't simply involve the recycling of used products. Rather, parts removed from used products are reused in other machines, promoting an effective use of resources.

TREE Focus

- Understanding product design and parts lifespan from the viewpoint of long-term durability and reuse
- 2. Establishing an efficient collection system for used products
- 3. Rigorously managing the quality of reused collected parts
- Developing and implementing reuse technology

Recycling of Consumables

Since 1990, Canon has been operating a Toner Cartridge Collection and Recycling Program on a global scale. Collected cartridges are separated by machine type, and parts that can be used again are reused or recycled (P. 17).

Development of Automated Plant for Recycling Toner Cartridges

Canon Ecology Industry Inc. (CEI) has advanced the recycling of toner cartridges with the introduction of a fully automated and specially designed plant that went online in 2002. Collected toner cartridges are simply placed into an apparatus that automatically separates the steel, aluminum, HIPS (high-impact polystyrene), and other plastics. The recovered HIPS is highly pure and has achieved flame resistance standards (UL certification), allowing it to be reused in cartridges as part of the closed material recycling system.

Conducting development, production, use, collection, and recycling all in the same region has enabled a life cycle that both reduces environmental burden and realizes economic efficiency.



Toner cartridge recycling plant (CEI)

The collection of used ink cartridges began in 1996. As of February 2003, more than 3,000 stores across Japan were cooperating in the collection of used cartridges. The collected ink cartridges are sent to CEI for separation. Plastic and metal materials are separated for recycling and reuse, while all other materials are converted to heat energy and 100% recyclable.

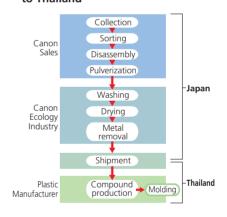
Canon is also carrying out the recycling of drums and toner containers.

Development of Plastic Recycling Technology

Recycling Plastic Materials

Beginning in 1999, we set up a plastic collection system across eastern Japan for mainly exterior parts of machines; then in 2002 expanded the program nationwide to include the paper supply cassettes for copying machines. The collected paper supply cassettes (HIPS material) are preprocessed in Japan for washing and the removal of foreign substances, then shipped to Thailand. There, a local plastic producer pulverizes the plastic and recycles it into m-PPE (modified polyphenylene ether resin). The recycled plastic has obtained UL electric safety standard certification and meets the same quality standards as virgin plastics. This recycled plastic is used as material for the power supply box cover in inkjet printers.

Materials Export from Japan to Thailand



Use of Recycled PET from Used PET bottles

In 2001, Canon adopted molded parts made from 100% recycled PET, for the main parts of laser beam printers. We will prioritize the use of 100% recycled PET parts for copying machines, facsimile machines, MFDs and other products. In 2003, the amount of recycled PET used by the Canon Group grew to 750 tons.

Minimizing the Environmental Burden on Local Communities through Continuous Oversight and Accurate Information Management

Continual environmental assurance activities based on ISO14001 have been augmented by material flow cost accounting and a production environmental information system. All are intended to manage environmental information accurately and reduce the environmental burden on the communities.

Operation of Environmentally Conscious Management System

The Canon Group continues to increase the number of manufacturing and marketing subsidiaries and affiliates with ISO14001 certification*¹. In 2003, Canon Engineering (Thailand) Ltd. was among five companies to receive certification, raising the total to 43 operational sites.

Operational sites that have not achieved certification are functioning independently with the same level of management system as those that have certification. We are also considering ways to attain consolidated certification for the Group (P. 49).

Monitoring and Measurement

Our independent environmental assurance system is based on the principle of being in compliance with all environmental laws and regulations in and outside Japan, thereby reducing our risk. For air and water emissions, in particular, Canon's standards have been set higher than the regulations. The environmental management results of all our operational sites are available on our website (URL: canon.com/environment).

In addition, we have established a Measurement Certification Division to comply with Article 107 of Japan's Measurement Law. Qualified environmental analysts from this division carry out analysis and evaluation of environmental burden using the

latest measurement devices. The division's Environmental Analysis Support System manages data and responds to irregular data levels related to wastewater, soil, air, odor, noise, vibration and other factors at all operational sites in Japan (P. 27).

Environmental Auditing

A special organization has been created to carry out environmental auditing*2 at all production and R&D sites both in and outside Japan, in accordance with Environmental Audit Standards established under ISO guidelines. Audits by each operational site and separate audits by headquarters are part of an effective and efficient environmental auditing system. The audit results lead to the strengthening of the environmental management system and a continual improvement in environmental performance.

An environmental audit by headquarters, meanwhile, is used to confirm the product assessment system for the research and development division and its implementation status (P. 49).

Risk Management

Response to Emergencies

Every operational site decides, as part of its Environmental Management Items, a response approach to unforeseen emergencies that would allow the site to make comprehensive decisions and take appropriate action quickly. Detailed information on preventive management methods is also part of each site's environmental management system. This includes an overview of soil surveys and environmental assessment, creation of construction standards, the adoption of secure wastewater facilities designed to protect the environment, and outlining how to manage measurement data

Environmental Assessment

Since 1990, Canon has utilized an environmental assessment when establishing new operational sites, from the process of selecting the location of the site through to the start of operations, using the same environmental management standards for sites in and outside Japan. For sites outside Japan, since the regulatory standards and requirements vary depending on the country, Canon's standards are added to the local standards. Local consultants are commissioned to complete the basic surveys, the site is chosen based on the results, procedures are taken after ensuring that the results accord with standards, and the construction of the site begins.

Topics Detection of Chlorinated Organic Compounds in Soil and Groundwater

Canon has actively surveyed the quality of soil and groundwater since the 1980s on an independent basis as part of our goal of conserving the environment. In cases where survey results are above environmental standards, we take measures to discover the cause of the problem and its effect on the surrounding environment, while closely working with local governments to resolve the issues.

In 2003, three operational sites in Japan were tested during the rebuilding of facilities at the sites, in accordance with Japan's Soil Contamination Countermeasures Law. The results showed that levels of chlorinated organic compounds were higher than environmental standards at the Shimomaruko Headquarters and the Meguro Office, though by only minute amounts that did not cause environmental problems

to the surrounding areas. Canon is now addressing the situation in cooperation with government agencies.

Canon has already eliminated the use of chlorinated organic compounds (>P. 57).

• Status at Operational Sites in Japan Groundwater

	Report to Government	Main Type of Contamination	Remediation Measures	Surrounding Wells
Toride	1998	Trichloroethylene	Activated carbon adsorption treatment of aerified pump water	Within standards
Fukushima	1990	Trichloroethylene		Within standards
Kanuma	1990	Tetrachloroethylene		Above standards*
lwai	2002	1,1-dichloroethylene		Within standards

^{*}The highest concentration of contamination of tetrachloroethylene in wells surrounding the Kanuma Plant was 0.23mg/l, compared to the highest acceptable concentration of 0.01mg/l.

Soil

	Report to Government	Main Type of Contamination	Remediation Measures
Shimomaruko	November 2003	Trichloroethylene	Soil excavation and substance elimination
Meguro	December 2003	Cis-1, 2-dichloroethylene	Soil excavation and substance elimination (planned)



Production Environmental Information Management

The Canon Group introduced the Production Environmental Information System in January 2003 to unify environmental information at our production sites. The new system makes obsolete the old method of compiling information through e-mail and survey forms, and instead works on a unified intranet database. Every operational site enters its environmental data according to specified categories. The system enables the Global Environment Promotion Headquarters to easily grasp the situation at Group sites around the world.

Further, the system is utilized as a management tool for evaluating environment results, environmental accounting, environment performance index, sustainability reports, and other management tasks.

Data Gathered through the Production Environmental Information System

- •Company overview •Environmentally conscious management •Global environment
- •Local environment •Resource conservation
- •Chemical substance management
- •Green procurement •Analysis and measurement •Work environment analysis and measurement •Human resources training
- •Soil and groundwater •Kyosei with society
- •Accident and disaster information
- •Achievement status •Survey

Environmental Education

Canon is committed to having all our employees understand the importance of environmental conservation and practicing conservation as part of their daily lives. To encourage this, we have published internal magazines including information on the environment and prepared videos for employees since 1989 as part of enlightenment efforts. Overall, Canon has instituted fundamental and rank-based education along with Specialist Training as two pillars of its environmental education.

Since 2004, we have introduced an intranet-based Environmental Education Fundamentals Course and Canon Ecology Person Diagnosis for all Group employees in Japan. These programs are expected to be expanded to Group employees outside Japan in 2005.

Fundamental and Rank-Based Education

Environmental education is provided to new employees, the general workforce and management, according to their ranks in the company. The education covers Canon's approach and measures for environmentally conscious management, from basic environmental information to daily environmental management, along with basic knowledge needed for green procurement and other programs.

Specialist Training

With training programs at all operational sites and workplaces, we are nurturing employees who can advance our environmental efforts. These include training for environmental staff and auditors, training for developers and designers on ways to make environmentally conscious products, and training on environmental and chemical safety technologies.

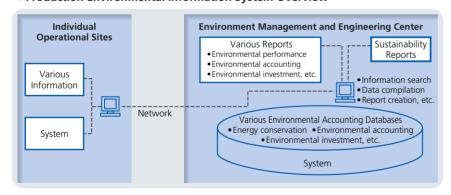
Introduction of Environmental Education Fundamentals Course and Canon Ecology Person Diagnosis

Environmental education using the intranet will be adopted for operational sites worldwide by the end of 2005.

The Environmental Education Fundamentals Course will cover basic global environmental problems, along with details of Canon's environmental assurance activities. The course will help improve the promotion of environmental assurance activities among all employees by upgrading the knowledge of environmental issues inside and outside the Group.

The Canon Ecology Person Diagnosis program promotes environmental assurance activities among employees by posing to them questions about regulations and ethics along with their everyday activities. Data gathered from this system are analyzed to revise the environmental education program and make other improvements.

Production Environmental Information System Overview





Screen from Environmental Education Fundamentals Course (Japanese version)

^{*1} ISO14001

The International Organization for Standardization's certification for environmental management systems.

^{*2} Environmental Audit

An evaluation, based on an objective set of criteria, of whether or not an organization or operational site is in compliance with environmental standards defined by environmental laws and regulations, as well as the company's policies and goals.



Reducing the Direct Environmental Burden at Operational Sites

The Mid-Term Environmental Goals are the foundation of our effort to reduce the environmental burden of operational sites by focusing on "Global Warming Prevention and Energy Conservation," "Resource Conservation," and "Elimination of Hazardous Substances."

Energy Conservation Activities

Energy Conservation Measures at Semiconductor Plants

At semiconductor production plants, a significant amount of energy is expended maintaining the pure environment of clean rooms. The Ayase Office's plants has made strides in reducing the energy consumed by the air supply and ventilation system in clean rooms by introducing in 2003 a system that reuses a part of the ventilation.

Proven effective in the past, this new technology selects reusable ventilated air from various ventilation systems to be recirculated. The system alone reduced the yearly amount of energy consumed at the Ayase Office by about 1.5%, for a cost savings of about 8 million yen. This energyand cost-saving system will be adopted as part of our facilities expansion plan for 2004.

Environmentally Conscious Headquarters for Canon Sales

Canon Sales completed its new environmental conscious headquarters building (Canon S Tower) in April 2003. The Canon S Tower gathers into one location the various sales sites previously located in the area, making for more efficient business operations.

From the planning stage, Canon S Tower was designed and built on the concept of energy conservation and longevity. This focus helped the new headquarters meet the requirements to be designated a Superior Building for the Environment and Energy Conservation in 2003, which recognizes buildings in which energy conservation activities are promoted. Canon S Tower becomes the third building of the Group to receive such distinction, following the Toride Plant's new B1 building, and the Shimomaruko Headquarters building.



Canon S Tower, an environmentally conscious building (center)

Waste Elimination Activities

Towards Zero Landfill Waste at All Japanese Operational Sites

Among the Mid-Term Environmental Goals at Canon is the elimination of all landfill waste at Japanese operational sites. Pursuit of this goal is based on phased-in reductions in waste achieved through employee enlightenment, research on waste generation, waste generation control, thorough separated collection, recycling of resources and other measures being taken on a Group-wide basis.

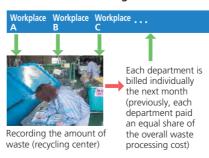
At the end of 2003, the Group had achieved the total elimination of waste at all 38 operational sites in Japan, which includes Canon and all of its manufacturing subsidiaries and affiliates. This compares with waste generation of about 35,000 tons in 1990. The establishment of new goals will include eliminating landfill waste at operational sites outside Japan.

Waste Elimination Efforts at Canon Components

Canon Components, Inc. introduced in the second half of 2003 a new waste elimination program in which each department in the company must bear the financial burden of their own waste processing. Previously, the general affairs division handled all the costs for waste disposal. Now, plastics and papers generated by each workplace are collected at a recycling center where the workplace, type of waste. and amount are recorded. Each department is then assessed a waste processing fee for the next month in accordance with the waste produced.

This new program also provides a wealth of data on the generation of waste from each department, making it possible to set new reduction goals by division. The program delivered a savings of about 3 million

Method of Billing Each Department for Waste Processing Fee



yen over the previous year, or a 30% reduction, and also led to the total elimination of waste due to the thorough separation measures taken

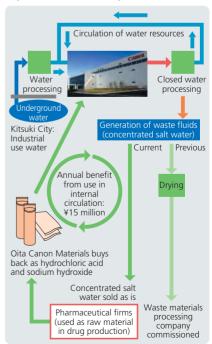
Improvement of Internal Recycling of Waste

We have begun aggressively purchasing reused materials and recycled products while continuing with the 3R promotion (P. 31). One of the New Mid-Term Environmental Goals is to increase internal recycling more than 40% compared with

At Oita Canon Materials Inc., salt water generated during the production process was previously disposed of as waste after drying. Now, however, as an example of our closed recycling system, the salt water is highly concentrated and sold directly to pharmaceutical firms, which use it as a raw material in producing drugs. During use, the materials are reprocessed as hydrochloric acid and sodium hydroxide, which are sold back to Canon.

Canon is making a contribution to the establishment of a recycling-oriented society while at the same time fulfilling our responsibility as a producer.

Case Study in Closed Recycling (Oita Canon Materials)



Vision and Strategy
P. 11–12

Performance Data
P. 55–58

Management

Programs

Reformance Material

Management

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Elimination of Hazardous Substances

Aiming for the elimination of hazardous substances, some sites outside Japan that were using dichloromethane have eliminated the substance (P. 57), while other measures have included the introduction of processing apparatus that greatly improves the quality of wastewater.

Introduction of New Wastewater Processing System

A new wastewater processing system was introduced at Canon's Hiratsuka Development Center in December 2003 to reduce the environmental burden by recycling the wastewater at the plant for the development and production of semiconductors and displays.

The new equipment efficiently processes the fluorine wastewater generated in the semiconductor production process, lowering the concentration of fluorine in the wastewater from 6.4ppm to 0.8ppm. Further, in the acidic and alkaline wastewater treatment processes generating sludge, the water content has been cut by 20%, thereby reducing the amount of sludge by 50%.

The Hiratsuka Development Center has also adopted separate wastewater collec-

tion systems to reuse the wastewater generated separately from the facilities and production process, enabling the plant to recycle 42% of its wastewater (228,000 m³ per year). The savings on the amount of water usage and sewage discharge along with the reduction in waste are expected to lead to yearly economic savings of about 88 million yen at the plant.



New wastewater processing system (Hiratsuka Development Center)

Low-Emission Vehicles

One of the environmental goals at Canon Sales is the adoption of low-emission vehicles. To that end, more than 90% of the vehicles the company purchased in 2003 were environmentally friendly. Specifically, of the 130 vehicles introduced, 124 were either low-emission gas vehicles*1 or high energy-efficient vehicles*2.

In addition, the Nagoya Branch of Canon

System & Support Inc., part of the Canon Sales Group, adopted 12 *COMS* electric vehicles. The Canon Sales Group is considering further introduction of electric vehicles in other areas as a way to reduce gas emissions, noise, and other types of pollution generated during vehicle operation.

- *1 Vehicles that have been rated "good" or higher according to the Ministry of Land, Infrastructure and Transport's low-emission gas vehicle certification ("good" being a 25% reduction of gas emissions compared to 2000).
- *2 Vehicles that have cleared the Ministry of Land, Infrastructure and Transport's fuel consumption standards.



Introduction of *COMS* electric vehicle (Canon System & Support, Nagova Branch)

Topics Material Flow Cost Accounting

Material flow cost accounting is an environmental management accounting tool directed at loss generated in the production process. This loss includes waste materials (material loss), associated processing costs, waste materials disposal and other costs. The combined losses represent the "negative product," as compared with the finished product, or the "positive product." The losses are analyzed to determine the process from which they came. Measures to reduce these losses result in a lower environmental burden along with cost savings.

From 2001, Canon began participating in research on material flow cost accounting with the Japan Environmental Management Association for Industry (JEMAI). Since then, material flow cost accounting and initiatives to reduce the "negative product" have been introduced laterally across the Group. At the same time we are striv-

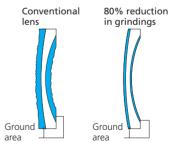
ing to develop the method upstream and downstream in our industrial relationships.

Utsunomiya Case Study

At Canon's Utsunomiya Plant, it was found that a large part of the loss in the overall cost of lens processing at the plant came from lens grinding sludge generated in the rough grinding process. To solve this problem, Canon cooperated with a raw materials supplier to introduce a "near-shaping lens," or a thinner lens, which enabled the company to both lower the environmental burden and achieve cost-savings. By implementing these types of measures we aim to waste none of the valuable resources used in our production processes.

Information from Japan Environmental Management Association for Industry URL: www.jemai.or.jp/english/index.cfm

Image of Near-Shaping Lens



Analysis of Lens Processing Costs (Utsunomiya Plant)



Reducing the Environmental Burden of Logistics

Canon's initiatives to minimize the environmental burden of logistics are being bolstered on a global scale, as we continue to make strides in cooperating with transportation companies on various fronts.

Eco-Logistics Policy and Activity Overview

The Group goal concerning logistics is to reduce, by the end of 2006, CO_2 emissions relative to sales by 20% compared with 2000. This goal is intended to both raise the efficiency of the Group's logistics operations and reduce the burden on the environment.

From 2002, Canon put in place the Environmental Logistics Sub Working Group under which teams are seeking new approaches to environmentally conscious logistics from six areas: procured parts, production sites, shipments in Japan, customer sales, shipments outside Japan, and packaging.

An Approach for the Entire Group

Internationally, managers have been installed at procurement, production and marketing sites outside Japan in an effort to raise the bar globally for environmentally conscious logistics. One achievement of this has been a program, begun in 2003, to collect information on and reduce CO₂ emissions from international shipments and logistics at each operational site outside Japan. Logistics-related CO₂ emissions by the entire Group in 2003 totaled about 690,000 tons (P. 48).

Survey on Truck Environmental Management

Canon is aiding transportation companies to reduce their environmental burden. From 2003, Canon has surveyed transportation companies regarding their environmental management using a Green Management Checklist developed by the Japan Foundation for Promoting Personal Mobility and Ecological Transportation. The foundation analyzes the results of the survey and Canon provides additional evaluation before feedback is presented to transportation companies to help them raise their awareness of the environment. The foundation is one of the certifying organizations under the Ministry of Land, Infrastructure and Transport's Green Management Certification System. Transportation companies with a high awareness of the environment already have begun taking measures to receive the green management certification.

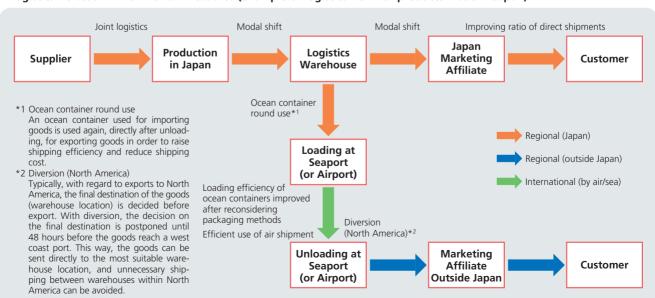
Joint Logistics

Canon introduced a joint logistics system for parts procurement in Japan in 1998. The adoption of this system has also begun in China and Thailand.

In the past, each of our suppliers used a different transportation company, and goods were transported to our operational sites separately. In response to this problem, the joint logistics system was developed to integrate shipments of goods from suppliers and transport them in rounds on large-sized trucks. In addition, where there were large numbers of deliveries in a day, the number of trucks used independently by the transportation companies increased, lowering the load efficiency. Joint logistics also solved this problem by reducing the number of trucks, thereby improving the load efficiency and allowing for large numbers of deliveries. Through the integration of multiple routes and delivery points, the load efficiency has been improved while reducing the amount of travel by logistics.

Since the adoption of joint logistics, the traveling distance per day has declined by $60,000\,$ km compared with independent transporting by transportation companies. In terms of CO_2 emissions, this translates into a reduction of 4,570 tons a year.

Logistics-Related Environmental Measures (example of logistics flow for products made in Japan)





Action Regarding Packaging Materials

The global logistics operations of Canon require the use of various types of packaging. In order to reduce the amount of packaging used and disposed of, while lowering the environmental burden during transportation. Canon has adopted reusable packaging materials such as collapsible plastic containers and trays, plastic pallets, pallet bands, and others used for the transport of parts.

As for the transport of products, we are making headway in the reduction of polystyrene foam used as shock-absorbing materials by switching to pulp molds, cardboard, and other paper-based materials. At the same time, Canon has implemented a proprietary polystyrene foam recycling system in which recycled materials are reused in the shock-absorbing packaging. The packaging we use is also easy for customers to recycle.

P. 48

In 2003, a new packaging material was developed for toner cartridges in which air is injected into the bag containing the cartridge so that it acts as both a storage container and shock absorber. The use of air as a shock absorber and the minimization of size make packaging materials more functional and resource-conserving than previously. This type of resource-saving packaging has greatly improved the efficiency of storage and transport of both packaging and products.



New packaging material for toner cartridges

Topics Promotion of Modal Shift

In Japan, Canon has raised the efficiency of main product transport routes through the use of fully loaded large-scale trucks. As this leaves little room for further improvements in load efficiency, it has become necessary to use other modes of transport in order to further promote the reduction of CO₂ in logistics operations.

Canon is aggressively implementing a modal shift, or a switch from truck transport to ship or rail transport*. For product shipments alone, 80% of the freight shipped between the Kanto region and Fukuoka (Kyushu) has been switched to ferry since 2002, and rail transport for products has also begun between Kanto and Osaka.

However, rail moved only around 40% of the products shipped by Canon because our packaging design standards were based on international standards for ocean containers, and therefore some of the products were not suited for rail transport in Japan. To raise this ratio to 80% by the end of 2004, Canon teamed up with a transport firm and Japan Freight Railway Company to jointly design a new railcar container dubbed BIG ECO LINER 31 that is similar in measurement to an ocean container and highly efficient in capacity. The use of these new containers was recognized by the Ministry of Land, Infrastructure, and Transport in 2003 as a demonstration proiect for the establishment of a low environmental burden logistics system. Its success helped Canon win the 4th Railway Freight Promotion Award.



New railcar container BIG ECO LINER 31

In 2003, the promotion of modal shift in the shipment of products led to a CO₂ emissions reduction of about 725 tons.

In addition, we are also aggressively implementing modal shift with respect to shipments of parts between our plants.

*Switching from truck transport to rail or ship The amount of CO₂ emissions generated by transporting one ton of freight over one kilometer by rail is 1/9 that of truck transport, while ship transport produces 1/4 the emissions.



Cargo train loaded with the BIG ECO LINER 31

Two-Way Communication with Stakeholders on Sustainability

Canon became the first major company in Japan to hold a conference for investors specifically on the theme "environment," as part of our efforts to deepen communication with our stakeholders.

Basic Concept

Environmental conservation is not something that just one company can talk about on its own; the pursuit of sustainability must be established on a mutual understanding with stakeholders.

One premise of this relationship with stakeholders is that the corporation will disclose accurate information to the public, making possible the type of communication activities that go beyond simply what is beneficial for the company. Mutually constructive communication, and with it accountability, can be established by fulfilling the responsibility to disclose information to a diverse group of stakeholders.

Canon is striving to explain our environmental initiatives to a wide group of stakeholders inside and outside the company, taking advantage of various opportunities for communication and using various types of media.

Direct Communication with Stakeholders

Canon values the direct relationship we have with our stakeholders. We became the first Japanese corporation to hold a conference for investors exclusively on the theme "environment." Conferences directed at consumers were also held (P. 20) (P. 64–65).

In addition, on a regular basis Canon provides sincere responses to various inquires from our stakeholders (>P. 66).

Cooperation with Government, Industry, Academia

The Canon Group takes part in joint activities with governmental, industrial, and academic organizations around the world (P. 50). We support governmental, industrial, and academic initiatives on environmental conservation. In addition, the Group actively responds to requests for seminars through which we can impart the importance of environmental conservation and other information to the public.

Environmental Public Relations

Environmental and Sustainability Reports

Canon published our first environmental report in 1994 under the title *Ecology*. From 1999, we have issued a yearly *Environmental Report*, which became the Sustainability Report from 2003 (>P. 66). The Sustainability Report has been recognized for excellence, winning the Outstanding Performance Award at the Environment Report Awards, an Excellence Award at the Sustainability Report Awards, and other honors. From 2003, a Sustainability Report Digest has also been published. The Digest has been made available in Chinese in addition to Japanese and English.

Since 2001, Canon (Schweiz) A.G. has been one of a number of Group companies to publish its own environmental report. Canon (Schweiz) took first and second prize in consecutive years at the environmental awards sponsored by the Swiss Association for Environmentally Conscious Management.

Environmental Advertising

We have been placing environment-related advertisements in Japan in newspapers, magazines on a continuous basis since 1995 in order to have as many people as possible understand our environmental efforts. In 2003, an ad directed towards the business community featured the theme "Overriding Indicator: Factor 2," while in general interest magazines, ads featured "energy conservation," "resource conservation," and "elimination of hazardous substances" for inkjet printers.

In the international arena, Canon has carried out various advertising initiatives, including the placement of an ad in a *Forbes* magazine special feature section on the environment, featuring our goal of "maximizing resource efficiency."



Environmental and sustainability reports



Advertisement for overriding indicator Factor 2



Advertisement for inkjet printer



Advertisement in international business magazine Forbes



Website Information

Canon offers the latest environment-related information and our sustainability reports on our website*1. Material Safety Data Sheets*2 are also posted on the website to support the safe and proper use of our chemical products.

- *1 Website URL: canon.com/environment
- *2 MSDS: Material Safety Data Sheet

Environmental Exhibit Rooms

Permanent environmental exhibit rooms are located at the Shimomaruko Head-quarters, Ami and Toride Plants, Fukushima Canon Inc. and Oita Canon Materials. The exhibits help educate school students and others from areas around the operational sites who visit on tours. Canon's environmental conservation initiatives are introduced through the exhibits themselves, videos like *Canon Ecology*, and other types of media.

Environmental Expos

Canon has a strong presence at various environmental expositions around the world. In 2003, we exhibited in Japan at Eco-Products, Enviro Shiga (International Environmental Business Exhibition held at Lake Biwa), ENEX, and other events. Canon's booths present environmentally conscious product and panel exhibits, along with product parts in compliance with the RoHS directive, and the showing of various videos for visitors. At Eco-Products 2003, we invited expo attendees to take part in an inkjet printer disassembly seminar. At the Enviro Shiga in western Japan, Nagahama Canon Inc., a local subsidiary, explained its environmental initiatives. Outside Japan, Canon was at the Sustainable Business Conference 2003 in New Zealand, among others (▶ P. 20).

Environmental Education

Canon believes that learning about the environment should be fun and interactive. We organize and support various environmental education events for children.

Environmental Education Events

The Shimomaruko Headquarters has teamed with Tokyo's Ohta Ward and the Environmental Study Group, an NPO, to hold the Canon Eco-Festival. This annual event provides an interactive space for children to learn about the environment through games, crafts, and study.

Canon U.S.A., Inc., meanwhile, supports the Canon Envirothon, North America's largest high school environmental science competition.

Environment Lessons at Elementary, Middle Schools

Employees of Oita Canon Materials began an environmental education program directed at some 2,000 students at nine local elementary and middle schools. Environmental classes feature quizzes and experiments, along with field trips to Canon plants to get hands-on education.



Canon Eco-Festival (Shimomaruko Headquarters)



Canon Envirothon (Canon U.S.A.)



Environment lessons at local schools (Oita Canon Materials)



Environment website



Canon Gallery, a showroom (environmental corner) at Shimomaruko Headquarters



Eco-Products 2003 (Japan)



Sustainable Business Conference 2003 (New Zealand)



Quality Assurance Defined by Trust, Satisfaction, and Evolution

Trust, Satisfaction and Evolution—the keywords behind Canon Quality. We strive to improve our customer service by listening to our customers and incorporating their needs into our product development.

Canon Quality

Pleasing the customer, having the customer enjoy Canon products. This is the spirit behind Canon Quality. Building on our legacy of quality means promoting quality assurance while always thinking about what is important to the customer and what we can do for the customer.

Ensuring high quality does not simply involve meeting the needs of the customer and society today, but rather "evolving" quality by constantly considering the future. Canon aims to maintain a strong understanding with customers while creating new value for them and with them.

Companies are in business to do more than provide just products and services to the marketplace. Information is an important factor in assuring quality. Businesses must keep an ear to what customers are saying, while in return providing information to the customers and society at large. In this sense, it will be even more important in the future to see quality as the relationship the company has with the customer. Canon is committed to thinking about quality from the customer's viewpoint.

Quality with Trust

Global Quality Assurance System

Canon depends on a global quality assurance system to deliver the same level of quality anywhere in the world. Under this system, Group companies in every region of the globe have adopted the same quality assurance approach and mechanisms and carry out quality assurance independently with the aim of realizing Canon Quality.

Approach to Substantial Safety, Quality Risks

One of the management policies of Canon is to make absolutely certain that from the viewpoint of customer protection, no harm will ever come to the consumer or their property due to the failure of a product or service. To ensure this policy is met, Canon has adopted our own Product Safety Technical Standard in which our internal standards for product safety supersede those prescribed in each country. Canon considers safety from the point of view of the customer, taking market conditions into consideration.



In the past, nearly all the quality risks considered by companies related to product safety. Now, however, problems related to service and defective functions are also factors affecting the safety of customers, and have the potential to become even bigger issues. Canon is dedicated to maintaining our own stringent standards to manage service and quality throughout the Group. This system will enable the Group to respond rapidly when problems do occur.

Ensuring Substantial Safety*

Substantial Safety

Canon's independent safety standards

Safety Regulations

Compliance with Electrical Appliance and Material Safety Law, UL/CSA, IEC, GB, etc. EMC regulation

Product Liability Laws in Each Country

*Substantial Safety
Substantial safety is a standard higher than the safety regulations, considering safety from the point of view of the customer grasped from the market situation.

Global Quality Assurance System

Product Development Stages	Quality Assurance
Planning	Product planning from customer viewpoint (reflecting market information)
Design	Establish functionality, capability, reliability (technical evaluation)
Testing	Establish quality in mass production (final quality evaluation)
Production	Quality maintenance and cost-cutting
Sales/Service	Response to customer (gathering of market information)



Quality with Satisfaction

Satisfying customers and having them appreciate products to the fullest start with focusing on people and approaching product development with a view to usability, barrier-free design, and other features. At the basis of this approach is our desire to listen to customers as we create attractive products to inspire the market.

Usability, Barrier-Free Design

A usability evaluation is conducted on our products to ensure that they are satisfying and easy to use. We evaluate products for their operability, comfort for the user, the clarity of the product instruction manuals, among other issues. Monitor test rooms are set up within the company where monitors use products so we can grasp how people think and feel about the items. The results are reflected in the creation of new products.

Advanced aged persons from outside the company are invited to assess the products in terms of whether the indication panels on cameras and printers are easy to read, the operations are easy to understand, and to determine, for example, how easy the product is to use overall. Canon also has a program for employees involved in planning, development, and evaluation in which their bodies are temporarily fitted with devices that simulate advanced age or a physical challenge.



Evaluation by monitors

Image and Sound

The way that people feel about a product, for example whether a product's features are "beautiful," "comfortable," or "noisy," is often hard to measure. New tools and technology have therefore been developed to analyze customer feeling about products and then have these opinions reflected in new designs.

For example, whether an image is considered beautiful will depend on the object, its purpose, and the ethnicity of the person viewing it along with their environment. With this in mind, we have instituted indices and evaluation gauges for our customers' preferences in pursuing Canon Color, or a unified color technology for images used in every area of the products, from input to output and indication devices.

We also continue to research ways to evaluate and create sounds that customers will find comfortable and pleasing, and ways to measure sound levels as heard by the human ear.

Customer Service and Support

Our response when a product fails to operate properly is an important part of service. At Canon Sales, products brought by the customer to the QR Center are immediately checked to determine the problem, which is explained to the customer along with the cost to repair the item. The product is then repaired as quickly as possible at the site so customers can return with a properly functioning item. We have put

into practice customers' demands for fast repair time, low repair cost, kindness, and politeness both in terms of how the customer is received and how the product is repaired.

Response to Customer Comments on Products

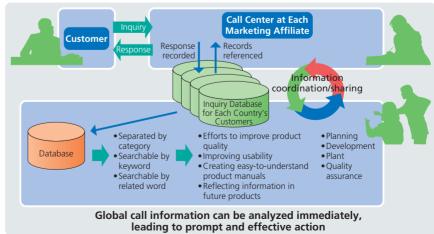
Our marketing subsidiaries and affiliates around the world have all established Call Centers to receive inquiries from customers. Friendly and prompt service is a given, and at Canon we also provide comprehensive support from the heart.

Inquiries and opinions from customers are entered into a common database centrally managed to enable us to grasp rapidly product and service quality information around the world (P. 19). Accumulated data are shared by Canon Inc. and the affiliated marketing companies to provide feedback to the quality assurance, development, production and other divisions. In the end, the collected data lead to improvements in product quality and product instruction manuals as well as in the development of new products.



Canon Information Technology Services, Inc. (U.S.A.)

Call Analysis Tracking System



Support and service information from marketing subsidiaries and affiliates around the world is available through links at the following URL: canon.com

Respecting the Individual and Providing a Safe, Healthy Workplace

Canon, through our corporate structure, offers a workplace environment that respects each individual employee and nurtures their capabilities. In addition, we have instituted new measures for the elimination of workplace accidents and the improvement of safety and health management.

Human Resources Policies

The Canon Group has operated with human resources policies based on its Guiding Principles. They originate in the *kyose*i philosophy and the "Three Selfs" principle (P. 22), known in Japan as the "Three Js," standing for *Ji-hatsu*, or selfmotivation to do every job right; *Ji-chi*, or self-management; and *Ji-kaku*, or self-awareness of one's working environment and responsibilities.

While reflecting these principles, Group companies around the world are in full respect of local laws, culture, and standards for workplace environment. Canon is fostering a corporate spirit that encourages enterprising employees and stresses the principles of "human respect," based on the desire to improve, take responsibility and have a sense of mission, and "personal achievement," wherein a just and fair evaluation of an employee's work is quaranteed.

Compensation System

Canon Inc. introduced a new compensation system from 2001 through 2002 in which the basis of the pay scale was changed from an individual employee's personal situation to their work performance. Salary increases under the new system are based on an evaluation of the function of the work involved and the results of an employee's efforts, within the salary range of the employee's rank. The bonus system is now linked to personal and corporate achievements.

This type of compensation system is already in place at Canon U.S.A., Canon Europe Ltd. and other Group companies in Europe and the Americas, while it is being gradually introduced throughout operational sites in Asia.

Canon is conducting surveys to determine what effect the implementation of this compensation system is having on employees, and the results will be used to understand the current status and make further improvements.

Aim of New Compensation System (Canon Inc.)

- 1. Aims for justness and fairness based on equal opportunity
- 2. Eliminates automatic raises, which foster rigidity
- 3. Seeks to build a competitive global system

Worker and Management Relations

Canon Inc. and the Canon Worker Union hold monthly a Central Worker/Management Conference to discuss the opinions of management and employees on various issues and share information. The worker issues of wages, working hours and conditions, safety and health are discussed at each respective committee in the conference. Through the committees, measures to implement new systems or modify existing ones, are examined and, if agreed upon by worker and management leaders, implemented.

In our Group companies, worker unions and other organizations with a similar function as unions are established and operating. In Europe, Canon European Consultative Committee meetings are held on a pan-European basis to include Group companies located in EU member countries.

Promotion and Understanding of Diversity

Supporting Women in the Workplace In the Canon Group, supporting the activities and career goals of female employees is important. We are striving to create an environment that supports women who aspire to pursue long-term career goals.

Support Programs (Canon Inc.)

- Childcare leave
- Part-time employment
- Re-employment after childcare
- Establishment of a sexual harassment consultation office

Employment of the Physically Challenged

The Canon Group ensures an environment in which physically challenged employees can put their abilities to use in a mutually supportive workplace. After hiring, we support improvements in their workplace and living environments and carry out workplace enlightenment.

Canon Inc. raised the physically challenged employment rate to 1.83% in 2003 without the establishment of a special subsidiary for such purposes. Other Group companies share the same vision of providing a workplace environment where the physically challenged can put their capabilities and knowledge to the best use.

Support for Self-Realization and Skills Development

Re-Employment after Retirement

Canon Inc. was among the first Japanese companies to set the retirement age at 60 back in 1977, and then in 1982 we began a re-employment program that keeps a number of retirees working until the age of 63. We set up an open recruitment system for re-employment in 2000, and currently we are tapping the wealth of experience and knowledge of some 160 re-employed retirees.

Internal Recruitment

We use an internal recruitment system to strengthen divisions and businesses in urgent need of personnel, to respond to the wishes and capabilities of our employees and to invigorate our organization.

Personnel Training

Various training programs are available to support the improvement of employees with special skills. The Canon Group is putting special emphasis on the training of management, with rank-based programs for all managerial staff appointed to new positions, as part of the realization of both strong individuals and a strong organization. The training runs a diverse range of topics and formats, from e-learning systems to programs teaching sign language.

In 2003, Canon Inc. carried out the My Action Program (MAP) for all of some 12,300 non-executive employees to deepen their understanding of the corporate spirit and new compensation system.

Various training programs are being undertaken at Group companies as well, depending on specific needs. At Canon Europe, e-learning programs extend across the continent and other training programs are set up based on rank.



Performance Data

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Elimination of Major Workplace Accidents/Creating a Pleasant Workplace

The Canon Group is making progress on the elimination of major workplace accidents through a no-accident campaign. Currently, Fukushima Canon is in first place in this campaign, logging more than 50 million hours of work time without a major accident. Next on the list of successful operational sites are the Utsunomiya Optical Products Plant and Canon Electronics Headquarters Chichibu Plant with more than 20 million hours.

The workplaces of other operational sites are being improved depending on their circumstances with emphasis on the 55*1 activities. At Group production sites in Japan, workplace safety and health standards have been instituted for the cell production method. We will continue to maintain and improve safety and health management at operational sites by eliminating excess and waste in the work process to ensure a more thoroughly healthy environment.

*1 The 5Ss stand for the Japanese words *seiri* (streamlining), *seiton* (organizing), *seiketsu* (hygiene), *seiso* (cleaning), and *shitsuke* (discipline).

Focus of No-Accident Campaign

- Analysis of accident cause and prevention of occurrence of similar accidents
- Safety inspections upon the introduction of equipment
- Workplace health management for chemical substances

Safety and Health Management System

In Japan, a safety and health management system was introduced in February 2000. In the first half of 2003, an internal auditing system was established with a view to introducing the system to all Japanese production sites.

In addition, Canon is actively submitting its safety operations to external review by the Japan Industrial Safety and Health Association (JISHA), whose activities are conducted in accordance with the International Labour Organization's OSHMS*² Guidelines along with Japanese Ministry of Health, Labour and Welfare policy. In 2002, JISHA began a screening program for OSHMS Standard Certification, selecting Fukushima Canon as an operational site with advanced safety policies. The company

subsequently received OSHMS certification in May 2003. Others preparing for such certification include Ueno Canon Materials Inc., along with the Utsunomiya, Toride, and Ami Plants.

Outside Japan, Canon Hi-Tech (Thailand) Ltd. became the first Thai corporation to receive TIS18001*³ certification. Group companies worldwide continue to make progress in the area of safety and health.

- *2 OSHMS: Occupational Safety and Health Management Systems
- *3 TIS18001 Thailand's labor health and safety management

Measures for Health Maintenance and Promotion

The well-being of our employees is the well-being of our Group. The health management of our employees both in body and in mind is an essential factor in maintaining a healthy and dynamic company as a whole. Canon Inc.'s Health Insurance Union supports the self-managed wellbeing of its employees through the Canon Group Health-care System (CHS21). In this system, healthcare professionals around Japan provide various health exams and seminars along with individual consultation services. In the past five years, the examination rate of the Canon workforce continues to be nearly 100%.

In addition, in compliance with Health Japan 21, the Health Promotion Law and other regulations in Japan, all Japanese Group companies have adopted the same goals for quantitative health examination results and other issues to help prevent illnesses related to lifestyle habits.

Various other measures at Canon Inc. include mental health examinations and

training in line with Ministry of Health, Labour and Welfare guidelines, along with organizing seminars on how to prevent the contraction of SARS (severe acute respiratory syndrome) and other infectious diseases.

Outside Japan, Canon Hi-Tech (Thailand) is among Group companies supporting the health management of its employees. It operates its own emergency cars to bring employees to the hospital during emergencies, and provides employees with health education.

CHS21 Characteristics

- Identification of important health management themes for each generation
- Performance of thorough physical examinations and tests that address both mind and body and are suited to the 21st century
- Performance of health education activities tailored to the needs of particular generations; and reinforcement of health support programs for use after physical examinations aimed at promoting self-managed healthcare
- Development of healthcare measures that cover employees on foreign assignments, retired employees (those who elect coverage) and families
- Health management staff education, and reinforcement of programs promoting health through the new health management system

Mental Healthcare Initiatives (Canon Inc.)

- Self-care Regular mental health checkups
- Line-based care
 Mental Health Training (required training for new Managers); Stress Management Training
- (for Assistant Managers)
 Care by on-site industrial health staff
 Care by specialist doctors and counselors, and private consultation services
- Care by outside sources Referrals to outside specialists

Topics

Utsunomiya Plant Earns Labour Minister Award for Safety and Health

In July 2003, Canon Inc. Utsunomiya Plant was designated a superior site for safety and health by the Japanese Ministry of Health, Labour and Welfare, which also bestowed on the plant its 2003 Labour Minister Award for Safety and Health.

Reason for Receiving Award

- ☐ The plant as a whole has taken aggressive measures to ensure safety and health, the standards for safety and health management are high, and the plant is a model for others.
- \square In addition, the plant has introduced a safety and health management system, and these activities are vigorously promoted.



Labour Minister Award for Safety and Health

Reaching Out with Social Contributions

In every corner of the globe, Canon is responding to the needs of society with social contribution activities based on the philosophy of *kyosei*.

Policy on Social Contribution Activities

With the corporate philosophy of *kyosei* ever in mind, Canon makes social contributions as a natural part of our business activities, while striving to fulfill our responsibilities outside this scope as well. In addition to making social contribution through business, we are striving to help people around the world enjoy rich lives by acting as a good corporate citizen in the following six areas: conservation of the environment; social welfare; local communities; education and science; art, culture and sports; and humanitarian aid and disaster relief.

Goals

- ☐ Provide ongoing support to people and organizations in need
- ☐ Carrying out a range of support activities in cooperation with partner organizations offering diverse values and expertise
- ☐ Effectively applying Canon's long-accumulated internal resources (employees, funds, facilities and technical know-how)

Conservation of the Environment

Environmental conservation efforts are critical to ensure that this beautiful world is passed along to future generations. In partnership with others, Canon is supporting conservation efforts around the world to help make this vision a reality.

As part of the Clean Earth Campaign, we are supporting important scientific research on the protection of wildlife in Yellowstone National Park in the United States. In addition, Canon technology is being used for monitoring park ecosystems.



Eyes on Yellowstone (Canon U.S.A., Inc.)

Social Welfare

The entire Canon Group is providing indepth support for social welfare activities with a desire to establish a more loving society supportive of all people.

In Australia, we organized the fundraiser Canon Pedometer Challenge Charity Walk, in which the participants took a total of more than 100 million steps over a period of 28 days to raise donations. The funds were provided to the Make-A-Wish Foundation to grant wishes to children with a life-threatening illness.



Canon Pedometer Challenge Charity Walk (Canon Australia Pty. Ltd.)

Main Areas of Canon's Social and Cultural Support Activities





Performance Data

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Local Communities

Sharing smiles with people living in local communities is a great reward for Canon, as it shows that we are trusted by people in the communities.

In the United Kingdom, we have established the internal corporate organization CARE (Communication Action Review Enterprise) to act as liaison with local citizen groups and philanthropic organizations. Through CARE, we support activities involving the local business community, education, arts and culture, humanitarian projects, environmental conservation and other activities covering a wide spectrum. Our employees take active part in philanthropic fundraising events.



CARE (Canon (UK) Ltd.)

Art, Culture, and Sports

Canon is helping arts and culture around the world to flourish with specific programs to foster new talent, educate people in the arts, and protect valuable cultural resources. We support sporting events that transcend borders and race, to bring people of various regions together for friendly competition.

In the arts, the Group supports a number of programs to encourage budding photographers, including the open-submission New Cosmos of Photography project in Japan and the worldwide Canon Digital Creators Contest for those who challenge themselves in the new age digital arts.

Canon is also a title sponsor of Junior Soccer, a program that enables children to experience the wonderful game of soccer, and through the sport, to create international friendship and exchange with girls and boys of other countries.

Humanitarian Aid and Disaster Relief

At Canon, we are always asking ourselves what we can do for those suffering from disaster. Our efforts go beyond borders to aid people in various regions around the world through humanitarian relief, rescue operations during disasters and other activities.

In 2003, Canon Europe Ltd. held the "On the other side of the lens" exhibition in London, at which more than 80 internationally famous celebrities presented photography taken with Canon digital cameras for auction. All the proceeds were donated to the European Red Cross Societies.



"On the other side of the lens" digital photo exhibition (Canon Europe Ltd.)

Education and Science

Canon has an important role in the support of education for children and academic research. This support comes in many forms, including international exchanges, scholarships, and scientific research.

Each year, the Chinese city of Dalian cosponsors with Canon a Japanese speech contest to help forge closer relations between China and Japan. In its 14th year, the event welcomes all members of the local community, typically drawing a wide range of participants, from elementary and college students to businesspeople and independent scholars.



Japanese speech contest for the Canon Cup in Dalian, China (Canon Dalian Business Machines, Inc.)



New Cosmos of Photography competition in Japan (Canon Inc.)



Canon Cup Junior Soccer (Canon Inc.)

Employee Volunteerism

Individual Canon employees are making the decision to participate in volunteer activities around the world, in parallel with the social contributions made by Group companies.

In the United States, the Canon Clean Earth Crew is one of the employee-led regional volunteer programs involving environmental conservation. Groups of employees team up to clean up local parklands, seashores, and maintain nature protection areas in various local communities.



The Canon Clean Earth Crew (Canon U.S.A., Inc.)

Website for Canon's social and cultural activities URL: canon.com/scsa



Evaluations by External Organizations/ Production Reform/Logistics

Evaluations by External Organizations

Evaluation of Canon in Surveys and Ratings (environmental/sustainability areas)

Surveys and Ratings	Evaluating Body	Main Type of Evaluation	Evaluation of Canon
7 th Environmental Management Survey (Manufacturing Division)	Nihon Keizai Shimbun	Environmental	1 st of 599 companies
ECO Value'21® environmental rating	Innovest (U.S.A.)	Environmental	AAA rating/4 th of 36 electronic device and equipment manufacturers
2 nd Environmental Management Rating	Sustainable Management Rating Institute	Environmental, social, economic	3 rd of 67 companies (2 companies 1 st , 2 companies 3 rd)

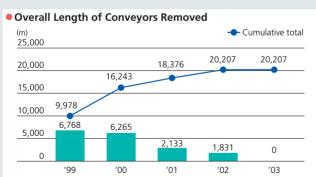
Evaluation of Canon in Sustainability Indices

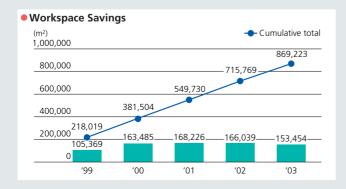
Sustainability Indices	Management Body	Main Type of Evaluation	Evaluation of Canon
FTSE4-Good Global 100 Index	FTSE (U.K.)	Environmental, social, economic	Included
Dow Jones Sustainability Indexes World	Dow Jones (U.S.A.)	Environmental, social, economic	Included
Ethibel Sustainability Index Global	Ethibel (Belgium)	Environmental, social, economic	Included
Morningstar Socially Responsible Investment Index	Morningstar Japan K.K.	Environmental, social, economic	Included

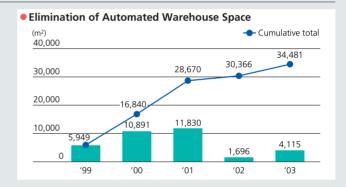
Production Reform

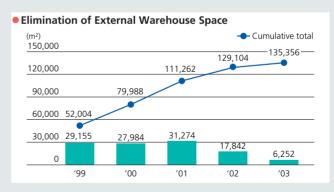
To meet the challenges of international competition and address changes in our operating environment, Canon has been engaged in production reform activities since 1998. These include the adoption of the "just-in-time" production system and a switch to cell production. (Since 2002, Canon has used no belt conveyors in any of its worldwide operations.) We have introduced systems such as factory vanning, in which we load containers right at our plants for export. All of these activities have contributed to our success in implementing flexible production.

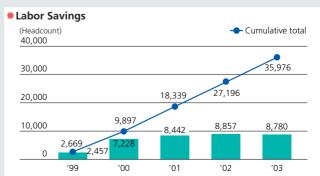
As a result of our production reform activities, over the last six years we have eliminated 20km of belt conveyors, created $870,000\text{m}^2$ of usable space and reduced our use of leased warehouse space by $140,000\text{m}^2$ (all figures approximate). This has translated into 228.8 billion yen in cumulative cost savings and a total emissions reduction equivalent to about 65,000 tons of CO_2 emissions.











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Logistics

■ Logistics Operations in 2003

In 2003, domestic parts procurement and production volumes declined due to transfers of production to locations outside Japan. The importation of products from outside Japan, however, resulted in an increase in domestic shipping volume. The promotion of modal shifts, improvements in logistics routes, greater efficiency in loading resulting from improvements in product packaging, and other factors reduced CO_2 emissions by approximately 800 tons, or an 18% reduction in CO_2 emissions compared with 2000 (14% reduction in terms of basic units of sales).

Additionally, with management improvements, it is now possible to identify CO_2 emissions from marketing subsidiaries and affiliates outside Japan, manufacturing subsidiaries and affiliates outside Japan, and international shipping. The Canon Group can now gather logistics-related data such as this on a global basis.

Logistics Operations Results in 2003

		2003 Logistics Statistics
Fuel (kL)*1		27,455
	CO ₂ (t-CO ₂)	689,627
Environmental Burden	NOx (t-NOx)*2	1,647
	SOx (t-SOx)*2	345

- *1 Fuel used in international shipping is not included in the above chart.
- *2 With regard to emissions of NOx and SOx, since coefficients for calculating international shipments and other factors have not been firmly established, for this report we have made calculations based on the coefficient for burning light oil.

Logistics-Related CO₂ Emissions

(10,000t-CO₂)

		2000	2001	2002	2003*
	Parts procurement logistics	1.19	1.12	0.93	0.85
lanan	Production site logistics	1.00	0.94	0.76	0.65
Japan	Shipping in Japan	1.05	1.05	0.98	1.09
	Sales to customers	0.52	0.45	0.48	0.49
Outside	Production sites	_	_	_	1.08
Japan	Marketing subsidiaries/affiliates	_	_	_	2.72
International	By air	_	_	_	40.33
Shipping	By sea	_	_	_	21.75
Total					68.96

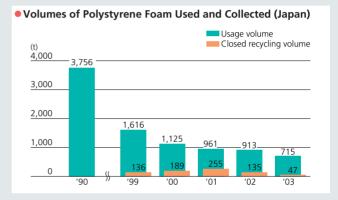
^{*}Gathering of data on logistics outside Japan and international shipping began in 2003

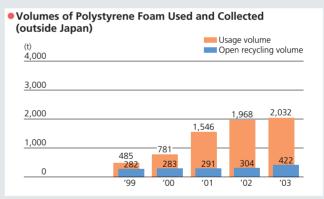
Use of Low-Emission Vehicles (fuel-efficient automobiles) as of December 31, 2003

As one of its environmental goals, Canon Sales is gradually increasing its use of low-emission vehicles. More than 95% of the vehicles Canon Sales purchases are either low-emission gas vehicles*¹ or high energy-efficient vehicles*².

Total Vehicles Purchased	Low-Emission Vehicles	Percent of Total
130	124	95.4%

- *Canon Sales owns 1,199 vehicles (including 63 three-wheeled scooters).
- *1 Vehicles that have been rated "good" or higher according to the Ministry of Land, Infrastructure and Transport's low-emission gas vehicle certification.
- *2 Vehicles that have cleared the Ministry of Land, Infrastructure and Transport's fuel consumption standards.





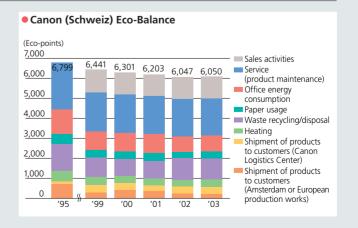
Topics Eco-Balance Initiatives

Canon (Schweiz) uses Eco-Indicator 99*, an environmental performance evaluation method, to comprehensively identify the environmental burden related to sales, product maintenance and other aspects of its operations. It determines its eco-balance and uses this information to evaluate its environmental activities. According to this method, the environmental burden has showed decline since 1995.

Canon is presently proceeding with a plan to improve its environmental performance throughout Europe by employing, for example, Eco-Indicator 99 to measure its environmental performance and working to achieve mid-term environmental goals for the entire continent.

*Eco-Indicator 99

This is an environmental performance evaluation method based on an LCA developed between 1997 and 1999 by a team of environmental experts, LCA experts from the Netherlands and Switzerland and others assembled at the request of the Netherlands' Ministry of Housing, Spatial Planning, and the Environment.





Group Data

ISO14001 Certifications

ISO14001 Certified Sites and Subsidiaries

Site/Subsidiary* ¹	Certification Date	
Japan		
Ami Plant	February 1995	
Ueno Canon Materials Inc.	February 1995	
Toride Plant	May 1995	
Fukushima Canon Inc.	September 1995	
Hirosaki Seiki, Inc. Ishiwatari/Kitawatoku Plants	September 1995	
Canon Electronics Inc. Misato Plant	October 1995	
Canon Finetech Inc. Headquarters, Ibaraki Plant	November 1995	
Nagahama Canon Inc.	December 1995	
Utsunomiya Plant	January 1996	
Oita Canon Inc.	January 1996	
Canon N.T.C., Inc. Iwai Plant* ²	July 1996	
Canon Chemicals Inc. Headquarters, Tsukuba Site	July 1996	
Canon Finetech Inc. Kofu Office	November 1996	
Canon Finetech Inc. Fukui Office	November 1996	
Canon Components, Inc.	February 1997	
Miyazaki Daishin Canon Co., Ltd.	March 1997	
Canon Chemicals Inc. Iwama Site	April 1997	
Utsunomiya Optical Products Plant	December 1997	
Canon Chemicals Inc. Ishige Site	January 1998	
Tamagawa Plant	November 1998	
Hiratsuka Development Center	December 1998	
Canon Electronics Inc. Akagi Plant June 1999		
Canon Electronics Inc. Headquarters, Chichibu Plant July 1999		
Canon Sales Co., Inc. Headquarters, branch offices, sales offices (281 locations in all)		
Ayase Office June 2001		
Optron, Inc. May 2002		
Americas		
Canon Virginia, Inc.	December 1997	
Custom Integrated Technology, Inc.	December 1999	
Europe		
Canon Bretagne S.A.S.	November 1995	
Canon Giessen GmbH	October 1997	
Canon (Schweiz) A.G.	December 1997	
Canon Svenska AB and Canon Centers (22 sites)	April 1999	
Canon Deutschland GmbH	October 2003	
Canon Italia S.p.A	October 2003	
Asia (excluding Japan)	·	
Canon Inc., Taiwan	April 1996	
Canon Hi-Tech (Thailand) Ltd.	November 1996	
Canon Opto (Malaysia) Sdn. Bhd.	December 1996	
Canon Zhuhai, Inc.	March 1997	
Canon Dalian Business Machines, Inc.	July 1997	
Canon Vietnam Co., Ltd.	October 2003	
Canon (Suzhou) Inc.	December 2003	
Canon Engineering (Thailand) Ltd.	December 2003	
Oceania		
Canon Australia Pty. Ltd.	November 2002	
· · · · · · · · · · · · · · · · · · ·		

^{*1} Company and operational site names are those that were still in use at the end of 2003.

Environmental Audits

Since 1994, environmental audits by Canon headquarters have been performed on Japanese operational sites once every two years and on operational sites outside Japan once every three years. These audits are very thorough, employ detailed sets of audit items and have helped operational sites achieve improvements in their environmental management year by year.

In 2003, we performed audits specifically in regard to the Waste Processing Outsourcing Law as a part of our compliance activities. These audits examined every figure related to contracts, manifest management*, and the confirmation of appropriate waste disposal. Errors in contracts and failures to abide by manifests were identified. However, operational sites moved rapidly to correct contract errors and advise waste processing subcontractors on proper procedures, and key points for future compliance with the Waste Processing Outsourcing Law became clear. Training by headquarters divisions specifically addressing manifest management was performed and specific measures were taken to address this topic in future internal audits.

Descriptions of Environmental Audits

Environmental Audits by Canon Headquarters	These audits are performed by a qualified environmental management auditor under the leadership of the director in charge of environmental matters at Canon Inc. Any shortcomings noted in the audit results are reported to the director in charge of environmental matters. The auditor will then revisit the site within three months to determine whether the shortcomings have been remedied.
Environmental Audits by Each Operational Site	These audits are performed by a management-level auditor who has undergone specialist training, at the direction of the highest management authority at the operational site. Any shortcomings noted in the audit results are reported to the highest management authority at the operational site and are remedied within one month.

• 2003 Results of Environmental Audits by Canon Headquarters

Canon Inc.	Shimomaruko Headquarters, Tamagawa Plant, Fuji-Susono Research Park, Canon Research Center, Ecology Research & Development Center, Kosugi Office, Utsunomiya Plant, Toride Plant, Ami Plant, Utsunomiya Optical Products Plant, Ayase Office
Domestic Manufacturing Subsidiaries and Affiliates	Fukushima Canon Inc., Hirosaki Seiki, Inc., Canon Chemicals Inc. Headquarters, Tsukuba, Iwama and Ishige Plants, Oita Canon Inc., Canon Finetech Inc. Ibaraki, Miyazaki Daishin Canon Co., Ltd., Canon Components, Inc., Ueno Canon Materials Inc., Canon N.T.C., Inc. Iwai and Saitama Plants, Nagahama Canon Inc., Optron, Inc., Canon Finetech Inc. Mitaka Office, Canon Precision Inc.
Subsidiaries and Affiliates Outside Japan	Canon Hi-Tech (Thailand) Ltd., Canon Opto (Malaysia) Sdn. Bhd.

^{*}Manifest

When a business generating industrial waste commissions a processing firm to process the waste, the manifest is a management sheet executed to prevent the illegal disposal of waste and ensure that proper processing procedures are taken.

^{*2} Canon N.T.C., Inc. was divided into two new companies, Canon Ecology Industry Inc. and Canon Semiconductor Equipment Inc. on January 1, 2004.



Management

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Environmental Education



Primary Training Programs and Results for 2003

/Doon	la'

	Japan	Outside Japan	Total
Fundamental and Rank-Based Education			
Training for newly hired employees	808	10,132	10,940
Training for general employees	4,239	330	4,569
Environmental fundamentals education (WEB)	109	0	109
Specialist Training			
Training for environmental staff	307	44	351
Environmental auditor training*	229	93	322
Seminars on environmental technology and safety technology for chemicals	10	0	10
Green Procurement Basic Course/ Green Procurement Environment Improvement Structure Course	93	0	93
Training for managers in charge of waste management	40	0	40
External Training Programs, Seminars, and Lectures, etc.	148	0	148
Total	5,983	10,599	16,582

^{*}In Japan, training is performed by headquarters divisions. Outside Japan, training is performed by special external organizations.

Primary Partners in Environmental Protection Activities

Partners in Government, Business, and Academia	Commissions and Study Groups
Japanese Ministry of Economy, Trade and Industry	Environmental Business Promotion Research Committee/Environment and Recycling Investigative Commission/Committee on Certification System for Information Management on Hazardous Substances in Products
Japanese Ministry of the Environment	Investigative Committee on the Application of Environmental Accounting/Committee on Revisions to Environmental Reporting Guidelines/Corporate Study Group on Emissions Trading of Greenhouse Gases
GRI (Global Reporting Initiative)	Organizational Stakeholder (OS)
Asian Productivity Organization	Green Productivity Consultative Committee
Japanese Environmental Management Association for Industry	Eco-Products Organizing Committee/ Eco-Leaf Environmental Label Management Committee/New Pj Planning Committee on LCA Method Application/Working Group 1 for Considering Methods to Decide Environmentally Conscious Capital Investment
Japan Electronics and Information Technology Industries Association	General Committee on Environment and Product SafetyIT Products Environmental Project Committee/International Energy Center Committee/Japan Green Procurement Survey Standardization Initiative/Printer Working Group
Japan Business Machine and Information System Industries Association	Policy Committee/Environmental Committee/ Environmental Technology Expert Subcommittee/Environmental Issues Coordination Working Group
Japan Machinery Center for Trade and Investment	Committee on Trade and Environment
Nippon Keidanren	International Environmental Strategy Working Group/Council on WTO Trade and the Environment/Environmental Steering Group Committee/Committee on Environment and Safety/Waste Working Group
American National Standards Institute	ISO/TC207/WG4 (Environmental Communications)
Camera and Video Equipment Industry Association	Environmental Work Subcommittee (Administrative Committee)
Japan Chemical Industry Association	Chemical Risk Research Committee
Battery Association of Japan	Secondary Battery Recycling Center Administrative Committee
The Nikkan Kogyo Shimbun, Ltd.	Green Forum 21
United Nations University	Zero Emissions Forum
Institute of Industrial Science, University of Tokyo	SPEEED
Sustainable Management Forum of Japan/SMRI	Sustainability Management Forum Rating Committee
Nikkei Business Publications, Inc.	Steering Committee of the Nikkei BP Forum on Environmentally Conscious Management
The Society of Non-Traditional Technology	Eco-Material Guidelines Study Group

Support for Environmental Organizations and Programs	Geographic Area
Harbor Branch Oceanographic Institution	America
Canon Envirothon (the largest high school environmental science competition in North America)	America, Canada
WWF	Middle East, Asia, etc. (over 100 countries in all)
Yellowstone Park Foundation	America
Public Broadcasting Service's NATURE series	America
Clean Up Australia	Australia
National Tree Day	Australia
Teak Plantation Project	Thailand
Environmental protection programs for rivers (Kano River, Sagami River, Tama River, Tone River, and others)	Japan

Canon Environmental Protection Programs	Geographic Area
Toner Cartridge Collection Program	All
Canon National Parks Science Scholars Program	Americas



Environmental Accounting

View on Environmental Accounting

We adopted environmental accounting* in 1983 to measure the amount we spend (as capital expenditures or expenses) to prevent environmental pollution. In 1991, we broadened the scope of environmental accounting to provide information not only on pollution, but also on the environment in general. Since then, we have used this data to determine whether we are investing our resources—people, materials, and money—in ways that are best for the environment.

In 2002, we expanded the Canon Group's Environmental Accounting Guidelines to include the disclosure of information to stakeholders and the provision of feedback to management on the progress of environmental initiatives. This was done to ensure our environmental accounting practices are consistent with the Environmental Accounting Guidelines (2002 edition) issued by Japan's Ministry of the Environment.

The year before, we added "reduction in product energy consumption" (reduction in energy used to operate Canon products) and "quantity of used products recycled" as "effects related to upstream/ downstream costs.

Most recently, we have revised the Canon Group's Environmental Accounting Guidelines to bring them into line with the Environmental Accounting Cost Classification Guide (2003 edition). In the years to come, we will continue to expand the scope of our environmental accounting disclosure from a global perspective.

Environmental Investment Standards

Environmental Investment Standards are being employed to promote a more appropriate approach to environment. Prioritizing investment in the environment enables optimum budgeting and execution of environmental investment on the whole.

Environmental Investment Standards

Priority	C	efinition	Specific Activities		
Rank A	Requires imr	nediate investment	To clean up contamination To correct violations of legal standards To respond to complaints		
Rank B	Require investment	To achieve within legally designated period	To reduce energy consumption per production unit by 1% in accordance with the Law Concerning the Rational Use of Energy To achieve within the midto long-term plan (3–5 years)		
Rank C	within planned period	To achieve industrial standards and goals	25% reduction energy consumption per production unit in 2010 To control emissions of hazardous substances: Reduction in dichloromethane		
Rank D		To achieve corporate standards and goals	Investment for achieving mid-term goals		
Rank E	Other environment-related investment				

^{*}Environmental Accounting

Grasping, measuring, and evaluating on a quantitative basis a company's expenditures for environmental conservation and management activities as well as the benefit (environmental conversation and economic benefits) these activities produce

Results for 2003

Our environmental protection outlays included 3.6 billion yen in capital investments and 11.7 billion yen in expenses. Compared to 2002, investments declined approximately 3.1 billion yen (46%) because no large-scale investments were made. Expenses increased approximately 1.3 billion yen (12%).

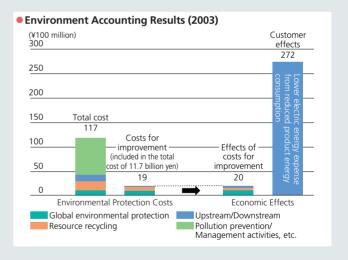
This was due largely to higher personnel expenses related to the strengthening of the environmental management organization, enhancement of maintenance and management for environmental protection facilities, and greater spending on research and development for soil remediation and environmental burden reduction.

Regarding the effectiveness of our outlays, we have determined the extent to which they have lessened our environmental burden over the year. Energy-saving measures taken by our operational sites reduced CO₂ emissions by 28,058 tons and production reforms led to energy savings that reduced CO₂ emissions by 10,973 tons. Our discharges of chemical substances and waste all declined: discharges into the air by 5 tons (1%), discharges into the water by 13 tons (40%), and discharges of waste by 593 tons (39%).

Calculation of the upstream and downstream effects of our environmental protection measures revealed that our sales of energy-efficient products saved energy equivalent to 863,715 tons of CO₂ and customer costs of 27.2 billion yen.

Including profits from sales of collected used products (for conversion into commodities), we estimate that Canon's environmental protection activities produced economic benefits of 1.96 billion yen, in return for expenses of 1.90 billion yen.

Canon plans to carry out environmental accounting in a manner in which the investments and expenses of environmental assurance are linked to our management.





Environmental Accounting Results for 2003

Calculations performed in accordance with the Environmental Accounting Guidelines (2002 edition) issued by Japan's Ministry of the Environment (¥100 million)

Environmental Protection Costs							
	Category Main Implementation						
(1) Business Operations Costs			18.7	57.5			
	① Pollution prevention	Air, water, and soil pollution prevention, etc.	7.8	29.4			
Details	② Global environmental protection	Energy conservation, logistics streamlining, prevention of global warming, etc.	8.4	9.2			
	③ Resource recycling	Efficient resource use, waste reduction, sorting, recycling, etc.	2.5	18.9			
(2) Upstream/Downstream Costs		Green procurement initiatives, product recycling ¹⁾ , etc.		13.6			
(3) Management Activities Costs		Environmental education, environmental management system, tree planting, information disclosure, environmental advertising, management personnel, etc.	9.9	34.3			
(4) R&D Costs ²⁾		R&D for reducing environmental burden	3.6	4.9			
(5) Social Activities Costs		Contributions to environmental and other organizations, sponsorships, memberships, etc.		0.5			
(6) Environmental Damage Costs		Soil remediation		6.4			
Tota	otal		36.3	117.2			

- 1) In connection with the recycling of used products, expenses for product collection, storage, sorting, shipment, etc.
- 2) Expenses for basic research of environmental technologies

Environmental Protection Effects						
		Environmental Protection	Environmental Protection Indices			
Details of Effects		Details of Effects Index		Change Compared to Prior Year		
		Energy conservation savings (t-CO ₂)	28,058	_		
	Effects related to resources used for business activities	Water conserved (10,000 m ³)	29	6% decr.		
Effects Related to Business Operations		Resources used (steel sheets, plastic) (t)	50,077	21% incr.		
Costs	Environmental burden and waste effects of business activities	Reduction in atmospheric emissions (t) 3)+4)	5	1% decr.		
		Reduction in discharges into water (t) 5)+6)	13	40% decr.		
	effects of business activities	Reduction in waste (t)	593	39% decr.		
Effects Related to Upstream/	Goods/services effects calculated	Reduction in product energy consumption (t-CO ₂) ⁷⁾	863,715	_		
Downstream Costs based on business activities		Quantity of used products recycled (t)8)	30,544	_		
Other Environmental Protection Effects	Shipping and other effects	Reduction in fuel consumption (t-CO ₂)	746	2% decr.		

- 3) Amount of atmospheric emissions of substances Canon treats as controlled substances (including PRTR substances)
 4) Amounts of NOx and SOx emissions resulting from consumption of boiler fuel
 5) Amount of discharges into public waterways of substances Canon treats as controlled substances
 6) Amount of discharges into public waterways of BOD, COD, nitrogen, phosphate, and SS
 7) CO₂ equivalent for forecasted electric energy consumption for the number of business machines with on-demand energy-efficient
- technologies (on-demand fixing technology, iH fixing technology, inkjet energy-saving technology) shipped in 2003 8) Number of copying machines, cartridges, etc. recycled (including third-party material recycling and thermal recycling)

(¥100 million)

Economic Effects of Environmental Protection				
Details of Effects				
Revenue	Sales revenue from waste recycling	1.2		
	Energy expense reduction from energy conservation	10.0		
Cast Cavinas	Expense reduction from green procurement	0.5		
Cost Savings	Waste handling expense reduction from resource conservation and recycling	3.2		
	Expense reduction from logistics streamlining	0.2		
Total		15.1		

(¥100 million)

Economic Effects of Upstream/Downstream Costs				
Lower Electric Energy Expense from Reduced Product Energy Consumption ⁹⁾	272			
Profits from Used Product Recycling	4.5			

⁹⁾ Calculated as the reduction in annual energy consumption of business machines with on-demand energy-efficient technologies (on-demand fixing technology, IH fixing technology) and inkjet energy-saving technology × ¥12/kWh (economic effect for the customer)

(¥100 million)

Environmental Protection Costs at Operational Sites Outside Japan	Investment	Expense
Americas	0.9	0.0
Europe	0.6	0.1
Asia	11.4	4.5
Total	12.9	4.6

Products and Services

Meeting Standards for Environmentally Conscious Products

At Canon, we develop products with the aim of meeting the Law Promoting Green Purchasing, Eco-Mark, International ENERGY STAR® Program, and other standards. Efforts to achieve such compliance have been completed for all new main products sold in 2003. Additionally, at Canon Inc., New Mid-Term Environmental Goals (to be achieved by 2005) have been established and efforts to comply with the standards for key environmental labels have begun.

Product Type	Law Promoting Green Purchasing		Eco-Mark		International ENERGY STAR® Program	
Copying Machines/MFDs	32/37	(86.5%)	25/37	(67.6%)	31/37	(83.8%)
Facsimile Machines	5/5	(100%)	_	(—)	5/5	(100%)
Laser Beam Printers	5/5	(100%)	5/5	(100%)	5/5	(100%)
Inkjet Printers	20/20	(100%)	15/20	(75%)	20/20	(100%)
Inkjet Multifunction Peripherals	2/2	(100%)	0/2	(0%)	2/2	(100%)
Image Scanners	5/6	(83.3%)		(—)	4/4	(100%)
Total	69/75	(92%)	45/64	(70.3%)	67/73	(91.8%)

- *The number of products qualifying under the given standard or program is shown next to the total number of products in the category, with the percentage of qualifying products in parentheses.
- *Products for which certification applications have been met but not yet submitted are not included in the figure for products qualifying under the given standard or program.
- * No Eco-Mark standards for facsimile machines and image scanners have been

Energy Efficiency

■ Mid-Term Environmental Goals

2003: Have all business machine products qualify for the International ENERGY STAR® Program (copying machines, printers, facsimile machines, image scanners)

Power consumption during operation (for new products): Reduce with each new model

2003 Results

- Qualification for the International Energy Star® Program: 92% achieved (67 of 73 products)
- Power consumption during operation (for new products): 100% achieved

Qualification for the International Energy Star® Program

Of the 227 types of business machines we sold between 2001 and 2003, 209, or 92%, qualified for the International ENERGY STAR® Program. We will continue to focus on the development of new energy-efficient elemental technologies and will achieve International ENERGY STAR® Program qualification for 100% of the new products we bring to the market.

Lower Power Consumption During Operation than Previous Model (new products)

For copying machines, energy efficiency is evaluated based on energy consumption efficiency standard established by the Ministry of Economy, Trade and Industry. In the case of printers and facsimile machines, this evaluation is performed using standards for average energy consumption during operation. When a new product is being developed, the new engine is compared to the engine for the current model to ensure the new product consumes less energy. When assessing a product under development we make it an absolute requirement that it consumes less energy per unit of production (e.g. energy consumed per A4-size page printed) than the existing model. All of our new products therefore, consume less energy than previous models.

Resource Conservation

■ Mid-Term Environmental Goals

2003: Gradually increase use of recycled parts and materials, and include them in the design of all products

- Implement reuse of products/parts
- Use of recycled plastic materials

Plastic materials*1: Reduce number of plastic grades to 1/3 2000

100% recycling of collected used products*2

- Copying machines
- Cartridges (ink, toner)
- *1 Excluding coloring agents.
- *2 Includes thermal recycling.

2003 Results

- Expansion of the number of copying machines for which parts are reused
- Expansion of the use of recycled materials in inkjet printers
- Use of recycled plastic materials: 4,218 tons used
- Reduced number of grades of plastic materials used to 67 from 103 (35% reduction)
- 100% recycling of collected used products: 95% for copying machines, 100% for cartridges

The goal of reducing the number plastic material grades used was established to promote the use of plastic material grades designated as standards by individual Product Group Operations when developing new products. However, with factors such as the globalization of manufacturing sites, the registration and adoption of new plastic materials, and the use of parts from earlier product models, it is not possible to sufficiently reduce the amount of plastics Canon uses. Nevertheless, we are using the scale merit of procurement focused on quality, cost and delivery to push forward with efforts to standardize plastic grades and consolidate materials throughout the Canon Group.

In 2003, plastics procured in quantities of at least 500 tons for the year spanned 53 material grades and accounted for 80% of all procurements. A significant improvement, therefore, was made toward lowering our environmental burden. We have strengthened as a standard technology our methods for registering and managing plastics at the design and procurement stages, designated 103 plastic grades as standard materials for operations worldwide, and classified these plastics into three types.

Types of Materials Used

3	
61	

	2000	2001	2002	2003
Plastics	144,390	127,000	138,260	142,561
Steel	70,621	91,000	100,424	137,883
Aluminum	_	9,123	9,248	18,155
Glass	_	2,994	3,192	2,602
Indirect Materials	_	8,019	7,492	9,176

Highlights of 2003
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Management

Management

Use of Recycled Plastic Volume used Cumulative volume used 35,000 <u>30,4</u>46 34,664 30,000 25,706 25,000 21 497 20,000 16,644 15,000 10,000 5,000 4,740 4,218 1,323 49 49 0 ′90 **'99** ′02 ′03 ′00 ′01

Used Copying Machine Collections (worldwide) (thousands of 2003 recycling rate: 95% machines) 160 144 140 128 120 119 -112 100 80 75 60 40 20 0

'99

'00

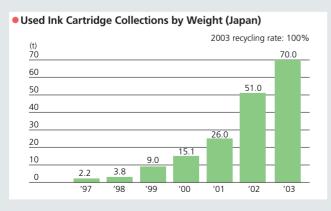
′01

′02

′03

'98

Used Toner Cartridge Collections by Weight (worldwide) 2003 recycling rate: 100% (t) 16,000 15,554 15,773 14,441 14.000 13,030 12,000 10,755 10,000 8,033 8,000 6,000 4,000 2,000 0 ′97 ′99 ′00 ′01 ′02 ′03



Elimination of Hazardous Substances

■ Mid-Term Environmental Goals

- 2004: In 2001, began sales of products from which designated substances*1 have been eliminated. Gradually eliminating these substances from all products
- 2003: Develop substitute technologies for PVC (polyvinyl chloride)*2 and brominated flame retardants
 - Use olefin-based plastic instead of PVC for electrical wire and wire harness sheathing
 - Use phosphate-based flame retardant V2 instead of brominated flame retardant plastic
- *1 Hazardous substances designated by the European Union's Restriction of Hazardous Substances (lead, mercury, cadmium, hexavalent chromium, PBB, PBDE).
- *2 Prohibit use of soft PVC containing phthalic acid esters. Use of PVC packaging materials was halted in 1996.

■ 2003 Results

- Established Product Chemical Substance Assurance System
- Held briefings to explain this system to approximately 3,000 suppliers worldwide
- Commercialized the imageRUNNER C6800/iR 6800C color MFD, which complies with the RoHS directive
- Began replacing PVC in some video camcorders
- Reduced usage of brominated flame retardants to 37% of the cost of all procured plastics

Canon is making progress on the elimination of hazardous substances from our products in cooperation with our suppliers. Our organizational structure to prevent the substances from being used in products has been strengthened, and a Product Chemical Substance Assurance System has been created as the foundation for procuring parts and materials. Between the end of 2003 and the beginning of 2004, we put on the market a new copying machine and digital camera in compliance with Europe's RoHS directive. For inkjet printers and other products, we aim to gradually expand this initiative to have all product lines in compliance by our goal of the end of 2004. As for PVC and brominated flame retardants, goals for eliminating these substances through the development of alternative technologies have been included in our New Mid-Term Environmental Goals for 2004–2005.

Global Warming Prevention and Energy Conservation

Reduction of Overall Greenhouse Gas Emissions

■ Mid-Term Environmental Goals

2010: Reduce CO_2 emissions by 25% compared to 1990 levels (per unit of production*1)

2003: Reduce CO₂ emissions by 15% compared to 1999 levels (per unit of production)

2003 Results

• Overall Greenhouse Gas*2 Emissions:

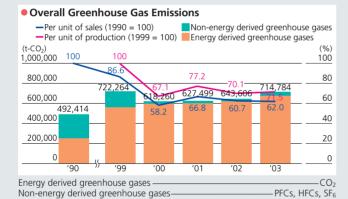
715,000t-CO₂/yr. (71,000t-CO₂/yr. increase compared to prior year)

• CO₂ emissions per unit of production:

62% of 1990 level (38% reduction from 1990)

71.5% of 1999 level (28.5% reduction from 1999)

An increase in the number of operational sites within the management scope and other factors led to an energy use increase equivalent to 62,000 tons of $\rm CO_2$ compared with last year. However, because of cumulative efforts to eliminate non-energy derived greenhouse gases, overall greenhouse gas emissions came to 71.5% of the 1999 level and 62% of the 1990 level, meeting the Mid-Term Environmental Goal for the end of 2003.

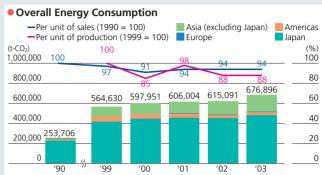


Energy Usage

In 2003, the energy usage management scope was expanded to include newly established operational sites in China (Zhongshan, Suzhou) and Vietnam, and the Shinagawa Headquarters building of Canon Sales, but usage per production unit remained basically unchanged from the previous year at 88% of the 1999 and 126% of the 1990 levels. Results for Canon as a whole, including sales and research and development, fell slightly per unit of sales to 93.9% of the 1990 level and showed a slight decline under 2002.

Specific improvements include the integration of operational sites in Japan and sites outside Japan to improve operational efficiency. At the operational site level, the introduction of cell production was completed, and active efforts have been made to introduce energy efficient buildings, facilities, and equipment. In 2003, energy conservation activities reduced our worldwide CO_2 emissions by 32,000 tons (equivalent to approximately 5% of overall energy consumption in 2003).

- *1 Unit of Production/Sales An expression of the efficiency of energy usage, in terms of sales (per unit of sales) or production (per unit of production).
- *2 Greenhouse Gases Gases that have a globe-warming effect. The Kyoto Protocol focuses on six greenhouse gases: CO₂, methane (CH₄), nitrous oxide (N₂O), chlorofluorocarbon alternative HFC, PFC, and SF₆.



- *Per unit of production data covers only production sites (all).
- *Greenhouse gas conversion coefficients

Conversion coefficients used in calculations for Japan are those announced by the Japanese Ministry of the Environment in 1999.

Conversion coefficients used in calculations for locations outside Japan are those announced by the Greenhouse Gas Protocol (URL: www.ghgprotocol.org) in

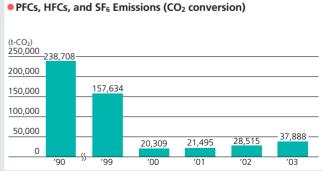
2003 Consumption of Electricity, Gas, and Petroleum-Based Fuel by Region

	Electricity	Gas	Petroleum	Other (steam, wide-area heating and air conditioning)
	MWh	km³	kL	MJ
Japan	958,593	16,353	22,120	68,529,069
Americas	57,918	22	0	0
Europe	16,660	358	43	0
Asia (excluding Japan)	204,607	1,139	632	52,525,320
Total	1,237,778	17,871	22,795	121,054,389

Non-Energy Derived Greenhouse Gases

In 1998, Canon established a Countermeasure Sub-Committee on PFCs and began working to eliminate PFCs, HFCs, SF₆, and other non-energy derived greenhouse gases from our operations. By December 1999, we had almost completely eliminated these gases from their primary uses in cleaning agents, solvents, and aerosol propellants.

We are now beginning to install abatement equipment for nonenergy derived greenhouse gases used in the cleaning of deposition systems employed in the manufacture of semiconductors and the dry etching of semiconductor materials. Results for 2003 include identification of the volume of NF₃ discharges.



- *Calculated using conversion coefficients announced by the IPCC (Intergovernmental Panel on Climate Change) in 1996.
- *As of the end of 1999, all sources of greenhouse gases were eliminated from all production processes, except those used for semiconductors.

Waste Reduction and Resource Conservation

Performance Data

Vision and Strategy

Reforence Materials Third Party Opinion

Waste Measures

■ Mid-Term Environmental Goals

2010: Reduce gross waste generation by 30% compared to 1998 levels 2003: Reduce gross waste discharge by 50% compared to 1998 levels 2003: Achieve zero landfill waste at all operational sites in Japan

■ 2003 Results

• Gross waste generation:

98,205t/yr. (11.1% increase compared to 1998 level)

• Gross waste discharge:

34,103t/yr. (34.3% reduction compared to 1998 level)

• Zero landfill waste: Achieved at all 38 operational sites in Japan

As a result of the introduction of material flow cost accounting (P. 36), the pursuit of company-wide reductions in cost inefficiency, and the introduction of technologies to sort collected items, disassemble and recycle them to turn them into valuable goods, all 38 operational sites in Japan have achieved the goal of zero landfill waste. Moreover, with the establishment of new operational sites in China, overall waste generation has increased 11.1% compared to 1998, but overall waste discharge has decreased 34.3%. Even greater efforts are being made to reduce waste at plants outside Japan, and marketing subsidiaries and affiliates.



*Operational sites outside of Japan began to actively manage their waste in 1993.

• 2003 Recycling Results (Japan)

Material Type	Details		
Paper	Cardboard, OA paper, plywood/pasteboard, toilet paper, paper product pulp, etc.	12,314	12,744
	Roadbed material, construction boards, fuel, etc.	430	,
Waste Plastic	Roadbed material, cinder blocks, raw material for cement, etc.	3,302	
	Material for plastic products	1,839	0.070
	Solid fuel, liquefaction/gasification	1,718	8,070
	Furnace reduction material, soil remediation material, textiles, etc.	1,211	
Metals	Metal raw material	6,800	7,036
	Roadbed material, etc.	236	7,030
Waste Oil,	Raw material for cement, roadbed material, etc.	2,557	
Waste Acid, Waste Acrylic	Recycling into oil, pharmaceuticals, and solvents	1,966	6,498
	Furnace reduction material, etc.	1,191	
	Fuel	784	
Sludge	Raw material for cement, construction material, aggregate, etc.	3,014	3,801
	Metal raw material, organic fertilizer, material for ceramics, etc.	787	3,001
Wood Chips	Raw material for paper, wood boards, plywood/pasteboard, etc.	433	4 424
	Compost	205	1,421
	Soil remediation material, fuel, etc.	783	
Human Waste	Fertilizer		604
Glass Waste	Raw material for glass, roadbed material, insulating material, aggregate, etc.		108
Organic Waste	Fertilizer, raw material for cement		26
Other*	Construction material, raw material for cement, roadbed material, furnace reduction material, etc.		219
Total			40,527

^{*}Ash, infectious waste, textile waste, etc.

Usage of Water Resources

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Management

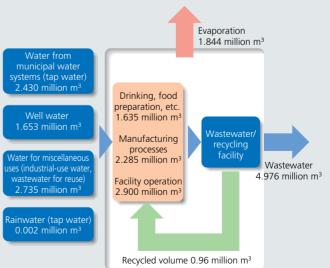
- Water resource usage in 2003: Totaled 6.82 million m³
- Water resource usage per unit of sales: 36.8% of the 1990 level

Water conservation and recycling measures are being advanced and use of river water, groundwater and water from other natural sources is being reduced. Since 1996, particular attention has been paid to introducing the latest water recycling systems*. In 2003, the Canon Group recycled 960,000 m³ of water.

*When we opened our Fuji-Susono Research Park in 1996, we implemented a system for thoroughly filtering, purifying, and reusing water in a closed wastewater recycling system. In 1999, when we established Oita Canon Materials Inc., a Group company, we made its plant a zero wastewater facility by installing a completely closed recycling system that uses no outside water sources other than rain. Through the introduction of new closed wastewater processing systems at the Utsunomiya Plant and Canon Zhuhai, Inc. and with the use of Ultra-Pure Water Recycling Systems at our semiconductor plants (Hiratsuka, Ayase), we are strengthening our efforts to use water resources effectively.

Use of Water Resources and Discharge of Wastewater Per unit of sales Water Resource Usage in Japan (1990 = 100) Americas Water Resource Usage Wastewater Discharges Outside Japan Europe Japan Japan (10,000 m³) (%) 100 100 1,000 800 80 723 682 669 668 633 600 60 400 40 200 20 Ω 0

Breakdown of Water Resource Usage in 2003



Management of Chemical Substances and Elimination of Hazardous Substances

Elimination of Hazardous Substances

■ Mid-Term Environmental Goals (Japan)

2003: Rank-A Substances: Eliminate use

Rank-B Substances: Reduce use by 20% compared to 1998 levels Rank-B Substances: Reduce discharges by 90% compared to

1998 levels

Rank-C Substances: Reduce discharges by 20% compared to 1998 levels

Reduce discharge of PRTR Law*¹ designated substances by 50% compared to 1998 levels

2003 Results (Japan)

• Rank-A Substances: Elimination completed in 2001

• Rank-B Substances: 65.9t used (reduced 58.9% compared to 1998

levels)

• Rank-B Substances: 4.8t discharged (reduced 85.6% compared to

1998 levels)

• Rank-C Substances: 346.2t discharged (reduced 72.3% compared to

1998 levels)

• Discharge of PRTR Law designated substances:

66.7t reduction (reduced 78.6% compared to 1998 levels)

Mid-Term Environmental Goals have substantially been achieved. Management of approximately 2,200 substances according to rank has been instituted, and, by ceasing certain operations, collecting solvents, and introducing internal recycling and other such facilities, usage and discharge of hazardous substances have been greatly reduced in Japan. Outside Japan, as well, use of dichloromethane for thin-film coating was completely halted when Canon Virginia, Inc. ceased using it in 2003.

*1 PRTR: Pollutant Release and Transfer Register

A system to determine quantitatively how much pollution-causing chemical substances are being discharged into the air, water, and soil, based on reports from businesses and others, along with how much waste is being transferred to waste processing companies.

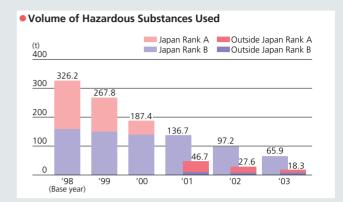
Substances Canon No Longer Uses

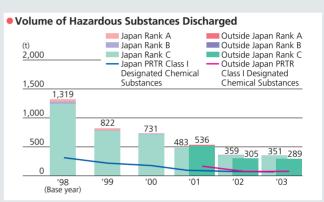
	Substance Name	Eliminated
Ozone Depleting Substances	CFCs (chlorofluorocarbons) 15 types 1,1,1-Trichloroethane HCFCs (hydrochlorofluorocarbons) 34 types	December 1992 October 1993 October 1995
Greenhouse Gases* ²	PFCs (perfluorocarbons)HFCs (hydrofluorocarbons)	December 1999 December 1999
Soil Contaminants	● Trichloroethylene ■ Tetrachloro ethylene ■ Dichloro methane (for cleaning) ■ Dichloro methane (for thin film coating)*3	December 1996 December 1996 December 1997 October 2003

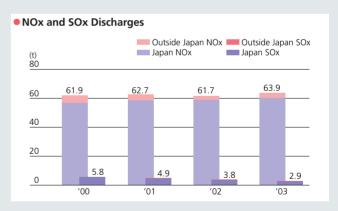
^{*2} Excludes use in semiconductor production.

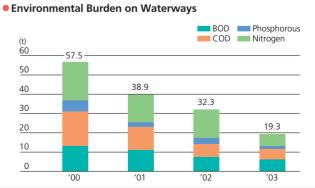
Effect on Atmosphere and Waterways

Canon has developed accurate data, introduced new equipment and taken other measures to reduce the environmental burden of NOx (nitrogen oxide) and SOx (sulfuric oxide), major causes of air pollution and acid rain; BOD (biochemical oxygen demand) and COD (chemical oxygen demand), which are indices of environmental burden on waterways; and phosphorous and nitrogen, which place a direct environmental burden on waterways.









^{*}Calculated as overall water discharges from operational sites in Japan × average annual water quality values. Discharges into sewers are not included.

^{*3} Usage in Japan ceased as of December 2001.



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• PRTR Control Balance Sheet for 2003 (Data for Japan and locations outside Japan)

No.	Substance	Chemical Substance	Hazardous Substance Discharge Volume		Amounts of Transfers		
NO.	No.	Chemical Substance	Atmospheric Discharges	Discharges into Waterways	Transfers into Sewage Systems	Transfers of Waste	Transfers of Recycled Materials
1	1	Water-soluble zinc compounds	0.00	0.00	0.00	0.00	0.90
2	16	2-Amino ethanol	0.00	0.00	0.00	0.00	13.66
3	25	Antimony and its compounds	0.03	0.00	0.00	0.00	0.14
4	30	Polycondensate of 4,4'- Isopropylidenediphenol and 1-chloro-2,3-epoxy-propane	0.00	0.00	0.00	0.25	0.17
5	40	Ethylene benzene	0.00	0.00	0.00	0.00	5.29
6	43	Ethylene glycol	0.00	0.00	0.00	0.07	1.95
7	44	Ethylene glycol monoethyl ether	0.04	0.00	0.00	0.00	0.03
8	45	Ethylene glycol monomethyl ether	0.00	0.00	0.00	0.00	0.00
9	63	Xylenes	3.45	0.00	0.00	0.51	36.61
10	68	Chrome and trivalent chrome compounds	0.00	0.00	0.00	0.00	0.03
11	93	Chlorobenzene	42.96	0.00	0.00	16.69	347.98
12	96	Methyl chloride	0.02	0.00	0.00	0.00	2.37
13	101	Ethylene glycol monoethyl ether acetate	0.21	0.00	0.00	0.00	0.51
14	113	1,4-dioxane	0.03	0.00	0.00	0.00	1.39
15	139	o-dichlorobenzene	0.13	0.00	0.00	0.00	8.65
16	145	Dichloromethane	0.02	0.00	0.00	0.00	8.69
17	172	N, N-dimethylformamide	2.48	0.00	0.00	0.00	128.91
18	177	Styrene monomer	2.10	0.00	0.00	0.00	36.23
19	181	Thiourea	0.00	0.00	0.00	0.00	1.71
20	207	Water-soluble copper salts	0.00	0.00	0.00	0.00	0.03
21	224	1, 3, 5-Trimethylbenzene	4.51	0.00	0.00	1.19	15.55
22	227	Toluene	44.01	0.00	0.00	22.66	16.51
23	230	Lead and lead compounds	0.00	0.00	0.00	0.00	3.26
24	231	Nickel (metal)	0.00	0.00	0.00	0.00	0.12
25	232	Nickel compounds	0.00	0.00	0.03	0.00	3.05
26	260	Catechol	0.08	0.00	0.00	0.00	1.60
27	266	Phenol	0.20	0.00	0.00	0.06	0.29
28	283	Hydrogen fluoride and water-soluble hydrogen fluoride salts	0.12	0.00	2.35	0.00	0.62
29	304	Boron and its compounds	0.00	0.00	0.00	0.00	0.31
30	308	Polyoxyl ethylene octyl phenyl ether	0.00	0.00	0.00	0.00	1.52
31	311	Manganese and its compounds	0.00	0.00	0.00	0.00	0.02
		Total	100.43	0.00	2.38	41.45	638.11

^{*}Canon used 41 Class I Designated Chemical Substances in quantities of at least 0.1 ton. The PRTR discharge and quantity data above are for those 354 Class I Designated Chemical Substances of which yearly usage was at least 1 ton and there were discharges or transfers. Substances recycled into non-valuable materials are counted under the column "Recycled."

PCB Waste Management

The Special Measures Law for the Promotion of the Appropriate Processing of PCB (Poly Chlorinated Biphenyl) Waste (the PCB Special Measures Law) took effect in July 2001, and Canon has implemented strict management in compliance with that law. At Canon there are 105 condensers and transformers, and approximately 1,400 fluorescent tube stabilization devices that are being stored as PCB waste. These will be processed as soon as a proper method is established.

^{*}There is no discharge into the soil and no burial at operational sites. "Discharges," in terms of Canon's reduction goals, means: Atmospheric Discharges + Discharges into Waterways + Discharges into Soil + Transfers into Sewage Systems + Transfers of Waste.

*The figures in the above chart are rounded off to two decimal places.



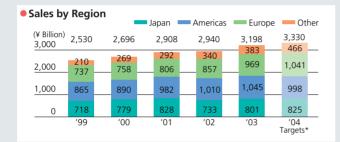
Economic Performance

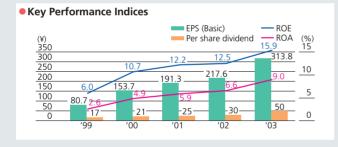
Financial Indicators

Results

Consolidated net sales for 2003 exceeded the previous year's result by 9% on the strength of significantly higher sales of digital cameras and color network digital MFDs (P. 5). Net income rose by 44.6% as production reforms and development innovations resulted in greater profitability. With record sales and profits in 2003, Canon has now posted record sales and profits for four consecutive years. The financial position is strong, with a capital ratio of 59%, interest-bearing debt ratio at 3%, and ROE of 16%.

Canon's market capitalization as of the end of 2003 was the highest of any Japanese electronics manufacturer, and leading U.S. business magazine *Business Week* ranked the Canon brand 39th in a list of the world's 100 best brands, reflecting the increase in Canon's value as a company in 2003.





■ Credit Rating

The world's leading ratings institutions raised their assessments of Canon's creditworthiness. Moody's Investors Service raised Canon's long-term credit rating to Aa3 from A1 in December 2003. Standard & Poor's did likewise, revising Canon's rating to AA from AA- in March 2004

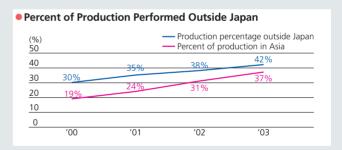
	Long-Term Credit Rating	Short-Term Credit Rating
Standard & Poor's	AA	A-1+
Moody's	Aa3	P-1
Rating and Investment Information	AA+	_

Dividends

Dividends are a critical tool for distributing profits to investors. In 2003, the company turned in a stronger performance than it did in the previous year, and, as a result, decided to raise our annual per share dividend by 20 yen, from 30 yen to 50 yen. In addition, the number of Canon shares traded per unit on the first section of the Tokyo Stock Exchange was changed from 1,000 to 100 shares as of May 2004. Lowering the minimum trading value of the stock will provide more opportunities for individuals to become investors in the company, thereby widening the ranks of shareholders. (All Canon shares are common shares.)

■ Production Structure

Due to efforts to address currency exchange rate fluctuations and other factors, the percent of overall production performed outside of Japan has been increased. Asia has seen the most notable production increase. (Consolidated)



Other Financial Data (Consolidated)

		1999	2000	2001	2002	2003
Net Sales	(¥ Million)	2,530,896	2,696,420	2,907,573	2,940,128	3,198,072
Income Taxes	(¥ Million)	83,939	87,197	115,154	134,703	162,653
Net Income	(¥ Million)	70,234	134,088	167,561	190,737	275,730
Total Assets	(¥ Million)	2,587,532	2,832,125	2,844,756	2,942,706	3,182,148
Interest-Bearing Debt	(¥ Million)	463,676	391,613	295,630	148,103	98,396
Retained Earnings & Legal Reserve	(¥ Million)	769,493	888,761	1,036,178	1,203,248	1,450,440
Stockholders' Equity	(¥ Million)	1,202,003	1,298,914	1,458,476	1,591,950	1,865,545
Capital Expenditure	(¥ Million)	200,386	170,986	207,674	198,702	210,038
R&D Expenditures	(¥ Million)	177,922	194,552	218,616	233,669	259,140
Dividends Paid	(¥ Million)	14,797	14,820	20,144	23,663	28,538
Investment Gains/Losses	(¥ Million)	▲10,134	▲3,590	▲1,141	2,410	4,657
Free Cash Flow	(¥ Million)	107,935	133,812	113,160	218,730	265,701
Year-End Share Price	(¥)	4,060	4,000	4,510	4,470	4,990
Shares Issued & Outstanding at Year End	(Thousands)	871,556	875,627	876,212	879,136	881,339
Year-End Market Capitalization	(¥ Million)	3,538,516	3,502,508	3,951,718	3,929,739	4,397,880

For more details and additional data, please refer to the following URL: canon.com/ir

The business performance forecasts included in this report were made by Canon Inc. using data available as of March 2004 and are subject to latent risks and uncertainties. Changes in various factors, therefore, may cause actual results to differ substantially from the business performance forecasts included herein.

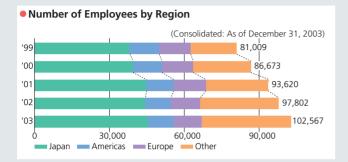
^{*}Targets for 2004 are as of March 2003.



Social Performance

Employees

The Canon Group employs a total of 102,567 people, 20,562 of whom work for Canon Inc. As the proportion of manufacturing performed in Asia (excluding Japan) has risen, the number of employees in "Other" regions has increased.

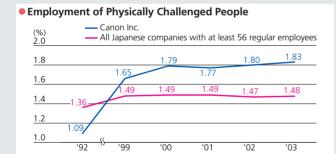


■ Promotion of Women (Canon Inc.)

Number of women working as Assistant Managers or in higher positions: 104

■ Employment of the Physically Challenged (Canon Inc.)

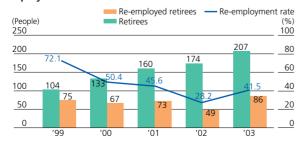
Canon Inc. achieved employment of the physically challenged at Japan's legally mandated rate of 1.80% in June 2002. Ongoing efforts to create a working environment in which the physically challenged can naturally exercise their capabilities have improved that rate further to 1.83% (as of June 2003) without the establishment of a special subsidiary. Canon Inc. will continue to hire physically challenged people and meet this responsibility to society.



■ Re-Employment of Retirees (Canon Inc.)

Canon Inc. currently employs approximately 160 of our retirees, who are making full use of their long years of experience and rich knowledge.





Training

Employees of Canon Inc. received an average of 30 hours of training per person in 2003.

Primary Types of Training (Canon Inc.)

Management

Rank-Based Training* ¹ Business Skills Training	Includes training for the physically challenged
Internationalization Training	Asia trainees, etc.
R&D Engineer Training	Includes system for sending employees to foreign educational institutions
Quality-Related Training	Product safety, regulatory matters, etc.
Training on Intellectual Property and Product- Related Legal Issues	Patents, design, etc.
Procurement Training	Green procurement, procurement ethics / conduct, regulations, etc.
Manufacturing Technology/Skills Training	Equipment control, glass processing, electronic circuits, etc.
Production Training	Production reform* ² , training for a new position, VE, QC, etc.
Environmental Training	Environmental Education Fundamentals Course, Canon Ecology Person Diagnosis, environmental staff training, environmental auditor training, etc.

- *1 Also includes coverage of topics such as compliance and risk management.
- *2 Training focused on cost cutting and production lead-time reduction (inventory reduction).

■ Minimum Employment Age

Canon Group companies abide by local laws and their own internal rules in hiring employees.

■ Elimination of Forced & Compulsory Labor

Canon Group companies abide by local laws and their own internal rules in hiring employees and are not involved in the practice of forced labor.

■ Worker and Management Relations

A total of 15,804 Canon Inc. employees are members of the worker union. These workers comprise 76.9% of Canon Inc.'s total employment of 20,562 (as of December 31, 2003).

■ Safety and Health

The Canon Group's workforce totaled 102,567 as of the end of 2003. A breakdown of labor accidents that occurred during the year is given below.

2003 Labor Accidents (worldwide)

		(IIIu	ividual accidents)
	Accidents Requiring Time Off*1	Accidents Not Requiring Time Off*2	Total
Japan	12	114	126
Americas	11	29	40
Europe	31	23	54
Asia (excluding Japan)	16	75	91
Total	70	241	311

Figures tabulated according to the following Japanese standards

- Cases in which a doctor orders a break from work to treat an injury, etc.
- *2 Cases in which a doctor does not order a break from work to treat an injury, etc.

nnloyment-Related Data (Canon Inc.)

Employment-Related Data (Carlon Inc.)					
	1999	2000	2001	2002	2003
Percentage of regular hire office employees (Male)	71.4%	62.1%	56.6%	56.5%	55.1%
Percentage of regular hire office employees (Female)	28.6%	37.9%	43.4%	43.5%	44.9%
People who have taken child-care leave	138	115	138	113	107
People who have taken nursing-care leave	21	11	25	12	18
Internal recruiting/ non-management	60	93	107	163	128
Internal recruiting/ management*	_		4	24	7

^{*}The internal recruiting system for management positions was introduced in October 2001

History and Recognition of Environmental Activities

	Social Developments	Environmental Activities	
2004		EOS-1D Mark II commercialized in compliance with RoHS directive e-Learning Environmental Education Fundamentals Course begun Consumer conference on the environment held in cooperation with the Japan Institute for Social and Economic Affairs	
2003	Soil Contamination Countermeasures Law takes effect EU's Directive on Waste Electrical and Electronic Equipment (WEEE) becomes EU law EU's Restriction of Hazardous Substances (RoHS) becomes EU law Ministry of the Environment establishes Corporate Study Group on Emissions Trading of Greenhouse Gases Environmental Conservation and Education Promotion Law promulgated Law on Promoting Green Purchasing revised	Global Environment Expert Committee established 2010 Vision Factor 2 announced imageRUNNER C6800/R 6800C commercialized in compliance with RoHS directive Product Chemical Substance Assurance System created Modal shift (rail shipment between Kanto and Osaka) implemented Inkjet printer and still camera acquire certification for Type III Eco-Label, or Eco-Leaf Program (first time for both types of products) Investors conference held on the theme "environment" Canon becomes member of Global Reporting Initiative (GRI) Canon Sales Group earns ISO14001 certification for all of its 281 operational sites (consolidated certification)	
2002	Johannesburg Earth Summit held GRI Sustainability Reporting Guideline 2002 issued End Use Equipment (EUE) directive proposed Law Concerning Special Measures Against PCB Waste takes effect	Environmental analysis business started Global Environment Promotion Headquarters established Environmental Logistics Sub-Committee established G-Project (for RoHS compliance) established Website for Global Warming Countermeasures Plan launched Type III Eco-Label (Eco-Leaf) certification for copying machines and laser beam printers (first in the industry) gained	
2001	• 7th Conference of the Parties to the UN Framework Convention on Climate Change held in Marrakesh, Morocco • Printer Eco-Mark established (type: 122) • Special Measures Law on PCBs passed • Law on Promoting Green Purchasing takes effect • Waste Management and Public Cleansing Law revised • PRTR Law revised • Home Appliance Recycling Law revised • Law for Promoting Effective Use of Resources revised • EU directive on the Impact on the Environment of Electrical and Electronic Equipment (EEE) proposed	Environment New Business Center established PIXUS F/S Series inkjet printers become the world's first inkjet printers to gain Eco-Marks Canon Inc. accredited as a Guide 25 environmental calibration and testing laboratory earned, and enters the commercial field of environmental measurement Use of recycled PET in product parts begun Nationwide development (Japan) of system for returning used copying machines completed Canon Group Environmental Charter revised Eco-Label Type III Ver. 2 announced Development of a standardized green procurement survey moved forward Environmental Evaluation System (part of evaluation system on a consolidated basis) introduced	
2000	Container and Packaging Recycling Law takes effect Waste Management and Public Cleansing Law revised Basic Law for Establishing the Recycle-based Society passed Law for Promotion of Effective Use of Resources passed and revised Law on Promoting Green Purchasing passed 6th Conference of the Parties to the UN Framework Convention on Climatic Change (COP6) held in The Hague, The Netherlands Recycling-related laws promulgated	Makuhari headquarters of Canon Sales gains ISO14001 certification	
1999	Pollutant Release and Transfer Register (PRTR) passed	Japan's first Type III Eco-Label disclosed	
1998		Canon Group Mid-Term Environmental Policies and Goals established	
1997	• 3 rd Conference of the Parties to the UN Framework Convention on Climatic Change (COP3) held in Kyoto, Japan	Green Procurement Standards established Recycling of ink cartridges in Japan initiated	
1996	• International ISO14001 standards enacted	Global Environment Promotion System created	Г
1995		BS7750 certification (Ami, Ueno and other plants) acquired ISO14001 (DIS) certification acquired	
1994	ISO/TC207 international standardization of environmental management begins	Product environmental assessments introduced Voluntary Environmental Plan formulated Canon Environmental Charter established	
1992	Agenda 21, Rio Declaration on Environment and Development, Earth Summit BS7750 takes effect	Use of CFCs eliminated	
1991	Basic Law for Establishing the Recycle-based Society enacted	Cartridge recycling at Canon Dalian initiated	1
1990		Toner cartridge recycling initiated Environment Assurance Promotion Committee established Canon U.S.A. launches its Clean Earth Campaign	



Economic/Social Activities	Awards and Other Recognition
Corporate Ethics and Compliance Committee and Internal Control Committee established Compliance Week started	LBP-2410 and i860/i865 & i560 both receive Chairman's Energy Conservation Center Award (The Energy Conservation Center) Canon Inc. receives Outstanding Performance Award at the 7 th Environment Report Awards ceremony (Global Environmental Forum, National Association Promotion of Environmental Conservation) Canon Inc. wins Excellence Award at 7 th Sustainability Report Awards (Toyo Keizai Inc.) Canon Inc. receives Nippon Keidanren Chairman's Award at 13 th Global Environment Awards (Fuji Sankei Communications Group, Japan Industrial Journal)
Privacy Mark certification attained Canon Inc. awarded Consumer-Oriented Business Achievement Award Utsunomiya Plant awarded 2003 Labour Minister Award for Safety and Health Fukushima Canon receives JISHA OSHMS Standard Certification Canon Group provides funds and medical equipment to help fight SARS (Severe Acute Respiratory Syndrome)	Canon Inc. ranked No. 1 in 7th Environmental Management Survey (Manufacturing Division) (Nihon Keizai Shimbun Inc.) IBP-2810/2710/2510 win the Director-General of Natural Resources and Energy Award at the Energy Conservation Awards (The Energy Conservation Center) Canon Group receives Excellence Award at 4th Railway Freight Promotion Awards (Japan Freight Railway Company, Railway Freight Committee) Canon U.S.A. receives the Energy Star® Partner of the Year Award Canon U.S.A. receives Wastewise Program Champion Award (U.S. EPA) Canon Group receives Environmental Protection Award at the 13th Company Social Contribution Awards (Asahi Shimbun Foundation) Canon Group receives Outstanding Performance Award at the 6th Environment Report Awards ceremony (Global Environmental Forum, National Association Promotion of Environmental Conservation) Canon Inc. receives Excellence Award at the 6th Environmental Report Awards (Toyo Keizai Inc.) Canon (Schweiz) wins second prize for the best environmental report published by a large-scale enterprise in Switzerland (Swiss Association for Environmentally Conscious Management) Canon Group named Outstanding Company at the 12th Global Environment Awards (Fuji Sankei Communications Group, Japan Industrial Journal) Canon Inc. receives Excellence Award at 30th Environmental Awards (The Hitachi Environment Foundation, The Nikkan Kogyo Shimbun, Ltd.) Canon Italia wins Ecohitech Award 2003 (WWF Italia, Ecqual' It)
Employment of the physically challenged at the legally mandated rate of 1.8% achieved Rules for the Protection of Personal Information established	Canon Inc. ranked No. 2 in 6 th Environmental Management Survey (Manufacturing Division) (Nihon Keizai Shimbun Inc.) Canon Inc. added to FTSE4-Good Global 100 Index for first time (current inclusion) Canon U.S.A. receives the ENERGY STAR® Partner of the Year Award Canon U.S.A. receives the Wastewise Program Champion Award (U.S. EPA) Canon U.S.A. receives the Environmental Progress Award (EIA) Canon Group receives the Judging Committee Special Award at the 5 th Annual Grand Awards for the Protection of the Ozone Layer (Ministry of Economy, Trade and Industry, Environment Agency, The Nikkan Kogyo Shimbun, Ltd.) imageRUNNER 3300/iR3300 receives Commendation from the Chairman of The Energy Conservation Center (ECCJ) Canon France receives Return Mark (French Environment and Energy Management Agency)
Management Strategy Committee established Excellent Global Corporation Plan Phase II begun Canon Group Code of Conduct established	Canon Inc. ranked No. 6 in 5 th Environmental Management Survey (Manufacturing Division) (Nihon Keizai Shimbun Inc.) Canon Italia receives Ecohitech Award 2001 (WWF Italia, Ecqual' It) Canon (Schweiz) wins first prize for the best environmental report published by a large-scale enterprise in Switzerland (Swiss Association for Environmentally Conscious Management) Canon Inc. receives Award for Excellent Companies at the 10 th Global Environment Awards (Japan Industrial Journal and the WWF Japan) Canon U.S.A. receives ENERGY STAR® Partner of the Year Award Canon Inc. receives Chairman's Award for Recycling Technology at the Recycling Technology and System Awards (Clean Japan Center, Japanese Ministry of Economy Trade and Industry, Federation of Economic Organizations) Canon Group receives Environmental Stewardship Award (Council on Economic Priorities) Canon Inc. receives 40 th Japan Industrial Journal Industrial Advertising Award's Multi-Advertising Category Gold Medal
Canon Inc. listed on New York Stock Exchange Open recruitment system for re-employment after retirement introduced	Canon Inc. ranked No. 3 in 4th Environmental Management Survey (Manufacturing Division) (Nihon Keizai Shimbun Inc.) Canon Svenska named Environmental Supplier of the Year (Oscar Dellert CO.) Canon Inc. included in Dow Jones Sustainability Indexes World for first time (current inclusion) Canon Inc. receives Excellence Award at the Environmental Report Awards (Toyo Keizai Green Reporting Forum) Canon Australia receives Sustainable Energy Development Authority Silver Award (Government Body - SEDA) Canon Inc. receives Copier of the Future IEA-DSM Award of Excellence (International Energy Agency) Canon U.S.A. receives the Wastewise Program Champion Award (U.S. EPA)
	Canon Inc. receives Science and Technology Agency Award at the 8th Global Environment Awards (Fuji Sankei Group, Japan Industrial Journal) Canon Inc. receives Outstanding Performance Award at the 3td Environment Report Awards (Japanese Environment Agency, Mainichi Shimbun, Nihon Keizai Shimbun Inc.) Canon Inc. ranked No. 3 in 3td Environmental Management Survey (Manufacturing Division) (Nihon Keizai Shimbun Inc.) Canon France receives Return Mark (French Environment and Energy Management Agency) Canon Italia receives Eco Hitech Award 1999 (Ecqual' It) Canon Inc. receives Award for Excellence of the Eco-Life Lake Biwa Awards (Shiga Pref., Nihon Keizai Shimbun Inc.)
Production-reform activities started throughout Group Management Reformation Committee established Canon Europe begins WWF Conservation Partner program	Canon Inc. receives Outstanding Company Award at the 1st Green Procurement Awards (Green Procurement Network) Canon Inc. ranked No. 4 in 2nd Environmental Management Survey (Manufacturing Division) (Nihon Keizai Shimbun Inc.)
Consolidation Planning and Measurement System introduced Management policy briefings by President and CEO begun Excellent Global Corporation Plan Javashod	Canon Inc. ranked No. 1 in 1st Environmental Management Survey (Manufacturing Division) (Nihon Keizai Shimbun Inc.)
Excellent Global Corporation Plan launched Fujio Mitarai appointed President and CEO of Canon Inc.	
Nursing leave system established	Canon U.S.A. receives Energy Star® Award for Technical Innovation
Canon Code of Conduct established	Canon Inc. receives Grand Prize at the 1st Global Environment Award (Fuji Sankei Group with the assistance of Japan Committee of WWF)
Canon Foundation in Europe begins scholarship system	•1st Chairman's Award from the National Geographic Society

Plants and Offices Covered in Report

(Company names, operational site names and activities are those that still applied during 2003)

Name	Location	Activities
Canon Inc.		
Shimomaruko Headquarters	Tokyo	R&D, corporate administration, others
Tamagawa Plant	Kanagawa	Development of inkjet printers, inkjet chemical products
Kosugi Office	Kanagawa	Development of software for office imaging products
Hiratsuka Development Center	Kanagawa	Development of displays, electronic devices, etc.
Ayase Office	Kanagawa	
Fuji-Susono Research Park	Shizuoka	R&D in electrophotographic technologies
Canon Research Center	Kanagawa	Development of basic and advanced technologies for future businesses
Ecology Research & Development Center	Kyoto	R&D in environmental technologies
Utsunomiya Plant	Tochigi	Manufacturing of EE lancos video
Olsunomiya Plant	Tochigi	Manufacturing of EF lenses, video camcorder lenses, broadcasting lenses, lenses for business machines, other specialized optical lenses
Toride Plant	Ibaraki	R&D in electrophotographic technologies, mass-production trials and support, manufacturing of chemical products
Ami Plant	Ibaraki	Manufacturing of office imaging products, chemical products, semiconductor production equipment, design and manufacturing of factory automation equipment and metal molds
Utsunomiya Optical Products Plant	Tochigi	R&D, manufacturing, sales and servicing of semiconductor equipment; sales of broadcasting equipment; R&D, sales of medical equipment
Optics R&D Center	Tochigi	R&D in optical device production equipmen
Kamisato Office	Saitama	Manufacturing of medical equipment, development of devices
Tsukuba Parts Center	Ibaraki	Storage of parts and management of domestic and international shipping
Domestic Marketing Subsidiari	es and Affil	liates
Canon Sales Co., Inc.	Tokyo	All products
Domestic Manufacturing Subside	diaries and	Affiliates
Canon Electronics Inc. Headquarters, Chichibu Plant	Saitama	Magnetic components business (precision components), manufacturing equipment business, VCS business, quality assurance
Canon Electronics Inc. Misato Plant	Saitama	IMS and business machines components business
Canon Electronics Inc. Akagi Plant	Gunma	Laser beam printers
Canon Finetech Inc. Headquarters, Ibaraki Plant	lbaraki	Development of page printers and digital MFDs, development and manufacturing of paper handling devices, and manufacturing of card/label printers
Canon Finetech Inc. Mitaka Office	Tokyo	Development and sales of inkjet printers
Canon Finetech Inc. Kofu Office	Yamanashi	Manufacturing of page printers, digital MFDs, large-format printers/plotters, and chemical products
Canon Finetech Inc. Fukui Office	Fukui	Development and manufacturing of photosensitive paper and chemical products
Canon Precision Inc.	Tokyo	DC micromotors, ultrasonic motor-related unit development and sales
Hirosaki Seiki, Inc. Headquarters, Kitawatoku Plant	Aomori	Manufacturing of toner cartridges
Hirosaki Seiki, Inc. Ishiwatari Plant	Aomori	Manufacturing of direct-drive micromotors and ICs
Canon Chemicals Inc. Headquarters, Tsukuba Site	Ibaraki	Manufacturing of toner cartridges
Canon Chemicals Inc. Iwama Site	Ibaraki	Manufacturing of toner cartridge parts
Canon Chemicals Inc. Ishige Site	Ibaraki	Manufacturing of rubber parts for business machines
Oita Canon Inc.	Oita	SLR cameras, compact cameras, digital cameras, video camcorders, visual communication cameras
Miyazaki Daishin Canon Co., Ltd.	Miyazaki	Digital video camcorders, digital cameras; electronics packaging
Optron, Inc.	Ibaraki	Polishing of optical crystals (for steppers, cameras, telescopes), vapor deposition materials
Canon Components, Inc.	Saitama	Contact image sensors, ink cartridges
Nagahama Canon Inc.	Shiga	Laser beam printers, chemical products, solar cells, ink cartridges
Oita Canon Materials Inc.	Oita	Chemical products for copying machines and printers
Canon N.T.C., Inc. Iwai Plant	Ibaraki	Business machines development and

Name	Loca	tion	Activities	
Canon N.T.C., Inc. Saitama Plant	Saitar	ma	Business ma	chine remanufacturing
Ueno Canon Materials Inc.	Mie			oducts for copying machines
Fukushima Canon Inc.	Fukus	shima		ing of inkjet printers, inkjet
Manufacturing Subsidiaries and	d Affil	liates		
Canon Virginia, Inc.	U.S.A			printers, toner cartridges, toner
Custom Integrated Technology, Inc.	U.S.A	١.	Copying ma	chine remanufacturing
Industrial Resource Technologies, Inc			Toner cartri	dge recycling
Canon Giessen GmbH	Germ	any		chines, copying machine uring, toner cartridge refilling ng
Canon Bretagne S.A.S.	Franc	e		copying machines, toner ecycling of toner cartridges
Canon Inc., Taiwan	Taiwa	an		npact cameras, EFS and other sion-metal molds
Canon Opto (Malaysia) Sdn. Bhd.	Malay	ysia	Optical lens	parts, digital cameras, EF lenses
Canon Hi-Tech (Thailand) Ltd.	Thaila	and	Inkjet printe	rs, personal-use copying nultifunction facsimile machines
Canon Engineering (Thailand) Ltd.	Thaila	and	Plastic mold	s, molded parts
Canon Dalian Business Machines, Inc.	China	9	Toner cartrid laser beam	dges, toner cartridge recycling, orinters
Canon Zhuhai, Inc.	China	9	Laser beam image scann	printers, compact cameras, ners and other products
Canon Vietnam Co., Ltd.	Vietn	am	Inkjet printe	rs
Canon Zhongshan Business Machines Co., Ltd.	China	9	Laser beam	printers
Canon (Suzhou) Inc.	China		machines	nonochrome digital copying
Marketing Subsidiaries and Aff	iliate			
Canon U.S.A., Inc.		U.S.		All products
Canon Canada, Inc.		Cana		All products
Canon Business Solutions, West, Ir		U.S.		Business machines
Canon Business Solutions, Central		U.S.		Business machines
Canon Business Solutions, Southeas	t, Inc.	U.S.		Business machines
Canon Financial Services, Inc.		U.S.		Business machine leasing
Canon Latin America, Inc.		U.S.		All products
Canon Panama, S.A.		Pana	ma	
Canon do Brasil Indústria e				All products
Comércio Limitada		Brazi	il	Copying machines, facsimile machines
Comércio Limitada Canon Chile, S.A.		Chile	<u> </u>	Copying machines, facsimile machines All products
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- Canon Precision Inc. and Hirosaki Seiki, Inc. merged in January 2004. The name of the new entity is Canon Precision Inc.
 Canon N.T.C., Inc. was divided into two new companies, Canon Ecology
- Industry Inc. and Canon Semiconductor Equipment Inc. in January 2004.
- Optron, Inc. changed its name to Canon Optron, Inc. in May 2004.
 With the beginning of full-scale operations at Canon Vietnam Co., Ltd., Canon Zhongshan Business Machines Co., Ltd., and Canon (Suzhou) Inc., these companies became a part of the reporting scope for the Sustainability Report as of 2003.

Detailed information on each operational site can be found at the following URLs: canon.com/about/group/list.html canon.com/ index.html

production



Dialogue with Stakeholders

Canon is creating opportunities to meet with as many different stakeholders as possible through effective direct dialogue. The feedback we are receiving from these meetings is being used to improve management even further. From January 2003 through March 2004, we engaged in fruitful discussions about the environment with both consumers and

investors, and this communication was lauded as meaningful and worthwhile by stakeholders outside and inside the company. These types of opportunities for communication will be increased in the future both inside and outside Japan. Direct communication with stakeholders is also being pursued through e-mail, surveys, and other means.

Consumer Conference

On March 10, 2004, Canon jointly held with the Japan Institute for Social and Economic Affairs* a conference in which 10 members of the public registered with the institute joined us at the Shimomaruko Headquarters. The participants toured our showroom "Canon Gallery," received a presentation on our environmentally conscious management and then engaged in free discussion with us.

The dialogue clearly showed us that consumers have developed a deeper understanding of the environmental aspects of products, and that consideration for the environment is one type of added value for consumers.

The opinions we received from this event will be taken into serious consideration as we carry out environmental assurance and public affairs activities. We will strive to further raise the level of awareness consumers have of our environmental measures, while expanding our marketing of environmentally conscious products, which in the end will provide great benefits for the conservation of the global environment.

*Japan Institute for Social and Economic Affairs

The institute promotes dialogue between journalists, government policymakers, researchers, educators, consumers and other parties, while co-operating with Nippon Keidanren on economic policy matters to provide information to various parties inside and outside Japan.

Summary of Opinions

After receiving the presentation, seminar participants indicated that they understood for the first time that Canon is taking substantial measures in support of the environment. The consumers had a low recognition of the activities Canon is taking with regard to the environment. They encouraged us to make more aggressive, effective, and specific public affairs efforts to raise recognition in the public realm, and to receive appropriate appraisal for the actual measures we are taking.

Specific Proposals

- Canon should publicize the environmentally conscious aspects of products consumers purchase and use most often, including inkjet printers and cameras, while also highlighting cartridge collection and recycling and other environmental assurance activities that consumers can easily understand.
- Canon should leverage its strengths and special qualities, including the efforts to standardize the green procurement survey, toner cartridge collection and recycling, etc.
- In environmental advertisements, Canon should include specific information, statistics, and graphs to explain environmental consciousness in an easier way, instead of simply using the phrase "environmentally conscious."
- •With regard to environmental initiatives, Canon should conduct public affairs activities in a way that is not only easy to understand for consumers, but explains the full extent to which the environment is being addressed, from the corporate principle to the specific measures undertaken.









Investor Conference on Environmentally Conscious Management

On June 20, 2003, Canon invited investors to the Shimomaruko Headquarters for a conference dedicated to the theme "environmentally conscious management" (P. 20). After explaining our environmental strategy, we engaged in a question and answer session with participants regarding Factor 2 of our environmental Vision for 2010 (P. 7–8), environmental accounting, environmentally conscious technology, environmentally conscious products, and other topics.

We came away with the understanding that our explanation about how our environmental measures specifically affect our finances and other areas was insufficiently disclosed during the conference. The main reason is that we have yet to establish adequate methods for quantifying the effects of environmental measures on our finances, for example, the contribution of sales of environmentally conscious products, or the improvement to brand value. We will continue to study this issue.

Summary of Opinions

- The holding of conferences on the environment itself is an advancement. It was well understood by investors, through the presentation by Canon and the question and answer period, that in the midst of the need to conserve the global environment, Canon's environmental measures have been incorporated into its strategy and are supporting the company's competitiveness. The Factor 2 concept in the Vision for 2010 is easy to understand and there is deep interest among investors in life cycle CO₂ emissions.
- From the viewpoint of improving corporate value, a key point is how much the environmental measures are tied to the profit of the company. There should be a more detailed explanation about what impact the environmental measures are having on financial performance.
- Canon should continue to create opportunities for direct dialogue with stakeholders

Questions from Investors and Canon's Responses

Regarding Factor 2

- Q. To what extent does Factor 2 cover life cycle CO₂ emissions?
- Q. Do you have a good grasp of the actual figures for CO₂ emissions for 2000, the comparison year for Factor 2?
- Q. To achieve Factor 2, in what main areas will you make progress on reducing the environmental burden (converted CO₂ emissions)? How much profit can you expect?
- A. It covers the entire life cycle of business activities; in other words, from the procurement of materials, to the production of the product, the use by the customer and the disposal and recycling after use, converting the environmental burden of these processes (resource consumption) into CO₂ emissions.
- A. We have accurate figures for 2000. Canon had started life cycle assessments for products at an earlier stage (P. 9–10).
- A. We will make progress mainly in the reduction of environmental burden of the product. There is still room left for improvement in making products lighter, more compact, and including more reused and recycled parts. We can also expect positive effect from expanding the products utilizing our on-demand fixing and other energy efficient technologies.

Further, we will make progress in the reduction of energy consumption at our operational sites. These are not efforts that can be directly converted into profit, but rather these types of environmental initiatives should be viewed as the basis to bolster Canon products. More specifically, the expansion of the lineup of environmentally conscious products will strengthen their competitiveness. In addition, continued reforms in production will further the effort to eliminate waste (P. 4.7).

Regarding Environmental Accounting

- Q. Concerning the upstream and downstream costs in environmental accounting, you have provided information about machines incorporating on-demand energy-efficient technologies, but do you have information on the energy efficiency benefits for other products?
- A. The data are being compiled. We have made general estimates of the benefit for other products, and we are studying the disclosure of the information at a later date. (Beginning with the *Sustainability Report 2004*, we have included the energy efficiency effect of the inkjet printers.) (P. 15) (P. 52).







Comments on the Sustainability Report 2003 and Our Response

Areas Particularly Praised by Readers

- In the annual report section, the highlights are listed in a way that is easy to understand.
- It is easy to see that Canon is making strides both economically and environmentally, and that positive effects are being produced, etc.

• Improvements to Sustainability Report 2004, in Response to Readers' Comments

improvements to busining majorites in mesperior	
Explain industry leadership and collaboration activities.	 ⇒ Response: RoHS compliance (before enforcement of the directive), standardization of common green procurement survey (▶P. 13–14) ⇒ Response: Promotion of modal shift (▶P. 38) ⇒ Response: Participation in revisions to GRI's 2005 Guidelines (▶P. 20)
Engage in direct dialogue with stakeholders and disclose the contents.	⇒Response: Held conference for investors (▶P. 65), and conference for consumers (▶P. 64) ⇒Response: Environmental communications (▶P. 39)
Make strides to strengthen socially responsible management.	⇒ Response: Strengthening governance; Introduced Corporate Ethics and Compliance Committee, Compliance Week, and obtained Privacy Mark certification (▶ P. 19) ⇒ Response: Made quantitative data more comprehensive concerning employees (▶ P. 60)
The contents are too wide in scope. In particular, in the Highlights section, the annual report should be narrowed to the characteristic measures. Further, it's hard to search the report for information, and much of the contents are too dense to read through easily.	⇒ Response: The Highlights have been narrowed from 16 pages in the 2003 report to 8 pages in the 2004 report ⇒ Response: An index has been newly added (▶ P. 70), and every page indicates links to related pages, URLs, and graphics (illustrations and charts)
There is no explanation why some of the Mid-Term Environmental Goals were not achieved, etc.	⇒Response: An analysis of results is included (▶P. 53–57), and Overview of 2003 (▶P. 11) provides a preview of the more detailed information found later in the report
Explain measures concerning the Kyoto Mechanism and WEEE (EU recycling law).	⇒Response: This has been considered within the company, but not included in this year's report because we are not at the stage where this information can be disclosed

Publication of Sustainability Report and number of Downloads

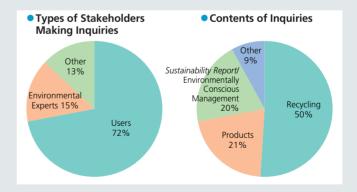
	Copies Issued		Copies Downloaded from	Accesses to Canon's
Japanese (published June 2003)	English (published August 2003)	Total	Canon's Website (entire Sustainability Report version)	Environmental Website
11,500	13,200	24,700	93,939	393,123

(The digest edition of the Sustainability Report is published in Japanese, English, and Chinese)

- *Conditions for counting accesses
- 1. Multiple accesses by same IP address within a 30-minute interval are counted as one session
- 2. Access to multiple files in the same directory is counted as one session

Inquiries Regarding the Environment

Canon received 624 inquires regarding the environment in 2003, via e-mail, postcard survey, and other means (excluding requests for copies of the Sustainability Report). The general contents of the inquiry and types of stakeholders making the inquiry are shown in the graphs.



Third-Party Opinion and Canon Response

Assurance and Trust

SustainAbility has worked with Canon for several years to help the company develop its relationships with stakeholders and its approach to assurance in its report. On this page, you will see statements from two key stakeholder groups on how well they believe Canon's report has met their expectations for information, for high-level performance, and for meaningful engagement.

This is a unique attempt to provide meaningful, credible external feedback, and one that aspires to meet international standards of best practice. Our philosophy, which Canon appreciates, is built on the AA1000 Assurance Standard* and its core principles:

- Materiality: Is the company reporting on the issues
- that really matter to its stakeholders?
- Completeness: Does the report demonstrate that the company has a complete and accurate view of its performance?
- Responsiveness:

Has the company listened and responded actively to stakeholders' concerns and

The purpose of the statements below is to give you, the reader, some information that will help you put your own expectations of Canon in perspective, and draw your own conclusions on how well Canon has met them through this report. Canon's response—how they have received stakeholders' comments, and how they intend to respond to them in the future—follow. This, it is intended, will give you a better sense for what you can expect to see from Canon in the future.

SustainAbility[®]

SustainAbility Ltd. URL: www.sustainability.com









Tell Muenzing Senior Advisor SustainAbility Ltd.

*AA1000 Assurance Standard URL: www.accountability.org.uk/aa1000/default.asp

Third-Party Opinion from ASrIA

Canon's sustainability report 2004 continues to build on its previous reports, providing detailed data on its operations laid out in an accessible format. Though the report is weighted towards environmental aspects, the increased focus on social issues reflects significant progress towards balanced triple bottom line reporting. The emphasis on formalizing and reflecting feedback from a range of stakeholders is an initiative to be applauded. Investors will also appreciate the company's orientation towards being an industry leader, such as with the Green Procurement Initiative in Japan, because this reflects a positive rather than reactive attitude towards sustainability issues.

The adoption of factor 2 as a benchmark with its emphasis on halving the varied environmental burdens of its operations within ten years seems to provide a clear target as well as a reflection of the company's technical and management prowess, however this target could obscure many areas where significantly higher waste reductions could or are being achieved. Perhaps factor 2 can be emphasised as a

minimum target and furthermore the factor 2 target level could usefully be shown in all relevant graphics to indicate progress towards this target.

Much excellent work is being done in Japan as a whole to manage environmental and community impacts. Canon is clearly a leader in this field. This report is to be applauded in including overseas operations in the data assessment, but it still presents many questions in this area. For instance Canon declares in the report that it only deals directly with its primary suppliers, however Canon can consider taking some interest and responsibility on labour/ social and environmental standards for all suppliers regardless of where they are in the supply chain. Investors are increasingly sensitive to such deep supply chain issues. Canon has the potential to take a pioneering role in the extent to which it exports its expertise and high social and environmental standards developed and refined in Japan overseas and develops ways to filter them down through its entire supply chain particularly in developing countries.

(Association for Sustainable & Responsible Investment in Asia) URL: www.asria.org



David St. Maur Sheil Director





Third-Party Opinion from The Wuppertal Institute

With the establishment of *kyosei* as a corporate philosophy, Canon has started a journey in which it committed itself to the protection of the global environment and sustainable social development. Much has already been achieved during this journey and a number of good examples are presented in this report. But where will this journey lead?

Expanding the reporting scope from an environmental report to sustainable development by including economic and social issues was an important milestone. Clearly, one of the next steps should be to further include the upstream and downstream activities. Like for many other companies, the larger share of Canon's overall impact both in social and environmental terms lies beyond the company gates. Taking the

example of CO_2 emissions, about 60% of the total originates from indirect sources, such as suppliers or users.

To "accept the responsibility of being a pioneer" is one of the *kyosei* corporate goals. One opportunity in this respect is to go ahead and determine how sustainability issues can be effectively integrated into the supply chain processes and how the challenge of sustainable consumption could be addressed. Meeting these challenges provides a strategic opportunity to learn more about current and future markets, offers a huge potential to sustainable development and will turn out to be a source of innovation. Also one of the greatest potential for achieving Canon's factor 2 goal must be seen here.

Looking back on what has already been

achieved during the journey, we are confident that Canon can meet these challenges!

Wuppertal Institute
URL: www.wupperinst.org



Volker Tuerk Researcher New Technologies Wuppertal Institute Sustainable Production and Consumption Department

Valler Tas



Michael Kuhndt European Senior Researcher Wuppertal Institute Sustainable Production and Consumption Department

H. Jahnet

Canon's Response to External Reviews

We asked two stakeholder groups to take up the issue of what is expected of Canon in terms of sustainability. We value these opinions greatly and will take them into serious consideration as we continue to innovate our management and strive to become an excellent global corporation rooted in the *kyosei* philosophy. Our response to the third-party opinions is as follows.

A corporation has the dual goals of contributing to the sustainable development of the global environment and society, and ensuring the sustainable development of the corporation itself through a sufficient level of growth and profit. Both of these goals must be carried out through the realm of business activity. For Canon, this means continually providing environmentally conscious products and services that enrich the lives of people around the world and reduce the burden on the environment, while pursuing rational management. Our approach therefore encompasses all three aspects of sustainability: economic, environmental, and social (▶ P. 20).

To further our environmentally conscious management, Canon is collaborating with suppliers, competitors, research institutions, governmental bodies and other stakeholder groups on a global scale and in various fields. This enables us to make contributions to the global environment and society on a larger scale than what we could do alone.

One example of this is our efforts to create a global standard for a green procurement survey (▶P. 14). Currently, our environmental procurement evaluation of suppliers basically covers only the primary suppliers. The primary suppliers take responsibility for lower-tier suppliers and guarantee that they meet Canon's requirements. The reason for this is that instead of having one company downstream in the supply chain managing the entire chain, green procurement can be promoted in a linked manner wherein the primary supplier guarantees the secondary supplier, and the secondary supplier in turn guarantees the tertiary supplier. This system is more rational from a management perspective because it reduces the surveying burden throughout the entire supply chain and provides for more efficient and accurate results, improving the supply chain management as a whole.

We are cooperating with manufacturers and suppliers worldwide to promote this type of green procurement, and efforts are already underway to standardize it globally, including turning our approach into an ISO standard. In addition, we consider economic and social surveys connected to the green procurement survey as the social system that guarantees Canon's green procurement with respect to the expanding boundaries of the supply chain, based on extended producer responsibility.

The 2010 Vision "Factor 2" is another example of environmentally conscious management at Canon (▶P. 8, 12, etc.). This vision sets out the goal of more than doubling the efficiency of all the environmental burdens associated with our businesses by 2010, as compared with 2000. This includes not only the direct burden caused by development, production, and sales of Canon products and services, but the indirect upstream and downstream burden of our suppliers, customers, and other stakeholders. In this report, we provide environmental performance results for 2003 as the last year of our previous Mid-Term Environmental Goals, but from the next Sustainability Report, we plan to disclose an evaluation of our progress based on the results of 2004, using our New Mid-Term Environmental Goals, which set 2005 as a milestone for achieving the 2010 vision.

Canon will continue to contribute to the realization of a sustainable society through the realm of our business activities, addressing the issues taken up in our dialogue with stakeholders. We will challenge ourselves to put sustainable management into practice based on our own environmentally conscious management system, while pursuing a rational business model that includes all three aspects of sustainability. The reporting of the results of our efforts will be made through our *Sustainability Report*.



GRI Guideline Implementation

In regard to the GRI Guidelines, below are the pages of the Canon Sustainability Report 2004 relevant to topics for which disclosure is

	uraged under the guidelines	
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2.8	Scale of the reporting organization	P. 5–6, P. 59
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2.14	Significant changes that have occurred since the previous report	P. 63
2.15	Basis for reporting situations that affect comparability from period to between reporting organizations	
2.16	Explanation of any re-statements of provided in earlier reports No si	
Report	t Profile	
2.17	GRI guideline compliance	Used as reference
2 10	Critoria/dofinitions used in any	

	provided in earlier reports	140 significant changes
Report	Profile	
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2.21	Policy and current practice v providing independent assu	
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٥.١	Governance structure of the organization 1.21 20
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*AR = Canon Annual Report FB = Canon Fact Book

Related URLs

GRI Guideline \Rightarrow URL: www.globalreporting.org/guidelines/2002.asp \Rightarrow URL: canon.com/finance/annual

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UNEP International Photographic Competition on the Environment 1999–2000 (Organizer: UNEP Sponsor: Canon Inc.) Title: *Companions in the Mist* (Winner of the Digital Camera Special Prize) Photographer: Claudio Bacinello (Canada)

Photo taken in the United States







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Tell Us Your Opinions

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Thank you for taking the time to read the *Canon Sustainability Report 2004*. This report has introduced the major initiatives we are taking by focusing on all three aspects of our sustainability activities (economic, environmental, and social) consisting mainly of our environmentally conscious management.

Now, we would very much appreciate your using the survey below to let us know your opinions about the content of this report and Canon's activities. The opinions we receive through this survey will be incorporated into the sustainable management activities we carry out in the future, and will aid us in producing even better *Sustainability Reports*.

We appreciate your sending the completed survey to us by fax at the number above.

Environment Management and Engineering Center/Global Environment Promotion Headquarters

Canon Inc. (E-mail: eco@web.canon.co.jp)

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		ort you found to be lacking, or in need of improversion with the 2003 report.)

Thank you for your cooperation.