

# CANON Sustainability Report 2003

**Canon**

**CANON INC.**  
**Environment Management and Engineering Center**  
30-2 Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501  
TEL: +81-3-3758-2111  
FAX: +81-3-3758-8225  
E-mail: [eco@web.canon.co.jp](mailto:eco@web.canon.co.jp)  
URL: [www.canon.com/environment/](http://www.canon.com/environment/)



**Cover Photo**  
3<sup>rd</sup> UNEP International Photographic Competition on the Environment  
(Organizer: UNEP Cooperation with: Canon Inc.)  
Title: *Nature of Children* (Winner of the General Category)  
Photographer: Lim Eng Geen (Malaysia)  
Photo taken in Malaysia

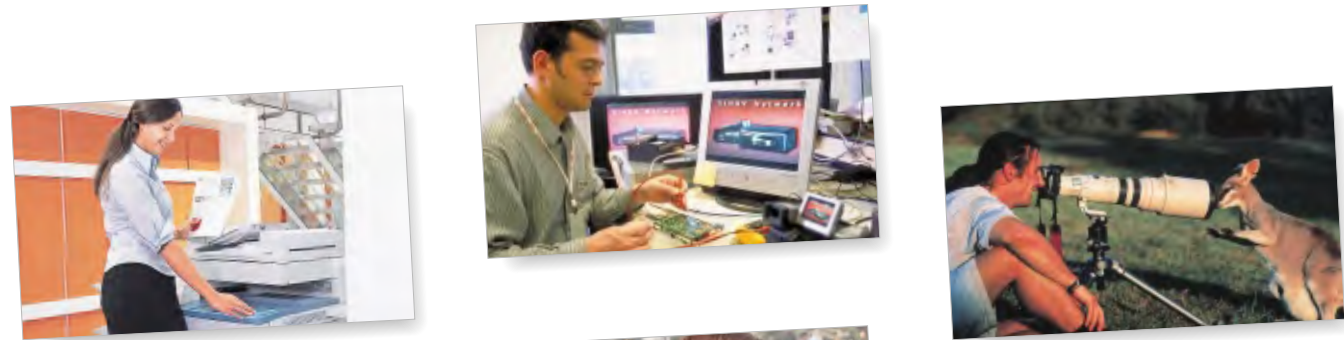
*Canon Sustainability Report 2003*, published August 2003  
(next scheduled publication: August 2004)



This report is printed with ink that includes no mineral oil and is characterized by superior decomposability and de-inking qualities. The 100% recycled paper on which this report is printed was processed with no VOCs (Volatile Organic Compounds).

PUB.ECO02 0803T13.2 Printed in Japan

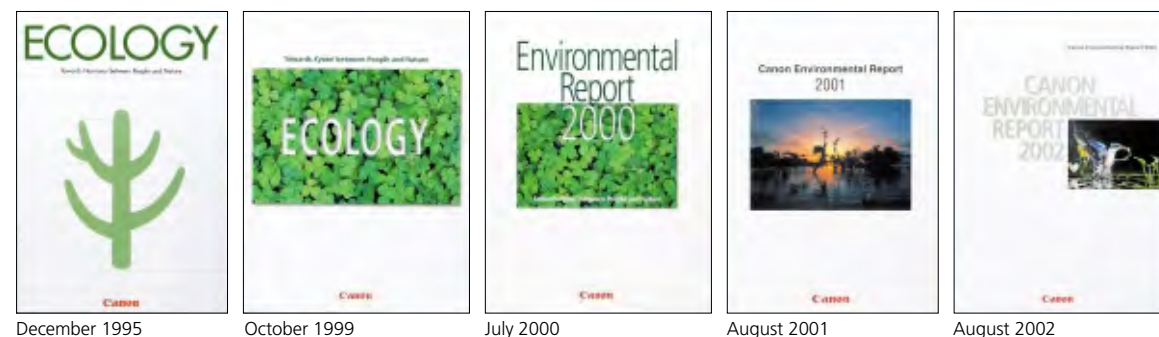
**Canon**



Living and Working together for the common good.  
**Striving to Achieve *Kyosei* for the Coexistence of  
 Humankind and Nature**



**Previous Environmental Reports**



**Editorial Notes**

Between 1994 and August 2002, Canon issued five *Environmental Reports* (annual publication began with the 1999 edition). For the 6<sup>th</sup> edition of this report, we decided to go a step beyond the 2002 edition, our first move toward publication of a sustainability report. The result is a comprehensive report for the entire Canon Group. In creating this first sustainability report, we have added coverage of the economic and social impact of Canon activities to reporting of the results of our environmentally conscious management. We have gone to great lengths to create a report that will provide a well-organized, clear explanation of the Canon Group's ideas and daily actions regarding global sustainability.

In preparing this report, we have referred to the Sustainability Reporting Guidelines 2002 issued by the GRI\* and two sets of guidelines issued by the Japanese Ministry of the Environment: the Environmental Reporting Guidelines (Fiscal Year 2000 Version) and Environmental Accounting Guidelines (2002 edition). We used these guidelines to set a clear reporting agenda for each item we addressed. To ensure objectivity, we asked SustainAbility Ltd. of Great Britain for a third-party review.

We edited this report in the hope it would be read by as many different stakeholders as possible. Toward that end, we have created both Japanese and English language versions. (URL: [www.canon.com/environment/](http://www.canon.com/environment/))

\*Global Reporting Initiative

**Overview of Canon Inc.**

Company Name:	Canon Inc.
Establishment:	August 10, 1937
Headquarters:	30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo
President and CEO:	Fujio Mitarai
Value of Common Stock:	¥167,242 million
Group Companies:	195 consolidated subsidiaries 19 companies accounted for under the equity method.

(as of December 31, 2002)

**Reporting Scope**

- Period Covered: January 1, 2002–December 31, 2002
- Operational Sites\* Covered: Canon Inc. (15 operational sites), Canon Sales Co., Inc. (1 operational site), manufacturing subsidiaries and affiliates in Japan (24 operational sites), overseas manufacturing subsidiaries and affiliates (13 operational sites), overseas marketing subsidiaries and affiliates\* (25 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.
- \*The data presented in this report were compiled by dividing Canon Group companies into four regions: Japan, the Americas, Europe and Asia (excluding Japan).
- \*When data presented are for a particular region only, the name of the relevant region is presented.

**Table of Contents**

<b>Vision and Strategy</b>	3
A Message from the President	3
Canon and Society	5
Sustainability Vision	7
Environmental Charter and Code of Conduct	9
Canon and the Environment	11
2002 Overview	13
<b>2002 Highlights</b>	15
Economic	15
Environmentally Conscious Management	17
Environmentally Conscious Products	19
Product Reuse and Recycling	23
Development and Commercialization of Environmental Technologies	25
Environmental Activities at Operational Sites	27
Social Responsibility	29
<b>Environmentally Conscious Management</b>	31
Environmentally Conscious Management System	31
Environmentally Conscious Management at Operational Sites	33
Environmental Information Management	35
Resource Recycling Management	37
Communication	39
Supply Chain Management	41
<b>Socially Responsible Management</b>	43
Governance System	43
Quality Assurance and Customer Satisfaction	45
Human Resources Management	47
Safety and Health Management	48
Social Contribution Activities	49
<b>Performance Data</b>	52
GRI Guideline Implementation	52
Economic Performance	53
Environmentally Conscious Management Performance	54
Production Reform/Logistics	54
Environmental Accounting	55
Group Data	57
Environmental Performance	59
Products and Services	59
Global Warming Prevention and Energy Conservation	61
Waste Reduction and Resource Conservation	62
Management of Chemical Substances and Elimination of Hazardous Substances	63
Site Topics	64
Performance in Terms of Social Responsibility	65
<b>Reference</b>	66
Plants and Offices Covered in This Report	66
History and Recognition of Environmental Activities	67
Glossary	68
<b>Third-Party Opinion</b>	69
<b>Response to Inquiries</b>	70

## Abiding by Our Philosophy of *Kyosei* and Aspiring to be a Frontrunner in Building a Society Based on Sustainable Development

### What We Can Do to Support Sustainable Development

The idea of sustainable development gained attention when *The Limits to Growth*, commissioned by the Club of Rome, was published in 1971. This book expresses the basic ideas behind environmental policies, placing the global environment on a foundation of economic activity and giving equal importance to environmental conservation and economic development. Since the publication of *The Limits to Growth*, it has been recognized that in addition to environmental and economic considerations, comprehensive social responsibilities also play an important role in the realization of sustainable development.

In 1989, when a disastrous oil spill occurred in Alaska's Prince William Sound, the world recognized that environmental issues can mean life or death for a company. And with the 1992 Earth Summit in Rio de Janeiro, interest in the relationship between companies and the environment expanded from local pollution issues to the global environment.

Pollutants, greenhouse gases and other forms of environmental burden from human economic activities combine with population and economic growth to overwhelm the earth's ability to cleanse itself and produce current environmental problems. The global environment, on which the ecosystem and the future of humankind depend, is being destroyed at an accelerating rate by acid rain, destruction of the ozone layer, global warming and other environmental maladies borne of economic and social activities.

Canon acknowledges this crisis confronting the world and we see sustainable management as a top priority. This means that we are committed to both the continued business development of the Canon Group on the one hand, and the protection of the global environment and sustainable social development on the other.

### Growing Our Company and Co-Existing with the Environment

In 1987, Canon celebrated the 50<sup>th</sup> anniversary of the company's establishment and the following year we committed to *kyosei*, living and working together for the common good, as our corporate philosophy for the next 50 years. The *kyosei* concept focuses on working for the continued existence and growth of the company through harmony with and contributions to society. Putting *kyosei* into practice requires that we maintain good relationships with not only our customers and local communities — those are givens — but also with nations and the environment. It demands that we fulfill our social responsibilities.

As an initial step in implementing *kyosei*, we established our Environment Assurance Promotion Committee in 1990. This committee, which deals with environmental activities on a full-time basis, played a key role in shifting the focus of our environmental initiatives from anti-pollution measures, which were originally launched in the 1970s, to environmental assurance. It has also been instrumental in our pursuit of environmentally conscious management based on the EQCD concept that environmental assurance is an absolute requirement of doing business.

In 2000, on the brink of the 21<sup>st</sup> century, the "Century of the Environment," we adopted maximization of resource efficiency as the fundamental concept behind our environmental activities. We believe that giving equal attention to environmental protection and economic development is critical for accelerating corporate environmental initiatives. This means boosting resource efficiency and minimizing resource consumption throughout product life cycles — in other words, balancing environmental protection with business development by minimizing resource consumption at every stage of a product's life cycle — from material procurement to product manufacturing, use, and disposal — while improving economic results.

### Establishment of Environmentally Conscious Management Systems

Some might say that reducing environmental burdens while maintaining or increasing economic activity is the same as raising environmental efficiency. At Canon, raising the environmental efficiency of not only our business activities, but also our products, is a key management focus. This means simultaneously developing environmental technologies and cutting costs to provide products that place equal emphasis on outstanding environmental performance and cost performance.

We have introduced several organizational changes to make environmentally conscious management a reality. For example, we created the Global Environment Promotion Headquarters under the full-time supervision of a Canon Inc. director, and have established departments responsible for advancing environmental assurance activities within each Product Group Operation and operational site. And most recently, the Global Environment Expert Committee was established under the direction of the Executive Committee to carry out such responsibilities as developing proposals for environmentally conscious management strategies.

Across the Canon Group, we transform our environmental principles into concrete initiatives through the Canon Environmental Charter, our Fundamental Rules for Environmental Assurance, and our Environmental Goals. The company's overall goals carry through to each of our Product Group Operations and operational sites, and we have implemented our Environmental Evaluation System to monitor progress in achieving these goals. The results of these evaluations are incorporated into our evaluation system on a consolidated basis and reported back to the Product Group Operations and operational sites, supporting a cycle fueling internal competition aimed at further improvement.

### Identifying Critical Issues and Mounting Effective Responses

To clarify what we should be doing in our environmental protection activities, we performed a Life Cycle Assessment (LCA) for our products. The results of this assessment indicated that providing consumers with products that reduce the burden on the environment during use was our most important challenge, shedding new light on our company's mission to apply innovative technologies to realize this goal.

Our next challenge was to attack the high environmental burden associated with the procurement of materials, parts and other items we use in our business. Doing this meant the employment of green procurement, not only within the Canon Group but also in our dealings with suppliers and other related companies. Along these lines, we have also devoted significant effort to material-flow management. At the same time, we recognize the importance of making our production facilities more energy efficient, reducing waste, and controlling our use of chemical substances. Paying special attention to these points, we continue to develop new production technologies and pursue other initiatives to help us meet our responsibilities.

Furthermore, to widely apply the environmental technologies we have developed over the years to the benefit of society, we added environmental business activities to our Articles of Incorporation at our 2002 general shareholders' meeting and have launched the development of environmental analysis and environmental clean-up businesses.

In 2003, we have established new Mid-Term Environmental Goals and introduced "Factor 2" to the operational life cycle to increase our resource efficiency, so that in 2010 it will be two times what it was in 2000. Both of these measures are intended to set a clear direction for the Canon Group.

One outwardly visible indication of our proactive approach to environmentally conscious management is our use of the Type III Eco-Label, the full story of which is contained in this *Sustainability Report*.

We will use information disclosure media like this report to propose the kinds of activities we believe are necessary for achieving *kyosei* between the earth and humankind, and will look to your opinions as we work to play an even more progressive role in building a sustainable society. Toward that end, we ask for your continued guidance and support.

June 2003

Fujio Mitarai  
President and CEO  
Canon Inc.




# Contributing to Society through Technological Innovation Focused on Imaging

To expand our business globally, we use products incorporating our own advanced technology. Our efforts include R&D in nanotechnology and other next-generation technologies.

## Development of the Canon Group

Canon Inc. got its start in 1937 as the first company in Japan to develop and produce 35mm focal-plane-shutter cameras and indirect X-ray cameras. We later entered the field of business machines, developing and marketing Japan's first plain-paper copying machine in 1970, and diversifying and expanding our operations with the launch of laser beam printers (LBPs) and Bubble Jet printers in the 1980s.

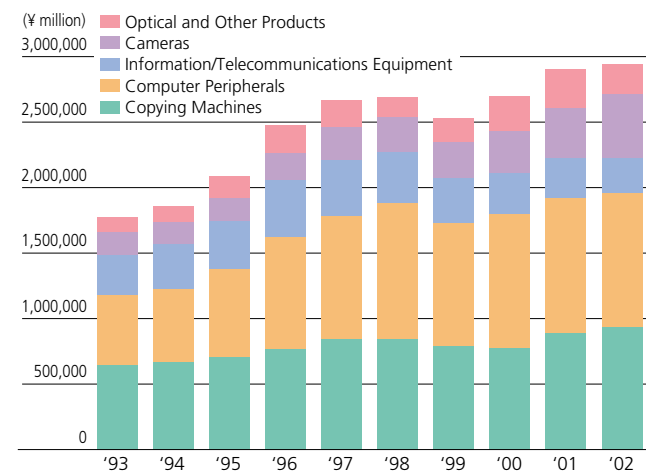
Our overseas business began with the opening of a New York branch office in 1955 and a European sales company in 1968. We established Canon Inc., Taiwan in 1970 to begin overseas production. Since then we have pursued development, production, and sales activities in the Americas, Europe, Japan and other parts of Asia.

## Business Activities and Their Relationship to Society

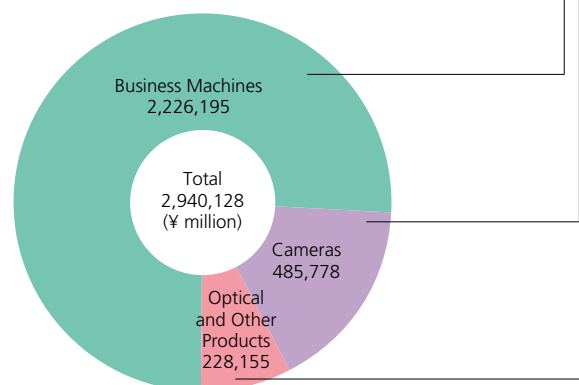
Canon continues to provide to the world products that employ proprietary advanced technology. Our copying machines, printers, cameras and other products enrich communication in business and in people's lives. Our ultra-precision equipment and optical products are used for an ever-widening array of functions in manufacturing, medicine and the media. They are even at work in satellites orbiting the earth. In research and development we are focusing on software and devices, and on nanotechnology, which is expected to contribute much to the next generation.

We have established 195 Group companies in countries throughout the world. Through management that is considerate of local cultures and customs, we have created employment for over 90,000 people and are contributing to the economic and cultural development of the areas where we operate.

## Consolidated Net Sales by Segment (1993–2002)



## 2002 Consolidated Net Sales



## Main Products

### Business Machines

- Copying Machines
  - Office Copying Machines
  - Personal Copying Machines
  - Full-Color Copying Machines
  - Digital MFPs, etc.



- Computer Peripherals
  - Laser Beam Printers
  - Bubble Jet Printers
  - Image Scanners, etc.

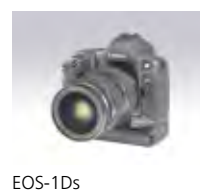


- Information/Telecommunications Equipment
  - Facsimile Machines
  - Handy Terminals, etc.



### Cameras

- Single-Lens Reflex Cameras
- Compact Cameras
- Digital Cameras
- Video Camcorders
- Interchangeable Lenses, etc.



### Optical and Other Products

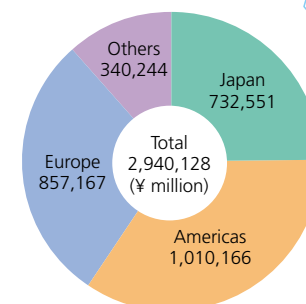
- Semiconductor Production Equipment
- Broadcasting Equipment
- Ophthalmic Equipment
- X-ray Equipment, etc.



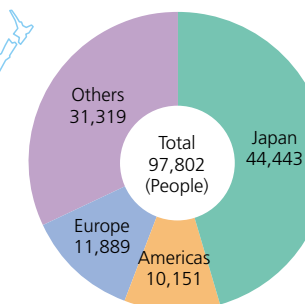
## Canon Global Network



2002 Consolidated Net Sales by Region



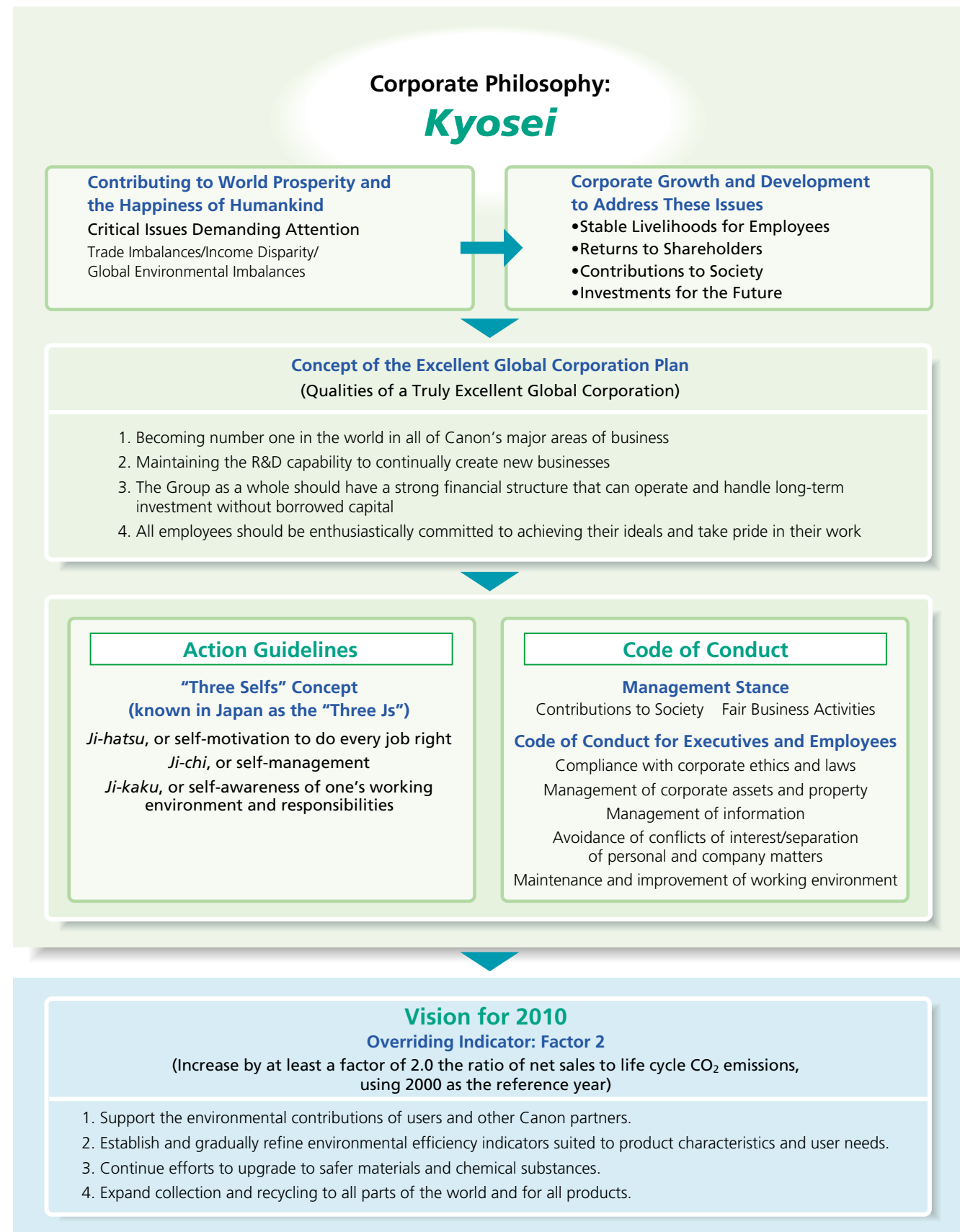
2002 Employees by Region (Consolidated)



## Aiming to be a Truly Excellent Global Corporation

Canon is pushing forward with environmentally conscious management that harmonizes environmental and economic interests. Furthermore, all our employees conduct themselves according to our "Three Selves" action guidelines.

### Canon's Sustainable Management



### Philosophy of *Kyosei* and Critical Issues

In 1988, we adopted *kyosei* as our corporate philosophy. *Kyosei*, a concept that embodies the idealism of Canon's founders, means "all people, regardless of race, religion, or culture, harmoniously living and working together into the future."

There are many obstacles to achieving *kyosei*. Imbalances in trade, income (the gap between advanced and developing countries), and the global environment (conflicts between development and environmental protection; and imbalances spanning generations) are all critical global problems that must be solved. We at Canon have a clear understanding of the enormity of our responsibilities as a corporation, and are moving proactively, through both business activities and social/cultural support initiatives, to solve these imbalances.

### Growth and Development Supporting Contributions to the People of the World

The pursuit of profits is the primary purpose of a company's existence. Canon, however, interprets "profits" in the wider sense of "benefits," and not just economic benefits for a company. We believe that companies exist to benefit customers through products and benefit society through the creation of employment and the invigoration of local economies. The purpose is to contribute to world prosperity and the happiness of humankind.

To be a corporation that can contribute to the benefit of all humankind, it is necessary for us to grow and develop. And to do that, we have to provide stable livelihoods with upward potential for employees; returns to shareholders; contributions to society; and produce the profits and capital necessary for sustainable development. We believe that a company's existence is meaningless if it cannot accomplish these things.

### Being a Company Worthy of Respect throughout the World

Acting on these ideas, we embarked on our Excellent Global Corporation Plan Phase II, a blueprint of long-term management objectives to be met by 2005. This plan is designed to make us a truly excellent global corporation. In implementing it, we aim to continue using technology to contribute to society under the philosophy of *kyosei* and to be a corporation that is accepted and worthy of respect throughout the world.

Toward that end, Canon Group executives and employees conduct themselves in accordance with the "Three Selves" action guidelines that have been a part of Canon since its very beginning.

### Sustainable Development by Harmonizing Environmental and Economic Interests

There has been a tendency to believe that environmental protection and economic growth are incompatible. At Canon, however, we are convinced that these two activities can be united.

Through production-reform activities undertaken since 1998 under our EQCD concept, we have verified that effective use of resources and energy leads directly to lower costs and shorter delivery times. Experience has shown us that a product's environmental functionality (resulting from the development of new technologies under the concept of maximizing resource efficiency), matched with a society dedicated to sustainability, leads to market competitiveness.

With this idea serving as a foundation, we are playing a leading role in building a sustainable society by promoting environmentally conscious management harmonizing environmental and economic interests. As our Vision for 2010, we have established Factor 2 as the overriding indicator. New Mid-Term Environmental Goals serve as milestones on the way to achieving Factor 2.

**EQCD Concept**

**Environment**  
Companies are not qualified to manufacture goods if they are incapable of environment assurance.

**Quality**  
Companies are not qualified to market goods if they cannot produce quality goods.

**Cost**  
**Delivery** } Companies are not qualified to compete if they cannot meet cost and delivery requirements.

**Maximization of Resource Efficiency**

"Maximization of resource efficiency" means achieving maximum efficiency in the use of resources — in other words, offering the highest standards of product and service quality, 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.

## Sustainable Business Based on Our Environmental Charter and Code of Conduct

A key concern of our management is to be environmentally aware. Our environmental assurance activities revolve around our EQCD concept and the maximization of resource efficiency. Our objective is to achieve *kyosei* with the global environment.

### Canon Environmental Charter

(revised April 2001)

#### Corporate Philosophy: *Kyosei*

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

#### Environment 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 Environment 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 environment 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 measures.
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.

### Canon Group Code of Conduct

Canon's ultimate goal is to become a truly excellent global corporation which fulfills its social responsibilities by building and maintaining good relations with such various stakeholders as customers, business partners and the community surrounding the company. To achieve this goal, it is essential that each executive or employee of the Canon Group acknowledges his/her own responsibility and perform his/her duties in the spirit of fairness, integrity and legal compliance.

Canon created its first code of conduct in 1992, setting forth specific standards of conduct that executives and employees of Canon Inc. and Canon Sales Co., Inc. must comply with in the performance of their duties. However, rapidly expanding Group companies worldwide made us aware that unified ground rules of conducts which cover the entire Canon Group are necessary. We created the Canon Group Code of Conduct in August 2001 to meet such needs. A specialized division for the promotion of the Canon Group Code of Conduct was established within the headquarters of Canon Inc. and this division cooperates with its counterparts in other Canon Group companies to ensure that both staff and management are fully aware of the standard of conduct expected of them.

The Canon Group Code of Conduct has been translated into seven languages, including English, French and Chinese, and is being applied to the Canon Group companies located in the Americas, Europe, and Oceania, as well as China and other Asian countries.

### Environmental Assurance Activities and the Canon Environmental Charter

Canon set up its Global Environment Assurance Promotion Committee and created the Canon Environmental Charter in 1990. Three years later, we drafted the New Environmental Assurance Concept, putting forward the EQCD concept. At Canon, we believe the actions that stem from these concepts go a step beyond "environmental protection." We refer to them as Environmental Assurance Activities.

Environmental Assurance Activities take the form of initiatives to minimize environmental burden through energy and resource efficiency, elimination of hazardous substances, and other such measures. These initiatives are carried out at every stage — from research and development, and product development and design, to material procurement, production, logistics, sales, and disposal (collection and recycling).

The EQCD concept is based on the idea of bringing all business activities into harmony with the global environment. We at Canon have come to believe that a company is not qualified to manufacture products if it is incapable of environmental assurance. Indeed, for us, environmental assurance is a prerequisite for quality, cost efficiency, and on-time delivery.

Since we adopted our New Environmental Assurance Concept in 1993, the depletion of global resources has only accelerated. This requires a new corporate response. In 2000, we set "maximization of resource efficiency" as our objective. Since then environmental measures have been critical in helping determine our management policies. And in April 2001, we revised the Canon Environmental Charter based on our deeper understanding of the social and managerial issues at hand.

#### Overview of the Canon Group Code of Conduct

##### Management Stance

###### Contribution to Society

- Examples:
- Provision of Excellent Products
  - Protection of Consumers
  - Preservation of the Global Environment
  - Social and Cultural Contributions

###### Fair Business Activities

- Examples:
- Practice of Fair Competition
  - Observance of Corporate Ethics

##### Code of Conduct for the Executives and Employees

###### Compliance with Corporate Ethics and Laws

- Examples:
- Fairness and Sincerity
  - Legal Compliance in Performance of Duties

###### 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

###### Management of Information

- Examples:
- 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

###### Avoidance of Conflicts of Interests/Separation of Personal and Company Matters

- Examples:
- Avoidance of Conflicts of Interests
  - Prohibition Against Seeking, Accepting or Offering Improper Gifts, Entertainment, or Other Benefits

###### Maintenance and Improvement of Working Environment

- Examples:
- Respect for the Individual and Prohibition Against Discrimination
  - Prohibition Against Sexual Harassment

# Identifying Environmental Burdens through Life Cycle Assessment

Canon analysis identifies direct and indirect environmental burdens of products throughout their life cycles. This information is then used to identify issues requiring attention and develop effective initiatives.

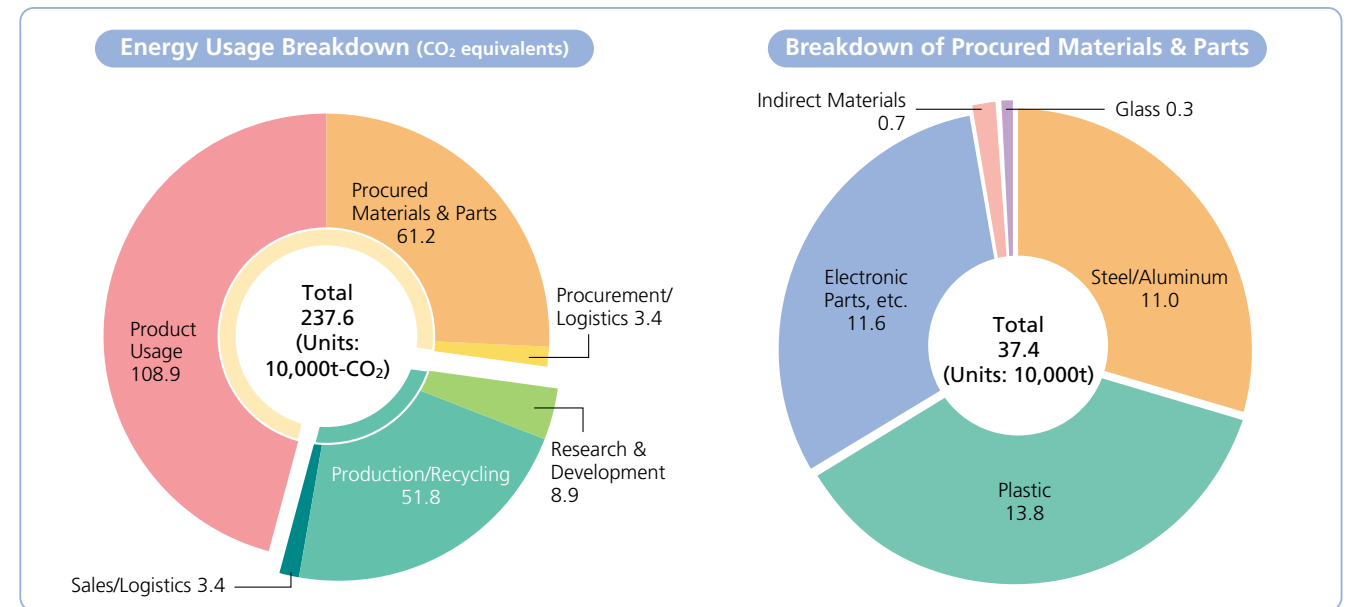
## Current Conditions of Environmental Burden

Canon's business activities begin with the procurement of materials and parts from suppliers via logistics companies. These materials and parts are processed and assembled into products and shipped to stores and other retail outlets. Once our products are no longer needed by customers, we try to collect as many of them as possible and then process them for recycling or reuse. Our analysis of direct and indirect environmental burden at each stage of our products' life cycles yielded the information provided below.

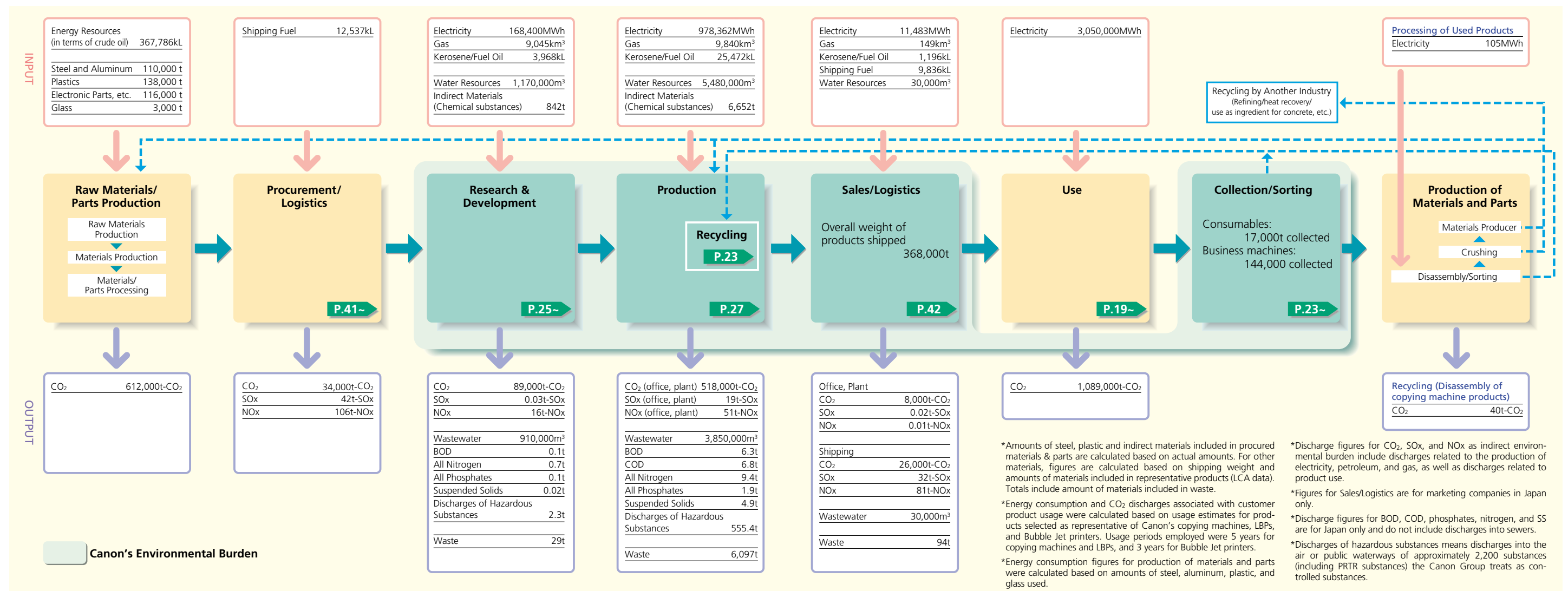
Direct environmental burden (from R&D, production, sales, and logistics) consisted of elements including: 641,000 tons of CO<sub>2</sub> emissions resulting from consumption of all the forms of energy we use; 558 tons of hazardous substance discharges into the atmosphere or waterways; and 6,220 tons of waste. Indirect upstream (production of materials and parts) and downstream

(product usage and processing of used products) environmental burden came to the equivalent of 1.735 million tons of CO<sub>2</sub>.

This data reminds us that most of our environmental burden is indirect and that our efforts to lower this burden should focus on our products more than production processes. Electricity consumption during usage is a particularly large source of environmental burden and indicates that making our products more energy efficient should be our most urgent priority. As for the materials we use, plastics account for the greatest weight, followed by steel. Recycling systems already exist for our used steel. For plastics, we are treating recycling and reduction of usage as a critical issue.



## 2002 Material Balance



# Taking a Hard Look at Our Results and Issues, and Setting New Goals

2002 was a year of significant progress toward our Mid-Term Environmental Goals for 2001–2003. Here, we report on our activities over the past year and discuss issues to address in the future.

## Key Issues, Activities and Results in 2002

In pursuit of our objective of maximizing resource efficiency, we envisioned where we should be at the end of three years in terms of our products, operational sites and issues that are common across the Canon Group, and then established our Mid-Term Environmental Goals for the 2001–2003 period. In 2002, we pushed forward with global warming prevention measures in the form of product and production energy-efficiency initiatives, and made progress in such areas as the construction of a global product recycling system and the elimination of hazardous substances from our products.

Product energy efficiency is the most critical issue when it comes to preventing global warming and in 2002 we succeeded in adding a line of products incorporating new IH fixing technology **P.21**.

In the area of production-reform activities aimed at improving economic efficiency and lowering environmental burden, the introduction of the cell production method at one of our manufactur-

ing plants in Thailand marked the removal of the last of the Canon Group's conveyor belt production systems **P.18**.

We also made progress in the elimination of hazardous substances from our products. This included the completion of a roadmap for implementing a common green procurement survey, promoting the adoption of such a survey by others in our industry throughout the world, and enhancing our own system for eliminating hazardous substances from our products **P.41**. We were the first in the industry to obtain system certification for the Eco-Leaf environmental label **P.20**, which discloses environmental burden in quantitative terms, and moved proactively to disclose information on our products.

With regard to the soil and groundwater problems that came to light at our Toride Plant in 2002 **P.34**, we have strengthened our relationship with the local community and authorities and gone to every length to protect the health and ensure the safety of local residents.

## Canon's Mid-Term Environmental Goals and Achievements as of 2002

◎: Degree of improvement greater than that achieved for prior year ○: Degree of improvement same as that achieved for prior year

Goals	Deadline	Performance Assessment 2002	Compared to Prior Year	
<b>Product-Related Goals</b>				
<b>Global Warming Prevention and Energy Conservation</b>	Bring all business machine products into compliance with the International ENERGY STAR® Program (copying machines, printers, facsimile machines, image scanners)	2003	92% achieved (60 of 65 products)	○
	Power consumption during operation (for new products): Reduce with each new model		100% achieved	◎
<b>Resource Conservation</b>	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	2003	• Implemented for copying machines and PIXUS series of Bubble Jet printers • 6,880 tons used	◎
	Plastic materials*1: Reduce number of plastic grades to 1/3 2000 levels		36% reduction (reduced grades of plastic from 105 to 67)	○
<b>Elimination of Hazardous Substances</b>	100% recycling of collected used products*2 • Copying machines • Cartridges (Bubble Jet, toner)	2003	• Copying machines 92% • Cartridges 100%	◎
	In 2001, begin sales of products from which designated substances*3 have been eliminated. Gradually eliminate these substances from all products.		2004	Launched G-Project, a team to deal with elimination Began sales of some products from which designated substances have been eliminated
<b>Elimination of Hazardous Substances</b>	Develop substitute technologies for PVC*4 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	2003	• Examining prototypes for some products • 1,280 tons of ABS materials	○ ◎

Goals Related to Operational Sites				
<b>Global Warming Prevention and Energy Conservation</b>	Reduce CO <sub>2</sub> emissions by 25% compared to 1990 levels (production sites)	2010	26% increase	—
	Reduce CO <sub>2</sub> emissions by 15% compared to 1999 levels (production sites)	2003	12% decrease	◎
	Reduce gross waste generation by 30% compared to 1998 levels	2010	6% increase	—
<b>Resource Conservation</b>	Reduce gross waste discharge by 50% compared to 1998 levels	2003	29.9% decrease	◎
	Achieve zero landfill waste at all operational sites in Japan	2003	Achieved at 27 of 39 operational sites	◎
<b>Elimination of Hazardous Substances</b>	Reduce use or emissions of materials in Canon's A, B, and C substance ranks (compared to 1998 levels) (Usage Reductions)	2003	Eliminated	◎
	A-Rank Substances: Eliminate use		39% reduction	◎
	B-Rank Substances: Reduce use by 20%		87% reduction	◎
	(Emissions Reductions) B-Rank Substances: Reduce emissions by 90%		72% reduction	◎
	C-Rank Substances: Reduce emissions by 20%	76% reduction	◎	
	Reduce emission of PRTR Law designated substances by 50% compared to 1998 levels			◎

Common Group Goals				
<b>Environmental Management Indices</b>	Implement Environmental Evaluation System in 2001	2001	Implemented in marketing companies	◎
<b>Human Resource Development</b>	Enhance internal environmental education programs	2003	Implemented green procurement training (completed by 36% of procurement employees in Japan)	◎
<b>Social Contributions</b>	Enhance social contribution programs	2003	Participated in local environmental programs	◎
<b>Communications</b>	Expand and promote environmental communications	2003	Responded to 401 questions received through Environmental Report opinion cards and other channels Environmental homepage downloads totaled 113,016 Environmental labels released for 12 products	◎
<b>Environmental Businesses</b>	Promote environmental businesses	2003	Strengthened analysis and evaluation businesses (product, general, workplace analyses)	◎

\*1 Excluding coloring agents \*2 Includes thermal recycling \*3 Hazardous substances designated by the European Union's Restrictions on Hazardous Substances (RoHS) (Cd, Hg, Pb, Cr (VI), PBB, PBDE) \*4 Prohibits use of soft PVC containing phthalic acid esters. Use of PVC packaging materials was halted in 1996.

## Future Issues

It is necessary to thoroughly strengthen our risk management capabilities in all business areas and global management while actively disclosing information regarding such efforts. At Canon, in addition to bolstering risk management worldwide, we have laid out new directions for strengthening our technology development and systems, and established concrete Mid-Term Environmental Goals for reducing the environmental burden of our products and production processes.

Our newly established vision for 2010, called "Factor 2," calls for the doubling of resource efficiency by 2010. Each of our environmental goals is a measure for achieving Factor 2. With 2010 as our Factor 2 deadline, we have positioned our new Mid-Term Environmental Goals as milestones to achieve by 2005. As we move to achieve these targets, each Product Group Operation and operational site will be required to contribute to the effort.



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

## Vision for 2010

<b>Overriding Indicator</b>	Factor 2 (Increase by at least a factor of 2.0 the ratio of net sales to life cycle CO <sub>2</sub> emissions, using 2000 as the reference year.)	Achieve by 2010
-----------------------------	---	-----------------

## New Mid-Term Environmental Goals

Product Goals	Deadline	Operational Site Goals	Deadline	
<b>Compliance with standards for environmentally conscious products</b>	Achieve industry's highest degree of compliance with the Law Promoting Green Purchasing	<b>Global Warming Prevention and Energy Conservation</b>	Reduce CO <sub>2</sub> emissions relative to sales by 25% compared to 2000	2010
	Gain certification for all major eco-labels		Reduce CO <sub>2</sub> emissions relative to sales by 5% compared to 2000	2005
<b>Global Warming Prevention and Energy Conservation</b>	Achieve highest degree of compliance with the International ENERGY STAR® Program	<b>Resource Conservation*</b>	Increase internal recycling percentage by 40% compared to 2000	2005
	Reduce energy consumption during operation and standby 30% compared to 2000		Decrease waste by 25% compared to 2000	2005
<b>Resource Conservation</b>	Achieve 100% compliance with the Law Concerning the Rational Use of Energy (copying machines)	<b>Elimination of Hazardous Substances</b>	Decrease landfill waste to zero (to be achieved in Japan in 2003)	2005
	Create recycling systems for Europe, Japan, Asia (excluding Japan), and North America		Reduce hazardous substance discharges by 50% compared to 2000	2005
	Recycle 90% or more (by weight) of collected products	<b>Logistics</b>	Reduce discharges of PRTR Law designated substances by 60% compared to 2000	2005
	Employ reused or recycled materials for all products (reused parts, recycled plastic)		Reduce CO <sub>2</sub> emissions relative to sales 20% compared to 2000	2006
	Reduce product size and weight by 15% compared to 2000			
	Increase designed-in recyclability to 75% or more of product weight (reuse, material recycling)			
Increase designed-in use of recoverable materials to 85% or more of product weight (including thermal recycling)				
<b>Elimination of Hazardous Substances</b>	Use green plastic (products and packaging)			
	Bring all products into compliance with the EU's RoHS			
	Use fewer types of plastic for parts and chassis; Use 100% non-halogenated plastic for product chassis			
	Use substitute materials for circuit boards (non-halogenated)			
<b>Protecting the Environment during Product Usage</b>	Use substitute materials for PVC in AC/DC harnesses			
	Meet principal environmental standards for noise			
<b>Management</b>	Implement LCA/LCC in design reviews for main products			

\*Resource Conservation Activities  
Internal recycling percentage = Recycled 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.



## Management Innovation Leads to Record Performance

As evidence of its ongoing growth, a company requires a rising company value. Driving to increase its company value in 2002, Canon achieved record high sales and profits for the year. Outside parties were quick to recognize this success and have given us high marks for achievement.

### Canon's Management Innovation Activities

Since its founding, Canon has sought a profit return method that is always fair. We embarked on our Excellent Global Corporation Plan in 1996 and have been working to make ourselves an even better corporation. Our aim in pursuing management innovation is not simply to increase net sales or expand our business. We are seeking to increase our value as a company, an essential goal if we are to realize sustainable growth.

Consolidated management that focuses on cash flow and pursues overall optimization is the foundation from which we strive to increase our company value. To promote consolidated management, we implemented our Consolidation Planning and Measurement System in 1997 and began calculating and evaluating performance of individual Product Group Operations. To improve our capital efficiency, we began using ROE\* and other performance indices. Now we are pushing forward with efforts to add even greater value to our products and with production reforms focusing on cell production. In research and development, we are promoting an intellectual property strategy through management of patents.

\*Abbreviation for "Return On Equity." Measure of financial performance calculated by dividing net income by stockholder's equity.

### Business Overview for 2002

In 2002, the second year of the Excellent Global Corporation Plan Phase II (2001–2005), Canon increased revenue and profits for the third consecutive year, achieving record highs in both areas, despite persistently weak economic conditions.

Results for individual products, anchored by digital copying machines, reflected solid growth. And performance in digital cameras and video camcorders continued at exceptionally strong levels. A series of production-reform activities produced cost reductions that contributed greatly to improving the overall profit margin.

Consolidated results for the year were: net sales, 2.9401 trillion yen (up 1.1%); operating income, 346.40 billion yen (up 22.9%); net income before taxes, 330.00 billion yen (up 17.2%); and net income, 190.70 billion yen (up 13.8%).

(Percentage figures reflect year-on-year differences)

### Canon's Management Innovation Activities

#### 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 adoration and respect worldwide.

##### Goals

1. Becoming number one 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 optimal 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

##### Four Purposes of Companies

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

##### Pursuit of Company Innovation

- ▶ Cash flow management
- ▶ Withdrawal from unprofitable businesses

##### Production Reform

- ▶ Upgrade to cell production from belt conveyor system
- ▶ Use of multiskilled production employees
- ▶ *Chie-tech* (Wisdom-tech: Make your own tools)
- ▶ Implementation of the "just-in-time" concept

##### Development Innovation

- ▶ 100% implementation of 3D-CAD
- ▶ Establish Color Technical Center and Color Stadium
- ▶ Undertake "no-prototype" production

##### Sales Innovations

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

##### 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-regional-headquarters global management system

### Topics — Successful Management Innovations Bring Worldwide Praise

Improvement in our already strong performance led both domestic and foreign ratings institutions to raise Canon Inc.'s credit rating. And in the PRISM multidimensional company rating system — developed jointly by Nihon Keizai Shimbun and Nikkei Research — Canon was moved up from the previous year's third-place ranking to second in 2002. Rankings are based on evaluations in four categories: "flexibility and social responsibility," "profitability and growth prospects," "research and development," and "innovativeness." We gained outstanding ratings in the first three categories, scoring 80 or higher in all three.

Honors also went to Canon Inc.'s President and CEO, Fujio Mitarai, who was presented the Commendation for Business Reformers by the Prime Minister of Japan, and the "23rd Mainichi Keizaijin Award," sponsored by The Mainichi Newspapers. Overseas, America's *Businessweek* magazine listed him among its "Top 25 Managers of the Year (2002)," for the second year running.



Canon Inc.'s President and CEO, Fujio Mitarai, presented with the Commendation for Business Reformers by the Prime Minister of Japan

### Topics — Second in US Patents for 2002

Canon was among the leading recipients of patents awarded in 2002 by the US Patent and Trademark Office (Department of Commerce), rising from third to second in the world. The patent office's preliminary announcement on January 13, 2003 placed us number two in the world, behind only IBM, and first among Japanese companies. We have now ranked among the top three patent recipients for 11 consecutive years.

#### Top 10 Corporations Receiving U.S. Patents in 2002

Overall Rank	Rank Among Japanese Corporations	Company	Number of Patents
1	—	IBM	3,288
2	1	<b>Canon Inc.</b>	<b>1,893</b>
3	—	MICRON TECHNOLOGY	1,833
4	2	NEC	1,821
5	3	Hitachi	1,602
6	4	Matsushita Electric Industrial	1,544
7	5	Sony	1,434
8	—	General Electric	1,416
9	—	Hewlett-Packard	1,385
10	6	Mitsubishi Electric	1,373

### Topics — Praise for Canon's Relations with Investors

In the 8th annual survey to select companies practicing superior disclosure carried out by the Security Analysts Association of Japan (SAAJ), Canon was ranked number one in the electrical and precision equipment sector. The association praised us for our informative Q&A sessions at results briefings, the wealth of information available through our Investor Relations (IR) section, and the valuable discussions that can be had with Canon representatives on a daily basis.

The Japan Investor Relations Association (JIRA) presented us with its "IR Award for the Most Progressed Companies on IR" based on the personal involvement of Canon's top management in the company's IR strategy, and the quality of our IR organization, system, briefings and materials.



Canon being awarded the "IR Award for the Most Progressed Companies on IR"

# Implementing Concrete Policies Furthering Both Environmental and Economic Interests

Our production reforms have resulted in lower environmental burden and reduced costs. We are working to further enhance the environmental consciousness of our management by introducing new systems, such as our Environmental Evaluation System.

## Advancing Environmentally Conscious Management

We at Canon believe that by developing new technology and constructing new systems for society, based on the concept of maximizing resource efficiency, it is possible to advance the interests of the environment and business along the same path. For example, the cell production and logistics efficiency initiatives we began implementing in 1998 produced very significant results by lowering both environmental burden and cost through thorough elimination of waste. Environmentally conscious products have become an element of market competitiveness. Business expansion based on environmental technology development P.25 is leading not only to profits resulting directly from product sales, but also to patent royalties.

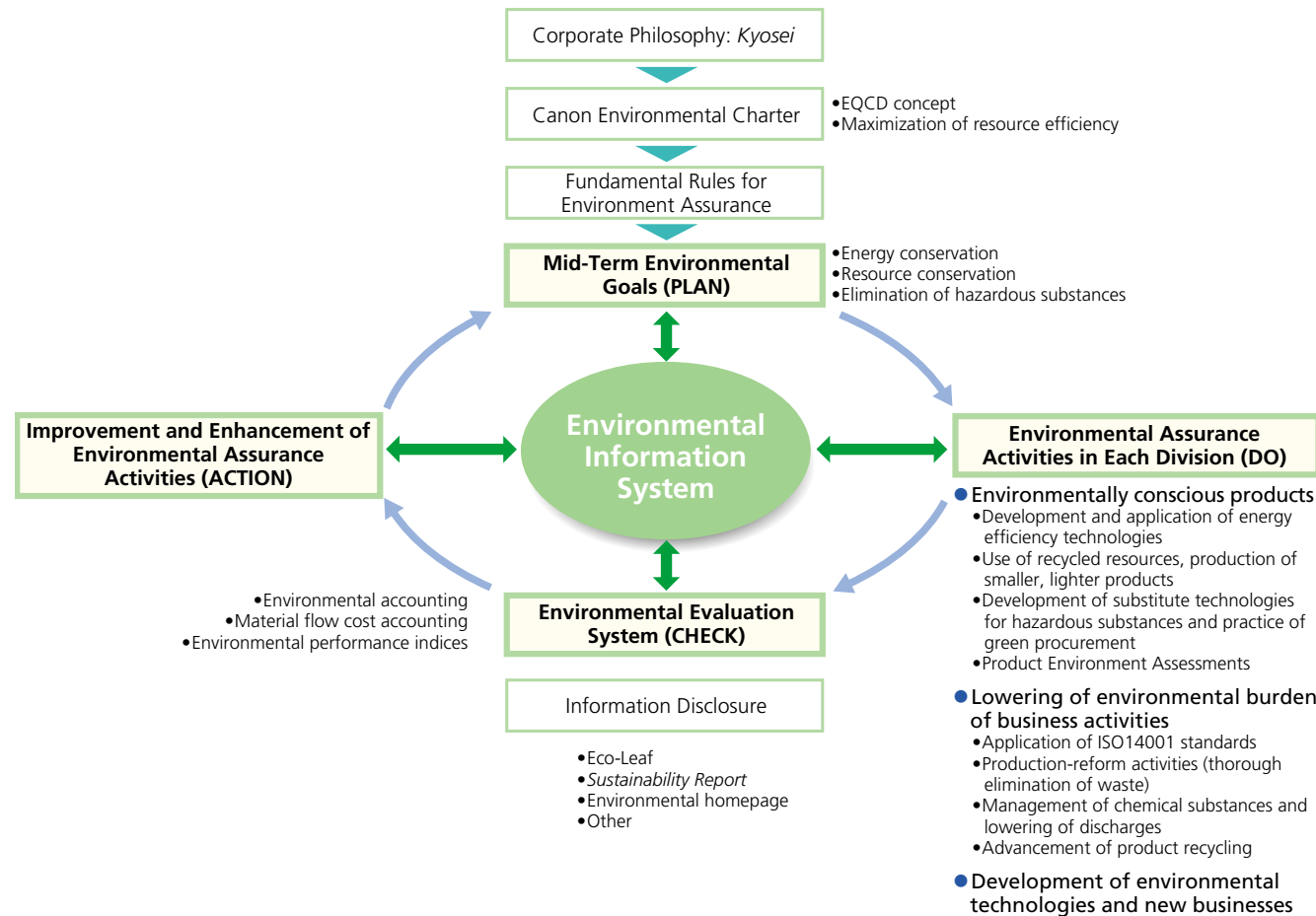
Our environmentally conscious management system, based on our Mid-Term Environmental Goals and our Environmental Evaluation System, incorporates these benefits into our business. We have positioned our Mid-Term Environmental Goals and our Environmental Evaluation System as the "Plan" and "Check" elements of the PDCA cycle we use in actually implementing (the "Do" element) environmental activities.

## Assessing Environmentally Conscious Management

We have managed to reduce our production costs by 173.8 billion yen over five years through cell production and similar innovations. Also, through even more environmentally conscious products, we expect benefits such as an approximate 7% cost savings in parts, realized through the use of high-value-added recycled plastics P.24 instead of PC-ABS (polycarbonate acrylonitrile butadiene styrene). Furthermore, we have undertaken a full-scale effort to develop environmental businesses.

In 2001, we introduced our Environmental Evaluation System to our consolidated Product Group Operations and manufacturing companies. The following year, we introduced it to our marketing companies. We also added new evaluation items to this system, increasing environmental evaluation results to approximately 10% of overall consolidated performance evaluation scores. New environmental management tools adopted included Material Flow Cost Accounting P.28 and Environmental Performance Indices.

## Canon's Environmentally Conscious Management System



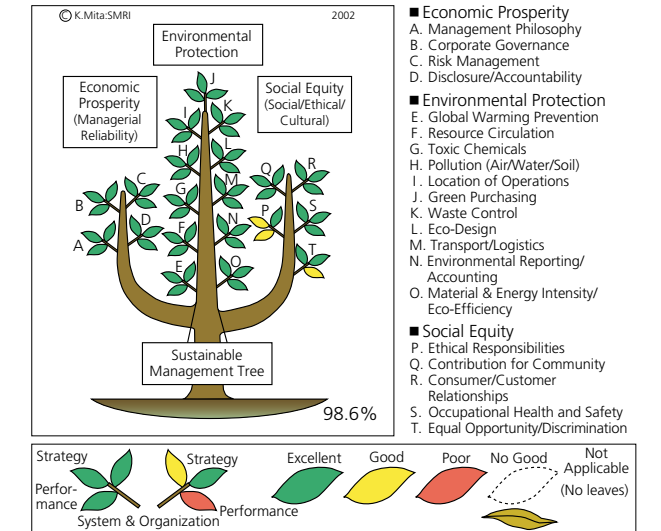
## Topics — High Environmental Ratings from Around the Globe

The Nihon Keizai Shimbun placed Canon second among 703 companies in its 6<sup>th</sup> Environmental Management Survey (Manufacturers Category), up from sixth place the previous year. In another achievement, the Sustainable Management Rating Institute\*1 placed Canon number three among 86 companies for actively pursuing environmentally friendly management. In its first such survey, the institute based its ratings on overall evaluations (see diagram at right) encompassing economic and social, as well as environmental, areas (the "triple bottom line").

For the first time, Canon was named among the top 100 companies in the FTSE's\*2 "FTSE4 — Good Global 100 Index," regarded as a leading international triple bottom line rating. And for the third consecutive year, Canon was selected as among the top 10 percent of the world's leading sustainability companies in the Dow Jones "DJSI World."

\*1 The Sustainable Management Rating Institute is an environmental rating body created by academic and business researchers.  
\*2 Originated as a joint venture between the Financial Times and the London Stock Exchange.

### Canon Sustainable Management Tree



Company ratings are displayed in this tree diagram. Environmental protection, economic prosperity and social equity are represented as the tree's main branches. Ratings focusing on philosophy & strategy, system & organization and performance for 20 different items are listed. Rating results are expressed in the colors of leaves.

## Topics — Elimination of Belt Conveyors from All Production Plants

We have introduced cell production methods to replace belt conveyors in our production plants throughout the world. In the fall of 2002, we removed from a plant in Thailand the last belt conveyor used in the Canon Group. Placed end to end, the belt conveyors we dismantled at our plants would stretch 20km. Line production uses belt conveyors and many workers to perform small production tasks. In contrast, cell production employs small groups of people or even individuals to produce entire products.

A series of production-reform activities, including this elimination of belt conveyors, increased economic efficiency and lowered environmental burden, reducing Canon's costs by 55 billion yen in 2002.



Cell production

## Topics — Canon Wins Environmental Protection Award at Company Social Contribution Awards and Outstanding Performance Award at the 6<sup>th</sup> Environment Report Awards

At the 13<sup>th</sup> Company Social Contribution Awards\*1, we were presented with the Environmental Protection Award, given to companies that actively contribute to society. In our case, it was recognition for creating our Environmental Assurance Promotion Plan under which we strive to conserve energy and resources at every stage from product development to material procurement, production, logistics, sales and disposal, and for achieving zero emissions at half of our operational sites in Japan.

In a separate development, the *Canon Environmental Report 2002*, issued in June 2002, was presented with the "Outstanding Performance Award" at the 6<sup>th</sup> Environment Report Awards ceremony\*2.

\*1 Sponsored by the Asahi Shimbun Foundation  
\*2 Sponsored by the Global Environmental Forum and the National Association Promotion of Environmental Conservation, and supported by the Japanese Ministry of the Environment



Environment Report Awards ceremony

## Applying Proprietary Environmentally Conscious Technologies in Products

Color IH fixing and other new proprietary technologies have lowered the environmental burden of our products. We use Type III Eco-Labels and are in compliance with International ENERGY STAR® and other environmental standards.

### Key Environmental Points of Our Products

LCA analysis of Canon's main products indicates that most of their environmental burden comes in the form of energy consumption when customers use them. This is followed by the environmental burden associated with the materials and purchased parts that go into our products P.12.

At Canon, we try hard to develop energy efficiency technologies. IH fixing P.21 and on-demand fixing technologies are just two examples. By actively using these technologies in our products, we are helping to lower the overall amount of energy consumed by society. We are also reducing the amount of materials we use by making smaller, lighter products. By designing products to be reused or recycled and using recycled plastic we can reduce our use of component materials even further. Another of our aims is the elimination of hazardous substances from our products. This is achieved through, for example, the development of alternative technologies and green procurement.

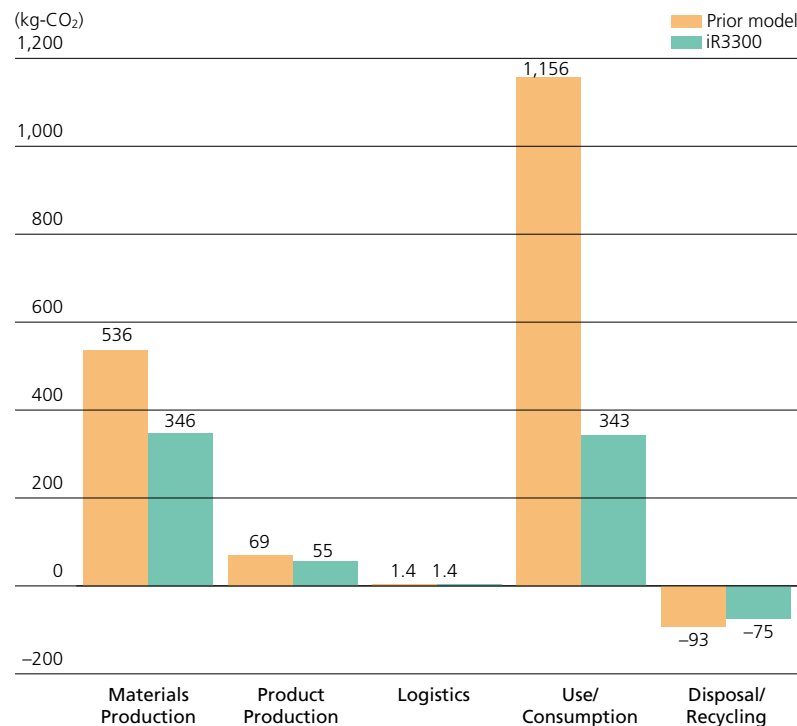
We keep environment-related information on our products in a database, use it in product development and disclose it through our homepage and other channels.

### Mid-Term Environmental Product-Related Goals and 2002 Achievements

In our ongoing effort to make products ever more environmentally conscious, we established Mid-Term Environmental Goals in three areas P.13 — Global Warming Prevention and Energy Conservation; Resource Conservation; and Elimination of Hazardous Substances. To achieve these goals, we are adopting concrete measures for each of our product groups.

In the area of Global Warming Prevention and Energy Conservation, we have reduced energy consumption with every new product model and have brought 60 out of 65 products into compliance with the International ENERGY STAR® Program. In Resource Conservation, we are expanding our use of recycled parts and materials for our copying machines and PIXUS series Bubble Jet printers. In 2002, we used 6,880 tons of recycled plastic. We have reduced the number of grades of plastic used in our products from 105 in 2000 to 67 in 2002. We now recycle 92% of the copying machines and 100% of the used Bubble Jet and toner cartridges we collect. In our efforts to eliminate hazardous substances, we are making progress in identifying and using alternative materials.

### Example of a Life-Cycle Perspective of Product Improvement (imageRUNNER iR3300)



imageRUNNER iR3300 Digital MFP

### Topics — ENERGY STAR® Award\* Received for the Third Consecutive Year

Canon U.S.A., Inc. won the U.S. Environmental Protection Agency's and Department of Energy's 2003 ENERGY STAR® Partner of the Year — Product Manufacturers Award. Canon U.S.A. has now won this award for three years in a row and a total of eight times since 1996.

Over 300 products are qualified as being in compliance with the ENERGY STAR® Program, more than any other business machine manufacturer. Canon U.S.A. was recognized for its protection of the environment through energy efficiency and innovative developments. It was given credit for promoting public awareness of environmental efficiency and for its continuous contributions to the use of the ENERGY STAR® logo. The logo is displayed on products, in advertising, at exhibitions and so on.



\*The Environmental Protection Agency (EPA) established the International ENERGY STAR® Program in 1992 to help prevent global warming by promoting the development and use of energy-efficient products. As part of this program, the EPA recognizes people and organizations that have contributed outstanding initiatives in product development and manufacturing, consumer education and other areas.

### Topics — First System Certification of Eco-Leaf Environmental Label Program

In July 2002, we won Type III ECO-Label, or Eco-Leaf\*, System Certifications for our copying machines and laser beam printers. System Certifications can be obtained based only on internal data verification procedures and without the involvement of a third-party certification organization. Canon was the first company in the industry to obtain Eco-Leaf System Certifications.

In January 2003, we gained the industry's first Eco-Leaf certification in the field of inkjet printers. Taking up the challenge of the Eco-Leaf Environmental Label Program, we plan to push forward with even greater environmental information disclosure.

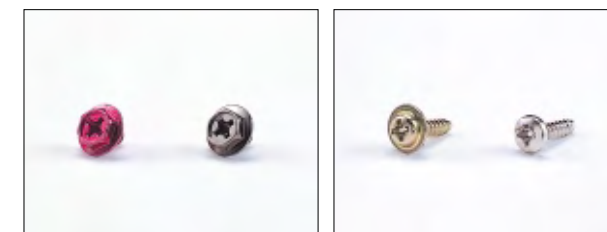


\*The Eco-Leaf program is administered by the Japan Environmental Management Association for Industry, an extra-governmental organization of the Ministry of Economy, Trade and Industry. Under the Eco-Leaf program a product's environmental burden is calculated based on the LCA concept and displayed in quantitative terms. Consumers can use this information to evaluate products for environmental consciousness.  
<http://www.jemai.or.jp>

### Topics — Canon Eliminating Hexavalent Chromium From All Screws in Its Products

Canon set up its Hazardous Substance Elimination Sub-committee in January 2001. In May of the same year, this team set the goal of eliminating all designated chemical substances (lead, hexavalent chromium, cadmium, mercury, two types of specified brominated flame retardants\*) from all of our products by the end of 2004. This action was taken to comply with the European Union's Restrictions on Hazardous Substances (RoHS). The directive calls for the elimination of all hexavalent chromium from electrical products by 2006.

In 2002, we took aim at hexavalent chromium. Trace amounts of this chemical occur in the coating of the more than two billion screws that we use every year to assemble business machines and optical products. To eliminate this chemical, Canon teamed up with a plating processing company to develop an alternative surface treatment method. The costs and quality of this method are on a par with those of methods using hexavalent chromium, and we are now introducing it at plants throughout the world. Building on this effort, we are working to develop substitute technologies for surface treatment of cast aluminum products and other processes.



Left Photo: Red screw (processed with hexavalent chromium) → Black screw (made of black nickel)  
Right Photo: Yellow screw (processed with hexavalent chromium) → Silver screw (made of black nickel)

\*Two types of specified brominated flame retardants:  
PBB (polybrominated biphenyls)  
PBDE (polybrominated diphenyl ethers)

**Topics — Energy Conservation Award for Laser Beam Printers**

Canon's LBP-2810/2710/2510 printers are the world's first color laser printers to use Color IH (Induction-Heating-Fusing) fixing technology. Developed by Canon, this technology reduces the standby energy consumption of fixing units to about 36W (approximately 78% less than for previous Canon LBPs) and warm-up time to 35 seconds (approximately 85% less than for previous Canon LBPs) in LBP-2810/2710 printers. It also cuts energy consumption under normal operating conditions to 84.7Wh/h (70% less than for previous Canon LBPs). LBP-2810/2710/2510 printers take up less space because of their simple structure, use of significantly fewer parts and application of a four-color vertical in-line engine. They also cut paper cost in half through automatic double-sided printing, a standard function on all three.

These three printers are in compliance with Japan's Law on Promoting Green Purchasing and the International ENERGY STAR® Program, and in 2002 won the "Director-General of Natural Resources and Energy Award" at the 2002 Energy Conservation Awards, sponsored by Japan's Energy Conservation Center. This was the second consecutive year and fourth time overall that we have received such recognition at the Energy Conservation Awards.

**● Color IH Fixing**

Color IH fixing employs a fixing unit that uses the same heating principle applied in induction heating ranges and rice cookers. Compared to traditional fixing units, IH fixing units require considerably less warm-up time and are extremely energy efficient. With IH fixing units the roller is heated only where necessary and in a direct fashion. Thermal efficiency, therefore, is excellent and the required amount of heat is attained very quickly.

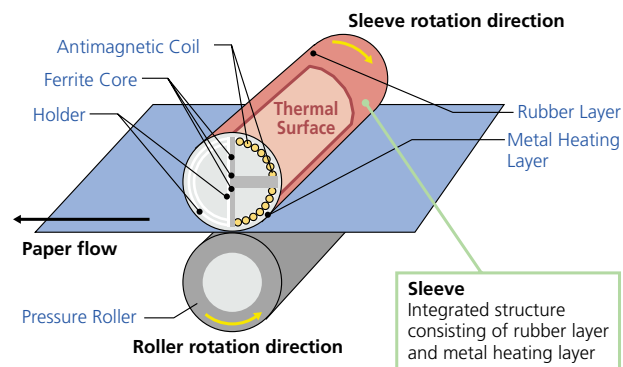
With the microcomputer-based thermal control and thin sleeve of our IH fixing units, temperature control is precise enough to produce the minute differences necessary to fuse four toner colors. Fixing temperature is attained rapidly and controlled with extreme precision, even within single pages, so the printed image has no unevenness in gloss and colors are applied with excellent uniformity.

Our on-demand fixing technology has allowed us to offer energy-efficient monochrome laser beam printers. Now, with our IH fixing technology, we also offer energy-efficient color laser beam printers.

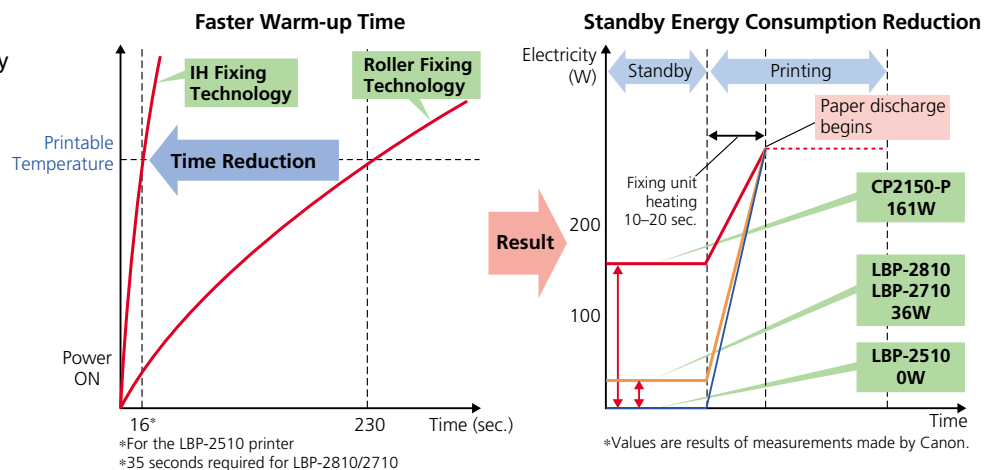


LBP-2810

**● Induction Heating Principle**



**● Faster Warm-up and Greater Energy Efficiency**



**Topics — Environmental Measures Built into Bubble Jet Printers**

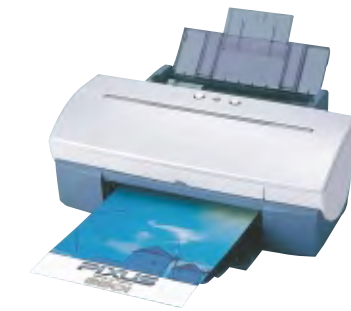
Our Bubble Jet printers are targeted for home use. We have devoted special attention to designs that save energy in standby mode and when a printer has been switched off. Our main Bubble Jet printer products introduced to the market in fall 2001 are among the industry's most energy efficient in standby mode, with electricity consumption of less than 3W. To illustrate just how energy-efficient these products are, the daily electricity consumption\* of our PIXUS 850i is approximately 68% lower than an earlier model, the S750. Its electricity consumption during standby mode is less than 1/40 the International ENERGY STAR® standard and approximately 70% less than that of the S750. Our PIXUS 550i Bubble Jet printer is similarly as energy efficient.

For our Bubble Jet printers, we have actively adopted technologies that eliminate hazardous substances. For instance, we have minimized the types of plastic used for these products and no longer use brominated flame retardant on their exteriors. Additionally, in 2002, we began using high-value-added plastic, made with recycled general-use material from our copying machine paper cassettes, for Bubble Jet printer power supply covers [P.24](#).

**● Eco-Marks for Bubble Jet Printers**

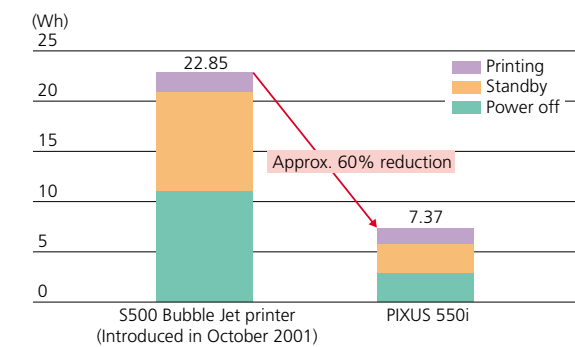
Canon was the first in the industry to gain the printer Eco-Mark, which was established in October 2001 by the Japan Environmental Association. By April 2003, we had gained this distinction for 21 of our printer products.

A particularly notable achievement involved our photo direct printer. Because photo direct printers have been improved to produce digital photo prints without using a PC, they tend to consume more electricity than conventional printers. To address this problem, we redesigned the energy conservation aspects of our 535PD Bubble Jet printer. Our efforts resulted in lower energy consumption for this product and an Eco-Mark, as well.



PIXUS 850i

**● Daily Electricity Consumption**



\*Evaluation Conditions: Printer is switched off for 16 out of 24 hours. The remaining 8 hours are composed of "printing time" and "standby time." "Printing time" is for the continuous printing of 15 color pages and 15 monochrome pages.

\*The Printer Eco-Mark is one type of third-party eco-label. To win the right to display this mark, 38 rigorous standards must be met (For copying machines there are 38 items. Canon has won the right to display Eco-Marks for 48 different machines in 11 product series). These standards address: energy efficiency, 3R design of printers, use of recycled plastic, collection of used cartridges, and elimination of hazardous substances. They involve all phases of the product life cycle, from product design, to production, usage, recycling, and disposal.

**Topics — Energy Efficiency through Low-Energy Consumption Mirror Projection Mask Aligners**

To make the production of liquid crystal displays more efficient, we have commercialized our MPA-7500 and MPA-7500CF low-energy consumption mirror projection mask aligners.

These devices are capable of fully exposing the world's largest panels (up to 1,100mm x 1,250mm) and can be used for producing liquid crystal displays of over 50 inches. When used for 17-inch panels, they consume less than half the energy required by Canon's earlier product, the MPA-5000.

In recent years, adoption of liquid crystal displays for personal computers and televisions has grown rapidly. Liquid crystal displays use 40% less energy than needed for cathode-ray tubes. By providing production technology for liquid crystal displays, Canon is helping to reduce indirect environmental burden.



MPA-7500

Model	Introduced	Energy Consumption
MPA-5000	February 1997	0.155kWh/panels
MPA-7500	February 2002	0.074kWh/panels

# Working Toward a Global Recycling-Oriented Society

We are pursuing inverse manufacturing to maximize resource productivity and provide the most efficient products possible.

## Inverse Manufacturing

In our quest to be a global corporation whose practices are consistent with the needs of a recycling-oriented society, we continue to develop our inverse manufacturing (IM)\* activities. IM is aimed at the development of an advanced product life cycle system that takes into account recycling at the development and design stages in order to maximize resource efficiency.

To that end, we have assembled a worldwide recycling system with centers in the Americas, Europe, and Asia. These centers share information and resources and are working to achieve resource recycling on a global scale. Lower environmental burden and greater economic efficiency will be achieved by employing collected used products as resources and reducing our use of virgin materials.

\*Inverse Manufacturing

Traditional manufacturing focuses on the conventional process of design, manufacturing, and use. It pays little, if any, attention to the "inverse" processes of waste disposal, reuse, and recycling. Inverse manufacturing solves this problem by adopting a comprehensive approach that considers a product's entire life cycle, including both the design-manufacturing-use processes, and the "inverse" processes.

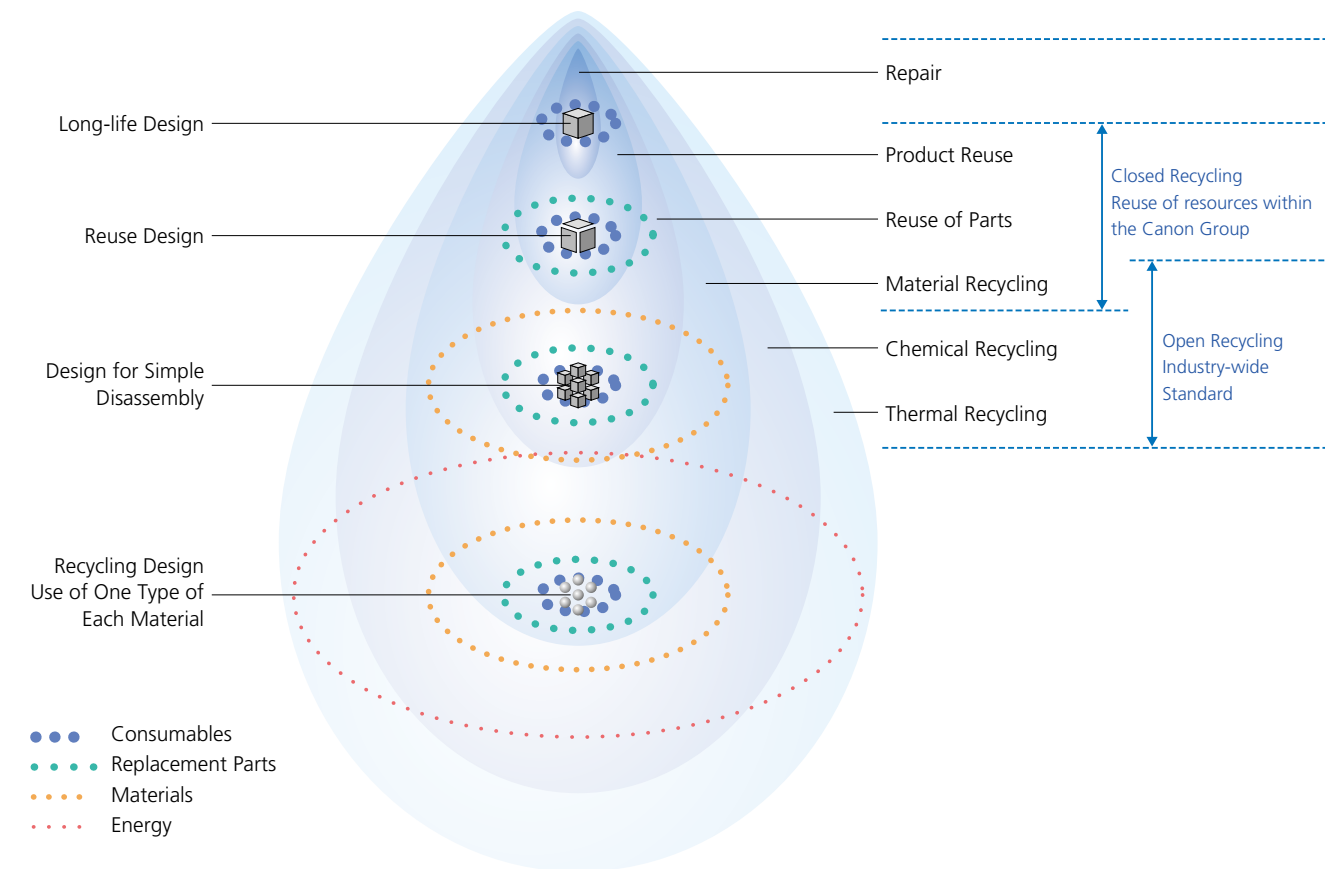
## Use of Recycled Plastic

Plastics and metals make up more than 70% of the materials and parts used in Canon products P.12. For metals, there exist already recycling systems provided by specialist companies; but for plastics, technical and system issues must be overcome before similar recycling systems can be established. One particularly challenging issue has been the difficulty of developing recycled materials that meet the rigorous fire, safety and quality standards covering business machines. In response, Canon has given high priority to the development of plastic recycling technologies and the building of a system for collecting used products.

As a result of our efforts, we collected approximately 7,327 tons of plastic in 2002 and used approximately 6,880 tons as recycled plastic. Cumulatively, we have collected approximately 44,352 tons of plastic since 1990 and used approximately 32,586 tons as recycled material.

We have done more than laws and regulations require for removing hazardous substances from our products and actually eliminated specified brominated flame retardants (PBB, PBDE) P.20 from the plastics we used in 1989.

## Global Resource Recycling Model (the "IM Drop") Based on Inverse Manufacturing



## Topics — Development and Use of a Fully Automated Toner Cartridge Recycling Plant

At Canon, we accepted the challenge to improve the way toner cartridges are recycled and set our Canon Recycling Operation Center (CROC) in Japan to work on finding a better way to perform this work. The solution it developed was a fully automated recycling plant, which began operations in 2002. At this plant, collected cartridges are simply placed into equipment that automatically sorts materials into groups for steel, aluminum, HIPS (high-impact polystyrene) and other types of plastics. The HIPS that emerges from this process is of high purity and has been approved for flame resistance (UL certification). By using this material again in cartridges, we have succeeded in implementing closed material recycling.

When development, production, use, collection and recycling take place in the same region, environmental burden is lowered and economic efficiency, based on a consideration of a product's life cycle, becomes possible.



CROC recycling plant

## Topics — Remanufacturing of Digital Copying Machines

In 2002, we began to remanufacture used GP405 copying machines in Japan. When a GP405 is collected from a customer and brought to one of our collection centers located throughout Japan, we examine its condition and then send it on to one of our production plants. There, parts are inspected for wear and those that are still good are reinstalled. We reuse 74% of these parts in terms of weight and 80% in terms of the total number of parts.

Each remanufactured GP405 is fitted with a new exterior cover, so it looks the same as a new product. Telecommunications and other functions are updated to the level of our latest products and we guarantee our remanufactured GP405s as new products.



Remanufactured GP405

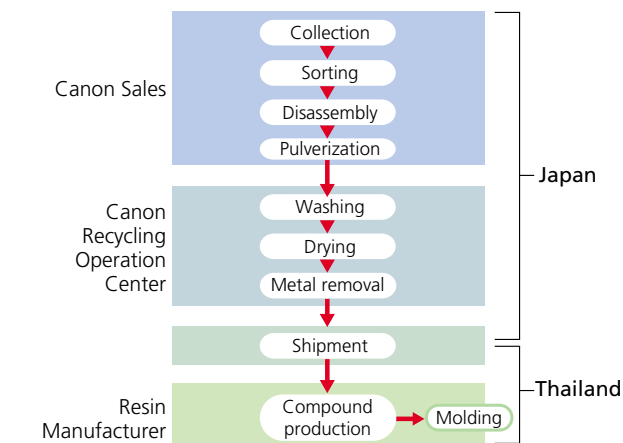
## Topics — Building a Recycling System for Plastics

In 1999, Canon began to collect used plastic parts, mainly exterior covers, in eastern Japan\*. Three years later, the collection area was expanded to all of Japan. Collection of paper cassettes from copying machines was also started. The HIPS recovered from these paper cassettes undergoes washing, removal of foreign matter and other reprocessing in Japan and is then sent to Thailand. There, local plastics manufacturers repelletize this material and recycle it into modified polyphenylene ether (m-PPE) resin. This recycled resin has won UL electrical safety certification and is equal in quality to virgin material. We use this resin to make Bubble Jet printer power supply covers.

In July 2002, we took another step forward in our recycling efforts when we began working together with other manufacturers to recycle PC-ABS used for the exterior covers of copying machines.

\*Excluding Hokkaido and some parts of the Tohoku region

### Shipment of Material from Japan to Thailand



## Full-Scale Effort to Develop Environmental Businesses

Over the years, we have developed environmental technologies and know-how. Now we have begun putting it to work for society through new environmental businesses.

### Canon's Development of Environmental Technologies

We have developed numerous technologies for lowering the environmental burden of our products and our production processes. For example, technologies we have created for our products and parts include on-demand fixing and IH fixing technologies **P.21** to improve energy efficiency, ozone-free electrical charging technology to keep usage environments clean, and technologies for recycling products and replacing hazardous substances with safer alternatives. Similarly, we are using production technologies that lower our environmental burden.

Our own R&D has produced the technologies we use for decomposing and rendering hazardous chemicals harmless and led to our application of biotechnology as environmental technology. We have incorporated our chemical decomposition technologies, one using low-voltage plasma and the other photo-activated water, into commercial equipment.

These technologies offer benefits beyond our own company. We are developing them into new businesses so that other companies and the whole of society can benefit.

### Development of Businesses Based on Environmental Technologies

Promotion of environmental businesses was one of the Mid-Term Environmental Goals we established in November 2000. We put in place an organization for promoting commercialization of environmental technologies and then, as we increased the number of employees assigned to this work in July 2002, created our Environment New Business Center. It became our entry into the world of environmental business.

Seizing on the opportunity presented by the implementation of Japan's Soil Contamination Countermeasures Law in February 2003, we created an engineering business to test and evaluate soil and groundwater contamination and implement remediation measures when called for. This business applies environmental analysis technology we have been refining for more than 15 years. It has earned the solid confidence of users and we are working to apply it in the high-value-added field of ultramicro analysis. Our technology for rendering hazardous substances harmless has given rise to several products for the environment that we have already begun to market.

### Canon's Principal Environmentally Conscious Technologies

#### ■ Environmental Technologies as Businesses

- Technology for rendering VOCs harmless
- Photo-activated water for decomposing soil contaminants
- Environmental measurement and assessment

#### ■ Technologies for Minimizing the Environmental Burden of Products and Parts

- On-demand fixing technology
- Ozone-free electrical charging technology
- Lead-free lenses
- Lead- and halogen-free technologies
- Hexavalent chromium-free technology
- Biopolymers

#### ■ Technologies for Minimizing the Environmental Burden of Production

- Technology for halving glass sludge
- Technology for eliminating special solvents and gases
- Rare earth metal recovery technology

#### ■ Product Recycling Technologies

- Dry ice cleaning technology
- Sandwich molding technology

### Topics — Environmental Measurement and Assessment Business

In April 2001, we completed three environmental analysis centers, one each at Shimomaruko (Tokyo), Toride (Ibaraki Prefecture, Japan) and Utsunomiya (Tochigi Prefecture, Japan). In August of that year, we became the first Japanese manufacturer to gain accreditation as an environmental analysis and testing laboratory under ISO/IEC 17025\*1 criteria. This accreditation is a sign of the reliability of the analysis and measurement data produced by these centers.

We gained registration as a Designated Testing Institution under the Soil Contamination Countermeasures Law in January 2003. We now perform environmental measurement and analysis of water, air, soil, waste, materials, noise and vibration, foul odors, designated buildings, and work environments. In performing this work, we apply ICP mass spectrometers, ion chromatographs, gas chromatograph mass spectrometers, atomic absorption spectrometers and absorptiometers. When measurements have been completed, certified environmental measurement specialists issue measurement certificates\*2.



\*1 An international standard for environmental analysis and testing laboratories. The technical elements of this standard are as demanding as those of the ISO9000 series standards.

\*2 This certificate is issued by a certified environmental measurement specialist as a public testimony to the accuracy of measurements performed for a third-party.

### Topics — Environmental Remediation (Soil and Groundwater Testing and Remediation)

Our Environment New Business Center has created a system for providing total solutions encompassing everything from testing plan proposal to actual testing (sampling and analysis), risk evaluation, engineering services to implement contamination countermeasures, and monitoring. These services support implementation of the Soil Contamination Countermeasures Law.

Two devices we use for decomposing and rendering Volatile Organic Compounds (VOCs) harmless are a Photo-Activated Water Treatment Device (see photo) and a low-voltage plasma device. The traditional method of remediation involves the complicated process of collecting and transporting contaminated material to incinerators. These devices are compact and make on-site remediation possible, so they are expected to be widely adopted.

On another front, we are working with Obayashi Corporation to develop a vacuum thermal absorption system for ridding soil of VOCs. This system, which is now undergoing testing, promises remediation in less time and with less expense through its use of vacuum technology.

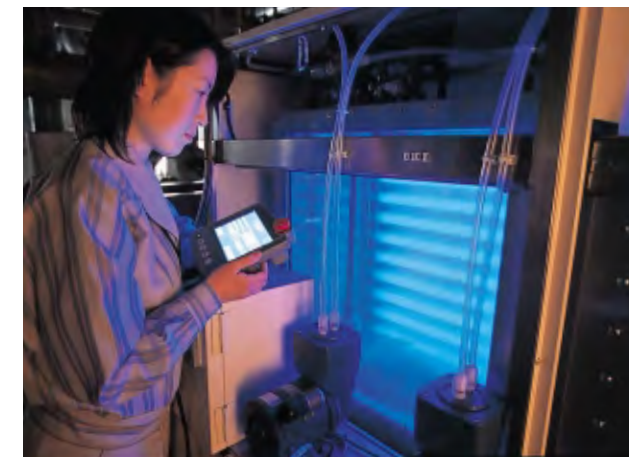


Photo-activated water experimental facility

### Topics — Grand Awards for the Protection of the Ozone Layer

For developing two technologies that eliminate the need for HFC134a, an aerosol that contributes significantly to global warming, Canon received the Judging Committee Special Award at the 5th Annual Grand Awards for the Protection of the Ozone Layer.

One of these technologies is applied in our Environmentally Conscious Mold Releasing Agent Application System. This automatic system uses air to apply mold-releasing agent\* and is as effective as the previous method, which used aerosol cans for this purpose.

The second of these technologies is used in our Environmentally Conscious Spot Refrigeration Apparatus. This piece of equipment uses liquid carbon dioxide to refrigerate semiconductor products and electrical circuits. This method has only 1/1300 the global warming effect of the previous aerosol-based system. The carbon dioxide gas it uses is recycled gas from our production plants.

With the implementation of these two technologies, we ceased using greenhouse gases in 2000. This means the elimination of

equivalent CO<sub>2</sub> discharges of over 3.5 million tons per year, the amount of CO<sub>2</sub> that would be a byproduct of the energy consumed by approximately 380,000 people over one year.

\*Mold-releasing agent is used in the manufacture of inkjet printer heads, camera parts, lenses and other items.



5th Annual Grand Awards for the Protection of the Ozone Layer

## Group's Environmental Management Begins at Operational Site Level

We use our Environmental Evaluation System to fully integrate the environmental activities of individual operational sites into environmentally conscious management at the Group level.

### Measures to Reduce Environmental Burden at Operational Sites

We examine environmental burden at operational sites in terms of Global Warming Prevention and Energy Conservation; Resource Conservation; and Elimination of Hazardous Substances. We then set Mid-Term Environmental Goals P.13 accordingly. The environmental burden reduction measures we pursue are based on efficiencies gained through cell production P.18 and production technology innovations. The introduction of environmental equipment and facilities, and the application of management systems are also exploited in this endeavor.

To meet our Global Warming Prevention and Energy Conservation goals, we are implementing energy conservation measures and have almost completely eliminated non-energy-related greenhouse gases. In pursuit of our Resource Conservation goals, we continue to make progress in converting waste into valuable goods and reducing the overall volume of waste. And regarding our Hazardous Substances goals, we have established internal rules that are stricter than laws regulating chemical substances. We have classified approximately 2,200 substances into three ranks and are pursuing control, reduction and elimination initiatives.

We are working to gain ISO14001 certification at our production plants, and also at marketing subsidiaries and affiliates P.57. In 2001, we introduced our Environmental Evaluation System, linking the environmental activities of individual operational sites to environmentally conscious management at the Group level.

### Measures to Reduce Environmental Burden at Operational Sites

#### Global Warming Prevention and Energy Conservation

- Cell production activities
- Improvement of production equipment and processes (production of chemical products)
- Implementation of cogeneration (Oita Canon Materials)
- Upgrade to high-efficiency equipment (heat source equipment, air conditioning equipment, etc.)
- Improvement of lighting devices, upgrade of various types of power equipment to employ inverters

#### ISO14001-Based Management

#### Resource Conservation

- Thorough sorting and disassembly for recycling
- Implementation of a closed wastewater system (Utsunomiya, Canon Zhuhai, Inc.)
- Waste solvent reduction activities (Canon Dalian Business Machines, Inc., Hirosaki Seiki, Inc.)
- Use of less packaging materials for shipping parts (conversion from stretch film to pallet bands)

#### Elimination of Hazardous Substances

- Elimination of dichloromethane for thin-film coating (Canon Dalian Business Machines)
- Elimination of hazardous substances by revising business activities

### Major 2002 Initiatives and Results

The most notable result achieved at our production plants in 2002 was in completing the introduction of cell production. We embarked on this effort in 1998 to reduce environmental burden at all of our production plants.

Progress toward our Global Warming Prevention and Energy Conservation goals is illustrated by the introduction of energy conservation devices at individual operational sites. A cogeneration system at Oita Canon Materials Inc. and other efforts throughout the Group have also been undertaken in the spirit of the Kyoto Protocol. To meet our Resource Conservation goals, individual operational sites revised and optimized their sorting and collection rules in line with operational changes. The objective was not simply recycling, but to turn waste into material with the highest possible added value. Significant effort is also being made to reduce waste fluids, wastewater, and use of packaging materials. Our mid-term goals for the Elimination of Hazardous Substances have already been achieved. We upgraded hazardous substance management systems at overseas operational sites to bring them up to the level of the system used in Japan, and continue to reduce or eliminate our use of hazardous substances.

### Topics — Environmental Assessments in Vietnam and Suzhou, China

When Canon establishes an overseas operational site, we conduct environmental assessments in line with local laws and our own standards, just as we do for new operational sites in Japan. We spend more time setting up an overseas operation than we do setting up an operation in Japan. Everything from studies of candidate sites to plant start-up gets extra attention. The added time allows us to take adequate preparatory measures and makes it possible to get plant operations off to a smooth start.

In 2002, we performed such environmental assessments in Vietnam and in Suzhou, China. Operating conditions at both plants are good, and though we have yet to obtain post-environmental-assessment evaluations, we have already begun working to acquire ISO14001 certifications.

The plant in Vietnam is an assembly plant, so it produces no

emissions which are a source of heavy environmental burden. Since the start of operations at that plant, we have been engaged in a local plastic recycling initiative.



Environmental assessment at Canon Vietnam Co., Ltd. (soil boring and analysis work)

### Topics — Implementation of a New Closed Wastewater Treatment System

The lens polishing and washing processes at Canon's Utsunomiya Plant use large volumes of water and a closed wastewater treatment system has been in use. However, this system was both labor- and cost-intensive. Also, changes in production meant even higher water quality was needed. In 2001, we installed a new filtration device with a hollow fiber ceramic membrane. This device is commonly used to clean water before it flows into water systems and to treat municipal wastewater. Canon was the first private-sector entity to use this filtration device and finally succeeded in implementing it after five years of trial and error.

This new device provides higher water quality than did the previous system. It is simpler in design and costs approximately 28 million yen less in annual operating expense. It also cuts carbon dioxide emissions by 258 tons per year and has benefits in terms of lower energy consumption and a smaller contribution to global warming.

In April 2003, a closed wastewater treatment system was also installed at Canon Zhuhai, Inc.

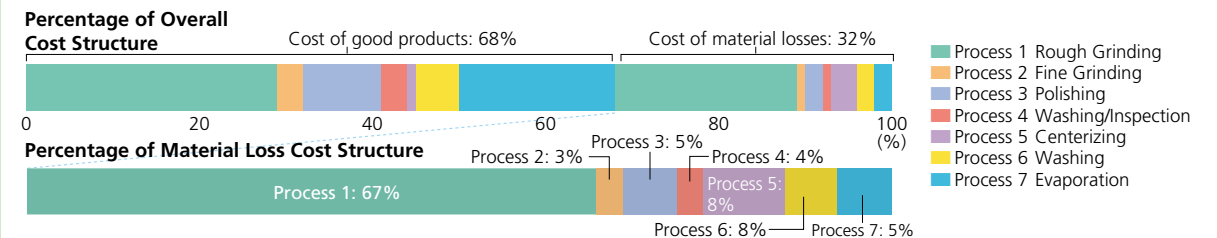


New Closed Wastewater Treatment System (membrane filtration device)

### Topics — Introduction of Material Flow Cost Accounting

Material flow cost accounting is an environmental management accounting tool that focuses on material losses (waste). Such calculations are not possible with conventional cost accounting. With material flow cost accounting, physical amounts of raw materials put into the production process are identified and tracked. Losses are recorded by material name and amount for each process. Values are attached to losses and when this information is applied to loss reduction initiatives, environmental burden and costs can be lowered simultaneously.

In 2001, we began participating in a test introduction of material flow cost accounting overseen by the Japan Environmental Management Association for Industry (JEMAI). Having confirmed the usefulness of this accounting system in material purchasing and processing, we are now working to implement it as a way of reducing material losses. As we push forward with the horizontal development of the Group's production plants, we will also pursue vertical development of upstream and downstream industrial relationships.



Most of the material loss from lens processing (67%) occurs during the rough grinding process. The cause of this loss was traced to the grinding sludge. We worked with the raw material manufacturer to reduce these losses.

## Boosting Company Value by Meeting Our Responsibilities to Society

Canon's declared policy is to give the highest priority to providing excellent products and services. Our business is carried out with fairness and integrity both inside and outside the company. We have established rules as guidelines for conduct and contribute to society even at the level of individuals.

### Position on Social Responsibility

The Canon Group views its responsibility to society from two perspectives: contributions to society and fair business activities.

Our first responsibility is to provide excellent products and services. However, as a member of society, we also believe in the importance of making contributions outside of business.

We believe business should be characterized by fairness and integrity and that there should be no improper activities or actions violating corporate ethics or social norms. This comes before all else. Beyond that, Canon believes companies are responsible for helping their employees earn livelihoods that are both stable and have the potential for improvement; paying returns to stockholders; pursuing sustainable operations; and increasing company value.

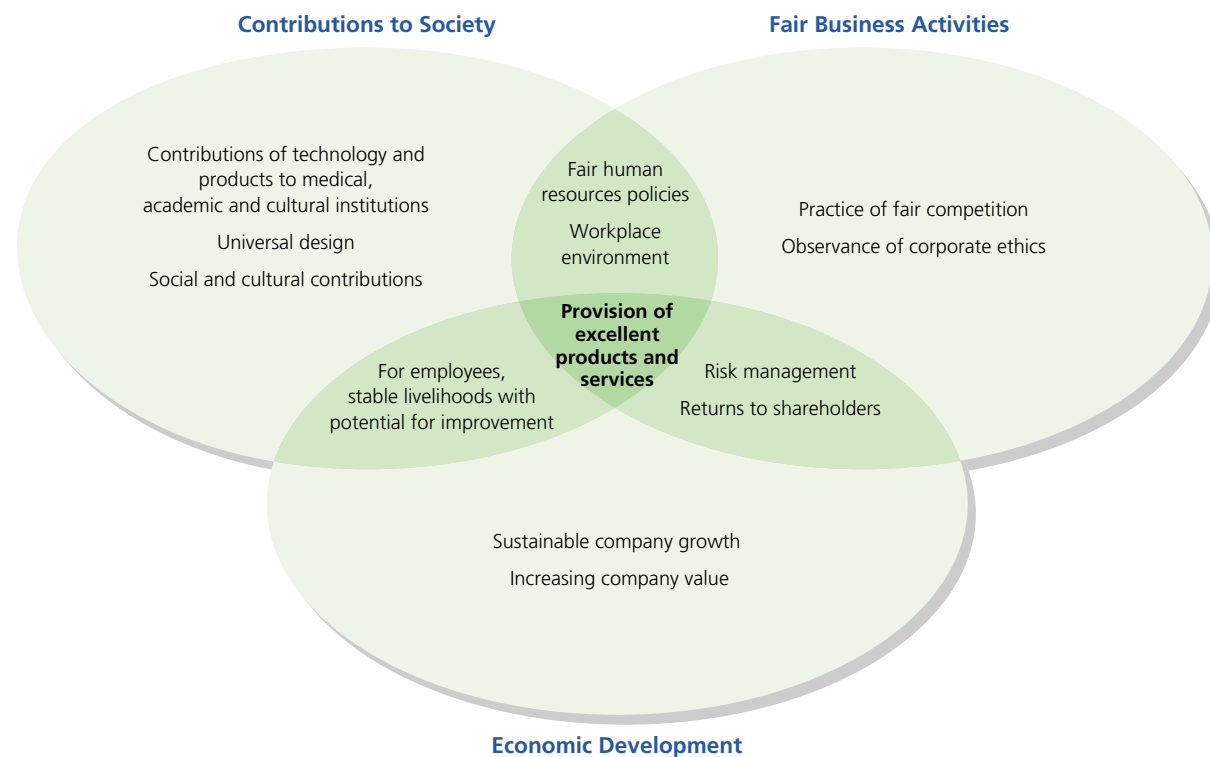
At Canon, we also devote significant effort to communication activities and information provision appropriate for helping society understand our management position.

### How Canon Meets Its Social Responsibilities

Canon's Global Legal Affairs Coordination Committee manages the information that ensures our products and services are in compliance with the law. Substantial effort is devoted to universal design and barrier-free design, so that we can provide products that are easy for anyone, including the elderly and the physically challenged, to use. Questions about products and services are addressed with detailed answers and support through Canon Sales and from operational sites throughout the world. Social contributions include easy-to-use, high-performance medical equipment and advanced technology for academic research of the South Pole and outer space.

For its employees, Canon has implemented human resources systems that are fair; created work environments that are challenging, safe and comfortable; and put in place various rules to make the pursuit of fair business practices possible. Canon also encourages employees at both the Group and individual operational site level to participate in activities that benefit society.

### Canon's Social Responsibilities



### Topics — Contributions to Medical Equipment

In January 2003, Canon introduced the world's first fully automatic tonometer, the TX-F, which examines both left and right eyes simultaneously. This product has vastly improved treatment procedures by rapidly performing examinations for glaucoma and other conditions.

CANON STAAR Co., Inc., a Group company that develops and manufactures lens implants used in treating cataracts, earns the respect of those in the ophthalmic medical community. CANON STAAR has produced four charity videos, providing an overview of valuable surgical techniques introduced at ophthalmic medical conferences up to 2002. It sells this video material to the ophthalmic medical community, which has reacted with overwhelming support. Proceeds from these sales are donated to the Eyemate Foundation, which trains seeing-eye dogs and works in other ways to help people with impaired sight live independently.

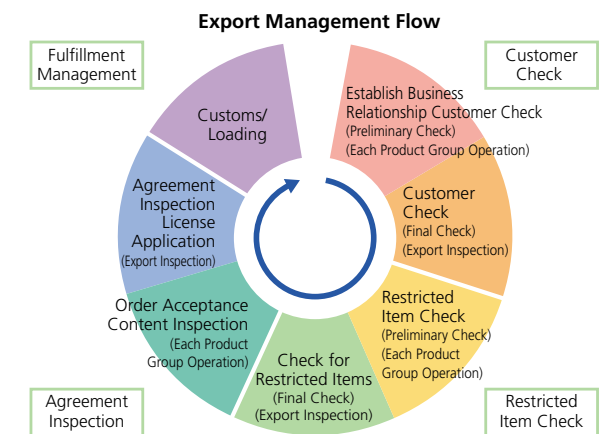


Contribution to the Eyemate Foundation

### Topics — Responding to Export Regulations for Security Enhancement

For all electronic equipment, there is a risk that individual technologies will be used for unexpected purposes. There are export regulations specifically intended to avoid this risk. Two examples are Japan's Foreign Exchange and Foreign Trade Law and the US Export-Control Law. Canon, of course, exports products and has put programs in place to ensure we are in compliance with these laws. 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. The export controls we implement are extremely thorough in terms of respect for related laws, meeting our social responsibilities and risk management.

In response to Japan's Catch-All Control, which took effect in April 2002 and is intended to prevent the dissemination of weapons of mass destruction, we revised the Canon's compliance program for the security export control and related internal rules. These revisions are intended to prevent the use of Canon products or technology in weapons of mass destruction and we have reinforced our export management based on them.



Canon's export management includes the above processes, which take place between the start of discussions with a customer and the shipment of products. Canon performs checks and inspections necessary for export management with security assurances.

### Topics — Renewing the WWF Agreement in Europe

In December 2002, Canon Europe Ltd. renewed its sponsorship agreement with WWF for a third term. Under the two-year agreement, Canon and WWF will continue to raise awareness of the environment through joint communications activities, such as audience-specific educational projects, product and retail promotions, a unified presence at trade fairs and events, and internal programs to boost employee morale. Canon Europe became a WWF Conservation Partner in 1998. We have since helped WWF enhance, completely digitize and make its superb image collection available online to its offices around the world.



James Leipnik, Canon Europe's Chief of Communications and Corporate Relations (right), and Paul Steele, WWF International's Chief Operating Officer, signing the renewal



# Environmental Assurance Activities Based on Environmentally Conscious Global Management

We revamped our system for promoting environmental assurance activities, creating a system that allows for rapid decision-making. To further enhance the environmental consciousness of our management, we have incorporated environmental evaluation results into our evaluation system on a consolidated basis.

## Global Environment Promotion System

In January 2002 Canon established its Global Environment Promotion Headquarters and below it created the Environment Management and Engineering Center to propose environmental strategies for the entire Group and promote the development of environmental technologies, and the Environment New Business Center to stimulate the development of environmental businesses. Environmental assurance management divisions were set up as line organizations to address environmental issues in individual Product Group Operations and at operational sites. In

May 2003, we established the Global Environment Expert Committee within the Executive Committee to propose strategies for environmentally conscious management.

Our Environment Promotion Committees are also working in Europe, the Americas, Asia, and Oceania, to pursue regional environmental assurance activities. They communicate with each other over an information network linking 26 countries. This makes it possible for all of our Product Group Operations to access information on the results of environmental initiatives in locations around the world. It helps rapid decision-making and allows management to take an even more active role in addressing environmental problems.

## Global Environment Assurance Activities

At Canon, environmental assurance activities are a major issue in all aspects of management. To achieve speedier decision-making and more effective decision implementation, we began to revamp our system for advancing environmental assurance activities in 2001. Responsible for environmental assurance was the Global Environment Promotion Committee. Its activities needed upgrading and from January 2002, we reconstituted the committee into our Global Environment Promotion Headquarters. We also revised the system to advance environmental assurance in each product, production and sales organization. This was done after determining the activities of each line organization were functioning smoothly.

Environmental assurance objectives within the Canon Group were clarified and various environmental rules were instituted or revised. Product-related environmental activities are now implemented under Product Environmental Assurance and other rules, and assured based on Product Assessments. For operational sites, environmental activities are implemented according to Production and Product Environmental Assurance Rules and the ISO14001 standards for environmental management systems. To determine whether these rules and standards are being properly followed, we established our Environmental Audit Rules and made clear the lines of responsibility for internal and third-party audits.

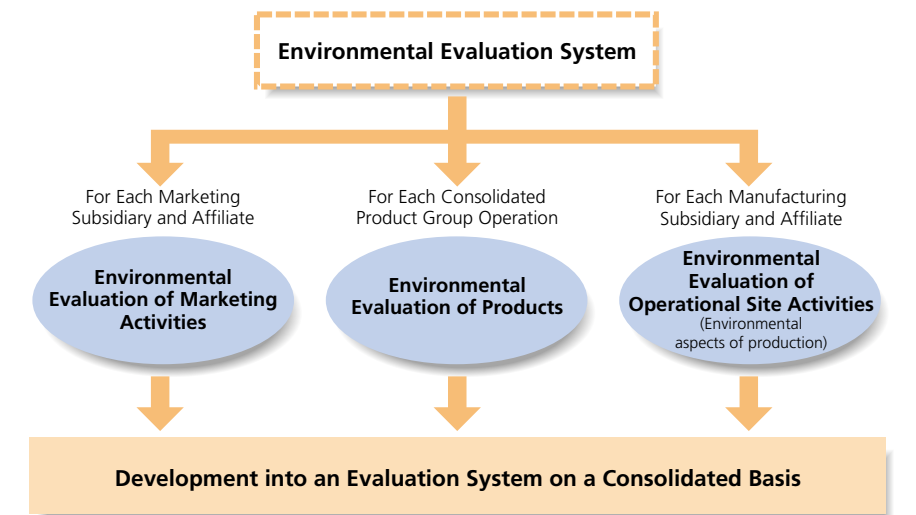
## Environmental Evaluation System

In 2001, we created an Environmental Evaluation System as part of our evaluation system on a consolidated basis, the foundation for our consolidated management system. Under the Environmental Evaluation System, checks on the activities of consolidated Product Group Operations, principal manufacturing subsidiaries and affiliates, and marketing subsidiaries and affiliates, are performed by our Global Environment Promotion Headquarters. Evaluations of consolidated Product Group Operations and principal manufacturing subsidiaries and affiliates focus on performance. Evaluations of marketing subsidiaries and affiliates focus on the condition of systems for effecting environmentally conscious management in light of differences in infrastructure and other factors, as well as local environmental regulations.

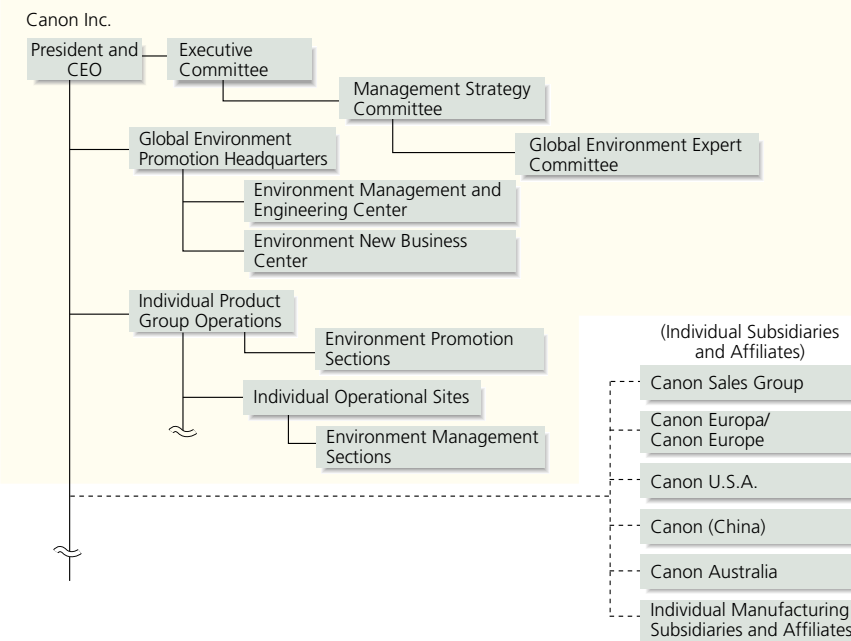
Evaluations on a consolidated basis are performed and results announced once per semi-annual period. Environmental issues account for approximately 10% of the total number of points that can be awarded. Our Environmental Evaluation System has already had positive impacts on our environmental activities and on our profits. As our environmentally conscious management evolves, we will add evaluation items that will help us to achieve further improvement.

For the best approach to environmental issues, we have established our Environmental Investment Standards. By setting environmental investment priorities, we

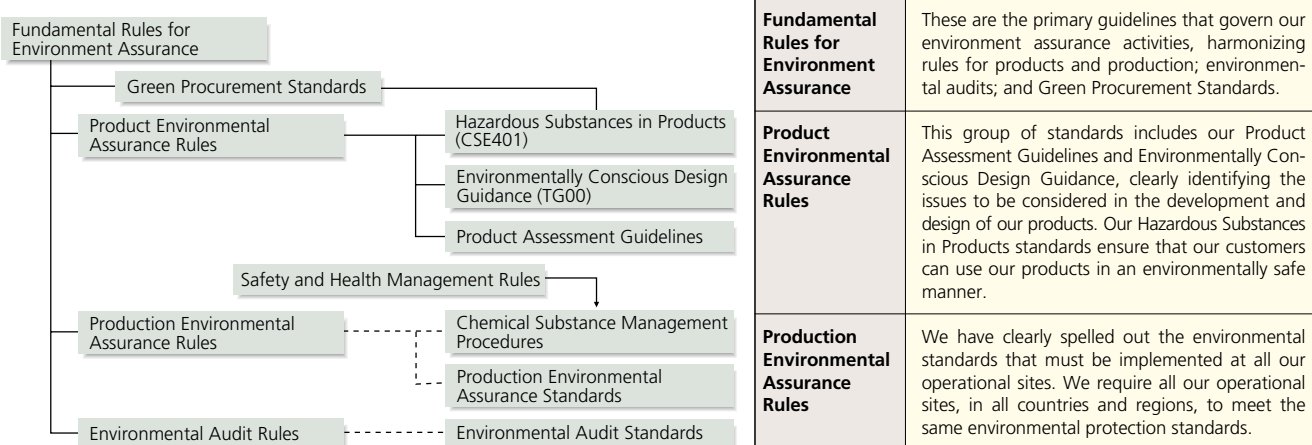
have clarified investment choices and focuses and are making investments with budgets that are most favorable from an overall perspective.



## Global Environment Promotion Organization



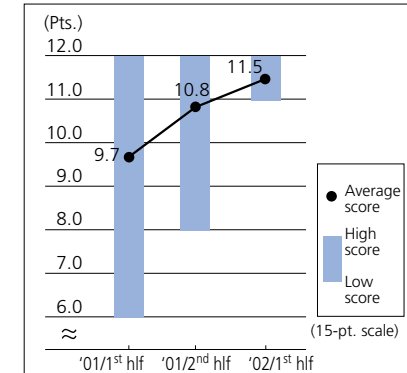
## Rules for Environment Assurance and Related Areas



## Evaluation Standards

<b>Consolidated Product Group Operations</b>	<ol style="list-style-type: none"> <li>1) Energy efficiency: Comparisons to previous models.</li> <li>2) Resource conservation: Use of recycled materials, reuse of parts, initiatives to make products lighter and more compact.</li> <li>3) Substitutes for hazardous substances: Substitute parts as a percentage of all parts.</li> <li>4) Results of operational site activities: Environmental evaluations of each operational site related to each Product Group Operation.</li> </ol>
<b>Manufacturing Subsidiaries and Affiliates</b>	<ol style="list-style-type: none"> <li>1) Observation of internal environmental standards: Whether the company has met internal rules that are stricter than outside laws and regulations on wastewater and gas discharges.</li> <li>2) Energy conservation: Percentage reduction in energy consumption.</li> <li>3) Waste reduction: Reduction percentage and recycling percentage.</li> <li>4) Reduction in chemical substance discharges: Discharge reduction percentages for PRTR substances and for the B-rank and C-rank substances on the company's own list of controlled substances.</li> </ol>
<b>Marketing Subsidiaries and Affiliates</b>	<ol style="list-style-type: none"> <li>1) Construction of an Environmental Management System (EMS): Status with regard to construction of a system for promoting an EMS, setting of goals and implementation of environmental education.</li> <li>2) Product recycling: Status with regard to collections of used products and percentage recycled.</li> </ol>

## Environmental Evaluation Results (Consolidated Product Group Operations)



Environmental evaluations have had a major impact on Canon's environmentally conscious management, helping to bring about overall improvements.

## Environmental Investment Standards

Priority	Definition	Specific Activities
<b>Rank A</b>	Require immediate investment	<ul style="list-style-type: none"> <li>• To clean up contamination</li> <li>• To correct violations of legal standards</li> <li>• To respond to complaints</li> </ul>
<b>Rank B</b>	Require investment within legally designated period	<ul style="list-style-type: none"> <li>• To reduce energy consumption per production unit by 1% in accordance with the Law Concerning the Rational Use of Energy</li> <li>• To achieve within the mid- to long-term plan (3-5 years)</li> </ul>
<b>Rank C</b>	Require investment within planned period	<ul style="list-style-type: none"> <li>• To achieve industrial standards and goals</li> <li>• 25% reduction energy consumption per production unit in 2010</li> <li>• To control emissions of hazardous substances: Reduction in dichloromethane</li> </ul>
<b>Rank D</b>	To achieve corporate goals and standards	<ul style="list-style-type: none"> <li>• Investment for achieving mid-term goals</li> </ul>
<b>Rank E</b>	Other environment-related investment	

# Pursuing Business Activities with the Lowest Environmental Burden for the Region through Steadfast Environmentally Conscious Management

We are expanding our acquisition of ISO14001 certification, and realizing efficient, effective environment assurance based on internal audit standards that are more rigorous than relevant laws and regulations.

## Environmental Management System Operations

In 1995, Canon Inc. became the first Japanese company to gain BS7750 certification.\*1 This certification with international environmental standards was the precursor to the current ISO14001 certification, which manufacturing and marketing subsidiaries and affiliates all over the world have been gaining in increasing numbers since its inception.

By the end of 2002, 39 operational sites, including Canon Sales, had received this certification. Others that have yet to do so are operating with management systems comparable to those that have won certification.

To clarify environmental assurance standards and reduce risk, we established our own environmental assurance standards based on respect for the laws and regulations of Japan and other countries. Concerning discharges into the water and air, we have set standards stricter than those mandated by law. On our homepage we announce the results individual operational sites have achieved in meeting them.

## Monitoring and Measurement

In accord with Article 107 of Japan's Measurement Law, we have established a Measurement Certification Division. This division uses qualified environmental analysts and the latest measurement devices to analyze and evaluate environmental burden. Measurement plans for all operational sites in Japan, together with data on wastewater, soil, air, foul odors, noise, vibration, etc. and information on handling abnormal values, are managed in our Environmental Analysis Support System.

In August 2001, the Measurement Certification Division gained the ISO/IEC 17025 (Guide 25) certification for testing laboratories and is now able to apply its expertise outside of the company **P.25**.

\*Obtained in February 1995 by the Ami and Ueno Plants (The latter is now Ueno Canon Materials Inc.)

## Environmental Audits

To ensure our environmental standards are upheld, we established an environmental audit organization in 1993. It has been performing environmental audits at our production and R&D sites, both in Japan and abroad, since 1994. Our environmental audits include internal reviews by our headquarters and each operational site. We perform these audits efficiently and effectively and employ standards that are optimal from an overall perspective.

Environmental audits by our headquarters and by each operational site are conducted in accord with our Environmental Audit Standards, comprising principles, procedures, and requirements applying to environmental auditors. These standards are in compliance with ISO guidelines. Environmental audits by our headquarters also examine the status and functioning of product assessment systems at our R&D divisions.

We use the results of our environmental audits to continually improve our environmental management systems and environmental performance.

## Responding to Emergencies

At Canon, each operational site decides within its Environmental Management Goals how it will respond to unforeseen circumstances. They create decision-making systems to rapidly determine and implement appropriate actions, and take

every measure necessary to ensure that these systems function as intended. In the case of an oil spill, for example, trained personnel would immediately deploy oil barriers, as management sections are notified of the situation.

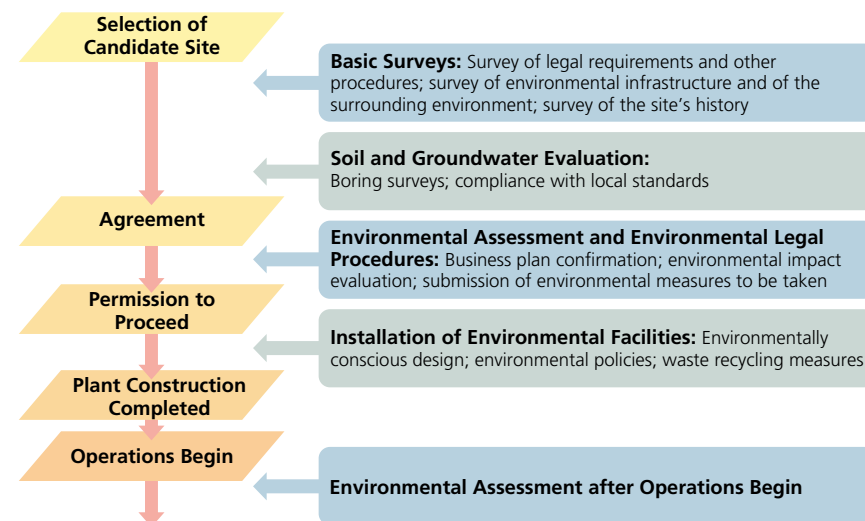
Meticulous attention is also paid to preventative measures. We have prepared guidelines for performing soil studies and environmental assessments; created our own construction standards; introduced secure wastewater facilities designed to protect the environment; and outlined how to manage measurement data.

## Environmental Assessments

Since 1990, we have performed an environmental assessment whenever we have established a new operational site. At every step, from the selection of candidate sites all the way through to the start-up of operations, we apply the same standards of environmentally conscious management, regardless of the site location.

For overseas operational sites, where regulatory standards and conditions differ from those in Japan, we apply Canon's standards on top of local ones. In selecting a possible location for a new operational site, we employ basic guidelines drawn up with the assistance of a local consultant. We finalize our decision and begin plant construction only after we have determined all of our standards have been met.

## Environmental Assessment Process



## Canon's Reaction to Detection of Chlorinated Organic Compounds in Soil and Groundwater

Canon has been especially concerned about protecting soil and groundwater since the 1980s and has undertaken various initiatives toward that end. We ceased usage of trichloroethylene, a chlorinated organic compound that has come to pose serious problems for society, after developing substitute technologies in 1996. We have also undertaken soil and groundwater testing to check for contamination by chlorinated organic compounds used in the past. As a result, we identified levels exceeding standards at our Toride Plant and some other locations.

### ○Response at the Toride Plant

In 1998, we reported to Toride City and Ibaraki Prefecture that we had detected chlorinated organic compounds in excess of standards at our Toride Plant. Acting on our own, we then installed monitoring wells within the plant grounds, treated pumped water and took other first-priority steps to remediate the soil and groundwater and prevent the contamination from dispersing outside the plant boundaries. More specifically, we employed vacuum extraction and other methods for soil remediation and techniques such as activated carbon adsorption treatment of aerified pumped water and activated carbon adsorption treatment of pumped water for groundwater remediation.

In November 2002, despite our best efforts, the chlorinated organic compound, trichloroethylene, and other substances were detected at levels exceeding standards at some of the monitoring wells. At that point, we requested Toride City and Ibaraki Prefecture to support us in addressing this situation and prevent any impact on the surrounding area. With their cooperation, we performed water quality tests on 245 wells within 500 meters of the plant site to make certain that contamination had not spread. No contamination thought to have originated from our plant was confirmed as a result of these tests. We then held briefings for residents to explain the situation and allay concerns. Our presentations at these briefings were detailed and included explanations of what further action we would take.

We are working closely with government agencies to perform remediation work within the plant site. Specifically, we will identify, and make arrangements to employ, the most appropriate remediation technology and implement remediation proce-

dures as soon as possible. We will do whatever we can to ensure the health and safety of local residents.

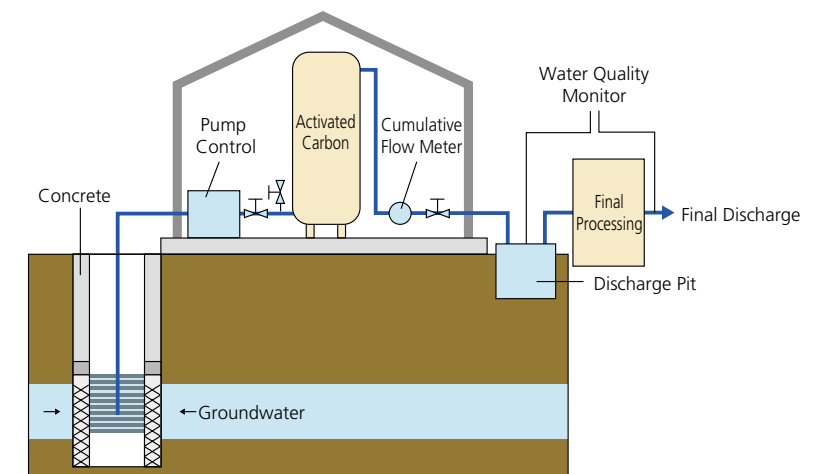
### ○Status of Other Operational Sites

As mentioned above, we have ceased using chlorinated organic compounds. We are also taking the most appropriate steps to address any aftereffects of our prior usage of these substances. Up to April 2003, we had reported contamination to governmental bodies and initiated measures to address soil and groundwater contamination at our Toride, Fukushima, Kanuma, and Canon N.T.C., Inc. (CNTC) Iwai Plants. For these and other sites as well, we have performed studies as required by Japan's Soil Contamination Countermeasures Law and related ordinances and are working to protect the soil and groundwater of surrounding areas.

### Status by Operational Site

Site Name	Reported to Government	Principal Contaminant	Remediation Measures	Wells Surrounding the Plant Site
Toride	1998	Trichloroethylene	Activated carbon adsorption treatment of aerified pumped water	Within standards
Fukushima	1990	Trichloroethylene		Within standards
Kanuma	1990	Tetrachloroethylene		In excess of standards*
CNTC Iwai	2002	1,1-dichloroethylene		Within standards

\*At the Kanuma Plant, the highest concentration of tetrachloroethylene detected at an area well was 0.089mg/l. The maximum acceptable concentration is 0.010mg/l.



Activated Carbon Adsorption Treatment of Pumped Water (Toride Plant)

# Making Our Products More Environmentally Conscious through Thorough Management of Environmental Information

All product-related environmental information is collated on our Intranet. This posted material ranges from development and design to procurement, production and disclosure information. The easy availability of such information helps us to efficiently and consistently produce environmentally conscious products.

## Product-Related Environmental Information System

At Canon, we post all product-related environmental information, covering everything from development and design to procurement, production and disclosure, on our Intranet. Doing this helps us to efficiently and consistently produce environmentally conscious products.

**Development and Design with DMR**  
For our development and design work we have implemented 3D-CAD software and use Digital Mockup Review (DMR). DMR makes it possible to simulate all development and design work, from the evaluation of designed parts to the confirmation of product and unit functions, on a personal computer\*1. Data on points needing improvement is fed back to planning, development and design departments. Resources, costs and time required for production of prototypes and for other steps are minimized. Knowledge gained in the development and design process is shared throughout the company via booklets, like *Environmentally Conscious Design Guidance and ECP (Environmentally Conscious Products) Design Examples*, and through a database on our Intranet.

### Green Procurement Information Management

When designers select materials and parts, they refer to CLEAN MATERIAL, our Green Material Information Management System. This system is a database of information on procured materials and parts. Information on action taken by suppliers to protect the environment is also kept in our Green Supplier Management System.

### Product Environmental Specification Management System

Our Product Environmental Specification Management System, CLEAN PRODUCTS, stores design data, product assessment information from the prototype stage, information on the degree of environmental consciousness of individual products, and production management system information. The system allows users to search for and compile information on parts, chemical substance content, and use of recycled materials for individual products. By using this information in design work, it helps to make our products even more environmentally conscious.

### Disclosure of Product Environmental Information

We also use CLEAN PRODUCTS as an information disclosure database. Internally, we employ it in conjunction with Eco-

Declarations\*2, a product environmental information disclosure system we adopted in September 2001. It is used to share information on our copying machines, printers, facsimile machines, and image scanners. In June 2002, we began using CLEAN PRODUCTS together with our PMI (Packaging Material Information) System\*3 to allow sales companies and others to download detailed lists of packaging materials.

CLEAN PRODUCTS also provides us with a means for managing the information sources for our Type III Eco-Labels (Eco-Leaf), a new channel for disclosing information to customers.

\*1 Development of one DMR function, the Eco-Design Function, is proceeding. Among its many goals is to make it possible to automatically compile data (for items such as reuse rates, recyclability rates, and hazardous substance content for units and products); assess and make determinations on design standards; determine ease of disassembly, recyclability, and eco-label compliance; and perform LCA and cost analysis.

\*2 The Eco-Declaration is a product environmental information format created in Northern Europe and now widely used by EU member states. Eco-Declarations are used for making bids to purchasers practicing green procurement. Eco-Declarations present information on environmental policies and management, environmentally conscious design, presence of hazardous chemical substances, various types of environmental characteristics, and packaging materials.

\*3 PMI (Packaging Material Information) is a system for disclosing information on the collection and recycling of product packaging materials. Disclosure of this information is required in European countries and Japan.

## Production Environmental Information System

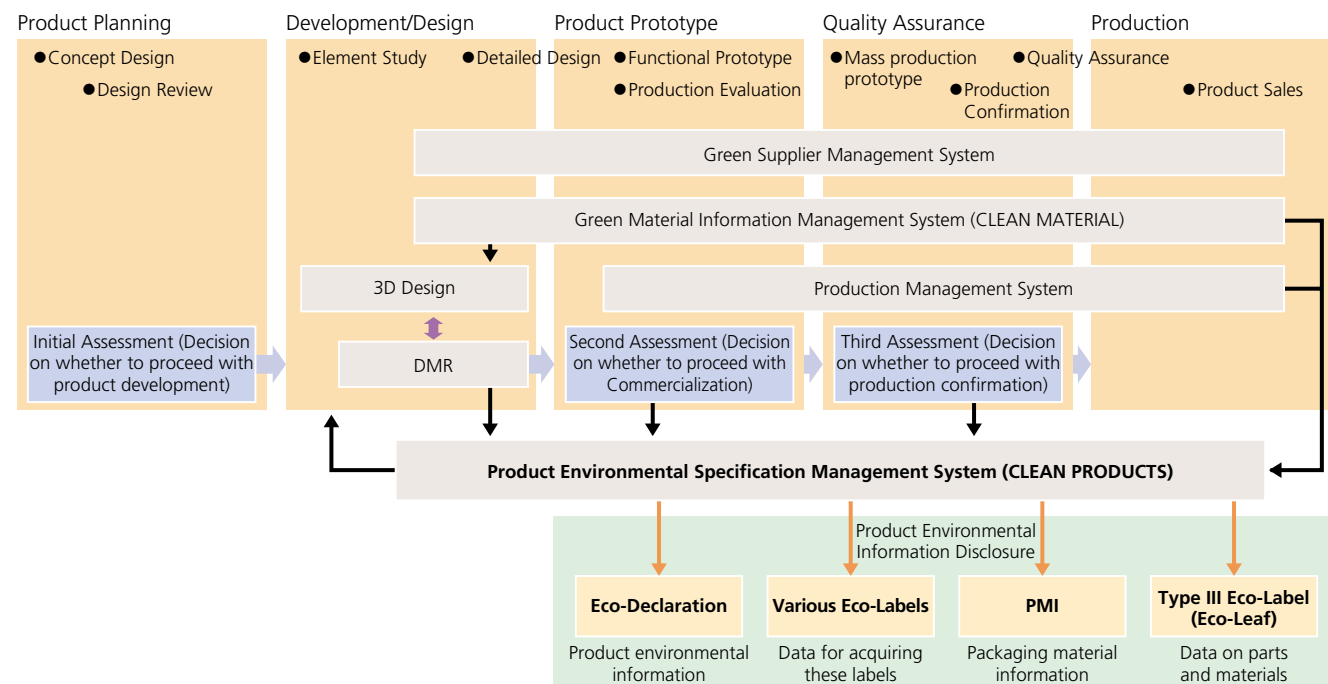
We introduced our Production Environmental Information System in January 2003 to centrally manage environmental information on our production plants. Under this system, information formerly gathered and reported through e-mail, surveys and various other channels is managed in a single Intranet-accessible database. Using our Intranet, each operational site enters environmental details and can compile facts according to its needs. This system is used by the Global Environment Promotion Headquarters to gather information on the entire Canon Group. It also serves as the database for compiling environmental accounting information.

The Environmental Performance Evaluation Indicators we introduced in 2003 is an evaluation tool that conforms to international ISO14031 standards and is linked to the Production Environmental Information System. Using this system, we evaluate 80 operations items and 18 environmental management items and determine scores for all 98. By clarifying environmental goals and progress in achieving them, we are attempting to improve the goal setting, self-evaluation and other aspects of operational site management and improve the efficiency of the Group's environmentally conscious management.

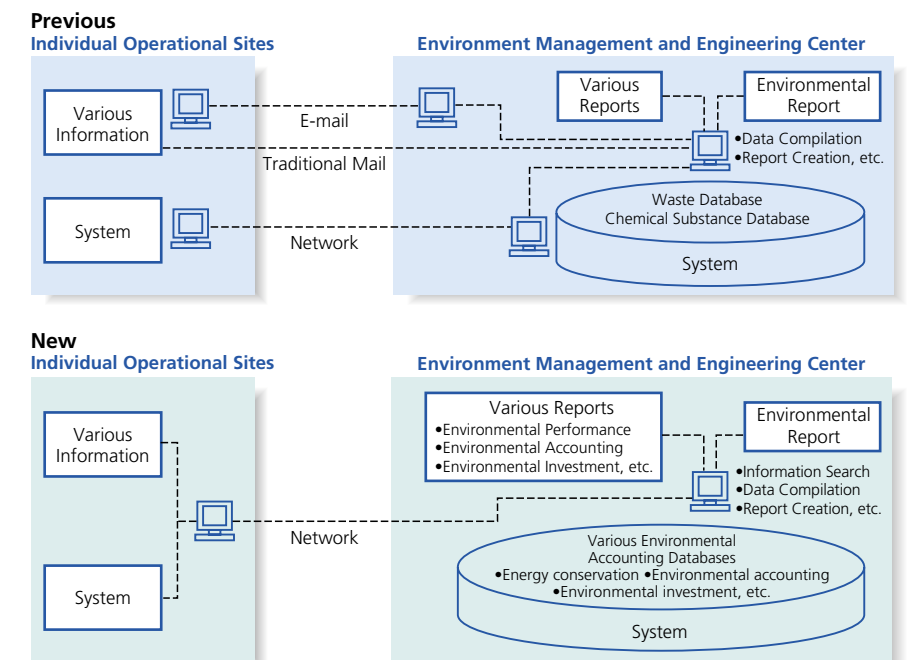
## Data Gathered through the Production Environmental Information System

Company Overview	10 items, including site characteristics, products or other items produced, and number of staff assigned to handle environmental issues
Environmentally Conscious Management	6 items, including ISO14001 certification, environmental goals, audits, and costs of management activities
Global Environment	16 items, including electricity usage and cost, and distance traveled by employees commuting by personal car
Local Environment	4 items, including pollution prevention measures, costs and effectiveness; and economic effects of risk avoidance
Resource Conservation	18 items, including waste discharge, and product recycling measures, costs and effectiveness
Chemical Substance Management	3 items, including chemical substance use and discharge; and usage reduction measures, costs and effectiveness
Green Procurement	2 items — Status of green procurement initiatives and green procurement advancement measures, costs and effectiveness
Analysis and Measurement	5 items — Water quality, air quality, noise, vibration, and foul odors
Work Environment Analysis and Measurement	4 items — Designated chemical substances, organic solvents, lead and dust
Human Resources Training	5 items, including training for regular employees and emergency response training
Soil and Groundwater	2 items — Measures to protect soil and groundwater and an operational site diagram
Kyosei with Society	8 items, including environmental information disclosure, environmental advertising and costs, social contributions and opinion surveys
Accident and Disaster Information	4 items, including complaints from local residents and number of labor accidents
Legal Compliance	1 item — Whether a government agency has requested corrective action
Survey	Information that cannot be gathered through the standard survey

## Product Environmental Information System



## Production Environmental Information System Overview



Information systems, such as the Waste Administration System (WASH) and Chemical Integrated Management System (CIMS), are linked to the new system, which promises more efficient environmental information management and various types of information applications.

# Improving Product Quality and Environmental Functionality by Recycling Resources

We guarantee remanufactured parts are of the same quality as new parts in our products. Through proprietary technology we have constructed a production system that incorporates recycled resources.

## Position on Recycling

Our Inverse Manufacturing (IM) activities are based on the 3Rs — “reduce, reuse and recycle.” Implementation of the 3Rs takes the form of product development-stage designs emphasizing longer life, smaller size and easier disassembly; the building of collection and processing systems for used products; development of recycling technology; and reuse of resources in products.

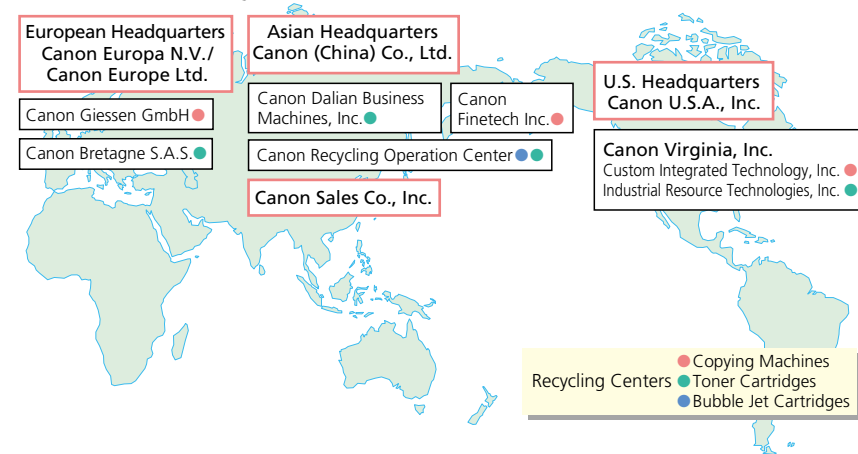
At Canon, we try to use identical parts in as many products as possible. Also, we strive to maximize reuse and recyclability by doing all we can to make products easy to disassemble, without compromising safety. We are working to enhance recycling systems in the Americas, Europe, Japan and other parts of Asia.

Recycling of plastic has been a particular focus of our attention and we have put sig-

nificant effort into researching and developing various recycling technologies to meet the strict standards that apply to this material. Our efforts are resulting in technologies we need and we are implementing them for our products as the necessary recycling systems are arranged.

- 1) “Reduce” means to extend product lifetimes, make products more compact, and minimize resources that go into making products.
- 2) “Reuse” means to have different generations of products share parts; extend the lifetime of parts; emphasize design that makes it possible to use parts again over the long term; and apply refurbished used parts in new products.
- 3) “Recycle” means to effectively use collected used products as resources for material recycling, chemical recycling, or thermal recycling, after carefully weighing the environmental burdens involved.

## Canon's Global IM System



## Product Reuse/Recycling

### ● Remanufacturing of Copying Machines

Our remanufacturing of copying machines began to take shape in 1992 at Canon Virginia, Inc. The following year, we started remanufacturing operations in Europe, and in 1998 launched them at the Kofu Plant of Copyer Co., Ltd. to create copying machine remanufacturing operations that span the globe. Remanufacturing begins with the collection of used products and the selection of parts according to rigorous criteria. Selected parts are then thoroughly cleaned and worn pieces replaced to ensure that each part meets the same quality standards applied to new parts. We guarantee that each refurbished part is as good as a new part.

### ● Part Reuse TREE

To augment our efforts to use resources effectively, we embarked in 1999 on a program for reusing parts. In this program called TREE, or Technology of Reusing for Environment with Economy, we remanufacture collected used products into products that are once again useable. We also take parts from used products and reuse them in new products. Through both activities, we are promoting the effective use of resources.

### TREE Priorities

- 1) To understand the design of products and lifespan of parts with a view toward durability and reuse
- 2) To establish an efficient system for collecting used products
- 3) To exercise strict quality control over collected parts
- 4) To implement reuse technology

## Reuse and Recycling of Consumables

### ● Toner Cartridge Recycling

With the cooperation of customers, we started our worldwide Toner Cartridge Collection and Recycling Program in May 1990. In addition to America, Germany, and Japan, we now collect cartridges in places throughout the world and have collected some 81,000 tons to date. We began by performing our recycling work at Canon Dalian Business Machines in China. In 1997, we increased our processing capacity with facilities at Industrial Resource Technologies, Inc. in North America and Canon Bretagne S.A.S. in Europe. After collection, cartridges are sorted according to type. Parts that are still usable are processed for reuse or recycling. In 2002, the Canon Recycling Operation Center (CROC) in Japan also began to recycle toner cartridges.

### ● Bubble Jet Cartridge Recycling

We began recycling Bubble Jet printer cartridges, which we sell in great volume, in 1996. By February 2003, over 3,000 retail stores located throughout Japan were cooperating in our collection efforts. Cartridges brought in by customers are sent to our CROC, where they are sorted and 100% recycled, either as plastic or metal materials, or as heat energy. Rising year by year, our cartridge collections reached approximately 51 tons in 2002.

### ● Recycling of Photosensitive Drum Units and Toner Containers

In Japan, we began recycling photosensitive drum units and toner containers at our CROC in 1996. Photosensitive drum units are sorted by type and inspected. Parts that can still be used are then processed for reuse and others are recycled into their component materials. Toner containers are also collected and some are reused in Japan and North America.

## Development of Plastic Recycling Technology

In realizing economical closed recycling of plastic, we undertook R&D to meet extremely demanding standards. We now offer products designed for recyclability and are simultaneously building collection systems. To take advantage of scale economies — in other words, lower environmental burden with greater economy — we are increasing the scale of our closed recycling.

### ● Development of Preprocessing Technology (Cleaning and Foreign Object Removal)

In 1998, we perfected technologies for removing foreign objects and treating wastewater in the recycling of Noryl plastic and made it possible to recycle 100% of our Bubble Jet cartridges. The equipment we developed works on a continuous basis to remove foreign objects and metal, in particular, from plastic.

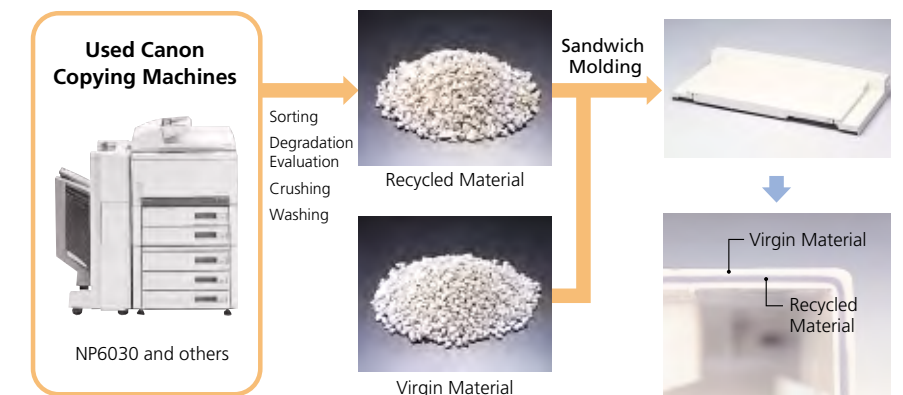


Line for cleaning and removing foreign objects from plastic

### ● Sandwich Molding

We developed sandwich molding technology for “sandwiching” recycled plastic between two layers of virgin plastic in 1999. With later improvements, we are now able to create sandwich molded plastic as thin as 3mm and containing 30% recycled material.

### Sandwich Molding Technology



### ● Recycling of Non-Halogenated Plastic

In 1991, we became the first in the industry to use PC-ABS for the exterior covers of copying machines. This material is a non-halogenated plastic, which means it does not use halogenated flame retardant and is friendly to the environment. PC-ABS is difficult to recycle, but in 1999, we found a way to do so and now use recycled PC-ABS for 20% of both internal and external parts.

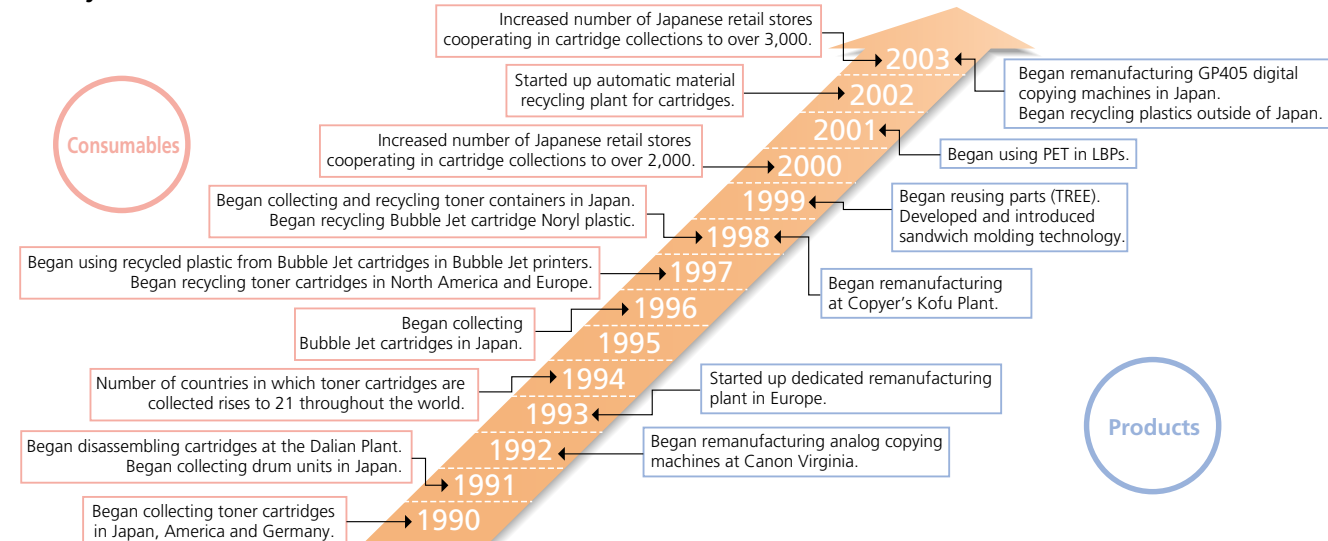
### ● Using Recycled PET

In 2001, we began using 100% recycled PET to make the principal parts of our laser beam printers. Now we are planning to use 100% recycled PET as the primary material for parts that go into our copying machines, facsimile machines and digital MFPs. During 2002, the Canon Group used 750 tons of recycled PET.

### ● Dry Ice Cleaning of Parts to be Reused

We have developed our own dry ice cleaning equipment for application on parts to be reused or recycled. This equipment uses very fine dry ice pellets and a spray gun to blast foreign material from the surfaces of parts, reducing processing time by approximately 40% and cleaning costs by approximately 20%.

## History of IM Activities



## Moving Toward a Sustainable Society Together with Stakeholders

Canon has established constructive communications through information disclosure that meets our obligation of accountability. We provide our employees with very thorough environmental education and take other measures to develop a workforce highly aware of environmental issues.

### Perspective on Communication

Canon's corporate philosophy of *kyosei* holds that a company's continued existence and development depend on cooperation with, and contributions to, society. Environmental problems are not issues that should be discussed by individual companies in isolation. We believe that a sustainable approach to environmental problem solving depends on the establishment of a mutual understanding with stakeholders. The purpose of communication activity is to disclose accurately and truthfully a company's perspectives. Our belief is that by communicating with outside parties we are making possible initiatives that serve more than the interests of Canon and its stakeholders.

Therefore, we pursue constructive communications through information disclosure that fulfills our obligation of accountability to various stakeholders. At Canon, we make use of various means and opportunities to disseminate information on our environmental initiatives both inside and outside the company.



Swiss Association for Environmentally Conscious Management environmental report awards ceremony



Environmental advertisement in *Forbes*

### Environmental Public Relations Activities

#### ● Environmental Report

In 1994, we published for the first time a report on the environment titled, *Ecology*. This report was the forerunner to our annual *Environmental Report*, which we began publishing in 1999 (P.1). In 2001, Coper Co., Ltd. (now called Canon Finetech Inc.), a Japanese manufacturing subsidiary, and Canon (Schweiz) AG began issuing their own environmental reports. Reports issued by Canon (Schweiz) received in consecutive years the highest and second highest awards presented by the Swiss Association for Environmentally Conscious Management.

#### ● Environmental Public Relations

To provide public information about our environmental initiatives, we have placed environmental ads in Japanese newspapers and magazines continuously since 1995. To reach people outside Japan, we placed an environmental ad in the special 2002 Earth Summit (held in Johannesburg, South Africa) issue of the international business magazine, *Forbes*.

In 2002, our F900 Bubble Jet printer newspaper ad won the Bronze Medal in the Under Matter Advertising Category at the 41st Japan Industrial Journal Industrial Advertising Awards. Our serial newspaper ads won the Grand Prize in the Newspaper Category at the 12th Contest of Environmental Advertisement, co-sponsored by The NPO Regional Exchange Center and Nihon Keizai Shimbun in Japan.



Main environmental ads for 2002

#### ● Environmental Exhibit Room

Permanent environmental exhibit rooms have been established at our Shimomaruko Headquarters, Ami and Toride Plants, Fukushima Canon Inc. and Oita Canon Materials. Video material — like *Canon Ecology* — and displays are used to explain Canon's environmental initiatives to primary school students, local residents, and others touring these facilities.

#### ● Information Magazine for Dealers in Japan

We use *C-MAGAZINE* to provide dealers in Japan with special articles on the environment and raise their awareness and understanding of environmental issues. The Global Canon Intranet Plaza, or G.CIP, provides similar material for employees.

#### ● Using Our Homepage\* to Disseminate Environmental Information

Through our homepage, we provide the latest information on our environmental initiatives and access to our *Environmental Reports*. We also make available Material Safety Data Sheets (MSDSs) to help customers use our chemical products safely and appropriately.

\*URL: [www.canon.com/environment/](http://www.canon.com/environment/)



Environmental Gallery newly established in the Shimomaruko Headquarters



*C-MAGAZINE* articles focusing on environmental issues

### Participation in Environmental Events

Canon is involved in numerous environmental events. In 2002, these included Eco-Products 2002, Enviro Shiga 2002 (International Environmental Business Exhibition held at Lake Biwa) and ENEX 2003.

At Eco-Products 2002, we set up an environmental demonstration corner for children, and Canon Inc. Managing Director and Group Executive of the Global Environment Promotion Headquarters, Yusuke Emura, joined a panel discussion addressing the question, "Can Environmentally Conscious Management Invigorate Industry?" For Enviro Shiga 2002, we displayed environmentally conscious Canon products and the local subsidiary, Nagahama Canon Inc., explained its environmental initiatives.



Eco-Products 2002



Enviro Shiga 2002

### Environmental Education

At Canon, we undertake practical environmental education. Since 1989, we have been using our in-house magazine, video news and other media to ensure our employees understand the importance of protecting the environment. We encourage our staff to put this knowledge into practice in their daily activities. Formal environmental education takes place in training programs for different ranks and in specialist training.

#### ● Training Programs for Different Ranks

Through training tailored for each employee rank, we seek to develop and reinforce understanding of the ideas and initiatives that comprise Canon's environmentally conscious management. Participants range from new hires to experienced employees and managers. They are taught everything from general environmental knowledge to information necessary for the daily practice of environmentally conscious management.

#### ● Specialist Training

We provide five types of environmental education. Two address the needs of environmental staff and environmental auditors, who play a central role in promoting environmental activities at operational sites and work areas. The other three are for helping development and design staff address environmentally conscious design standards, chemical safety and environmental technology, and green procurement.

In 2002, 15,327 employees throughout the Canon Group received environmental training of one type or another. We will continue our environmental education efforts, progressively enhancing the content of what we teach.



Web training for green procurement

#### ● Internal and External Green Procurement Training

In 2001, we started a training program as part of our efforts to develop green procurement specialists. This training consists of two courses, our Green Procurement Basic Course and Green Procurement Environment Improvement Structure Course. Employees responsible for procurement are taught the basic concepts and fundamentals of green procurement. They are also taught Canon's standards and evaluation methods, practical roles, and other types of basic content. In addition, we train certain employees to promote green procurement to suppliers, encourage them to adopt it and support them in their efforts to do so.

In 2002, we held two types of training sessions for a total of 265 of our own employees. This brought the number trained to 360, or approximately 36% of our procurement staff in Group companies located in Japan.

#### ● Environmental Education at Canon (Suzhou) Inc.

We conduct environmental education at new overseas operational sites to help them establish their own environmentally conscious management systems.

In October 2002, we arranged training at Canon (Suzhou) for the president, other management personnel and those specifically responsible for environmentally conscious management. The training curriculum focused on the issues of greatest importance to the Canon Group and helped the 43 participants to better understand environmental issues.



Environmental Education at Canon (Suzhou) Inc.

# Strengthening Internal and External Cooperation to Build a Highly Efficient Procurement and Logistics System

Working with Group companies and suppliers, we are improving the efficiency of our green procurement activities and product logistics, while lowering our environmental burden.

## Green Procurement Results

Canon uses its Green Procurement Standards, created in 1997, to select environmentally conscious suppliers and environmentally friendly parts and materials. In 2002, we completed evaluations of our principal Japanese suppliers based on their consideration of the environment during the design phase and their cooperation with us. Today we procure 94% of the custom-made goods, for which we create designs and specify materials, from green suppliers.

For the future, we are creating a system for evaluating standard parts and materials. We are also performing a wide-ranging review of financial and other matters, based on the concept of comprehensive supply chain management and enhancing our evaluations of ethical issues.

## Organizing the Standardization of Green Procurement Surveys

Canon is one of 18 major electrical equipment manufacturers working together to develop a common green procurement survey. This group of companies, which Canon chairs, aims to implement a survey and format that will allow their suppliers to quickly and accurately monitor 28 chemical groups in the parts and materials they purchase and diminish their burden on the environment. Trial guidelines were drawn up in April 2002.

Makers of electronic parts and materials have been invited to participate in this endeavor and work toward the revision of the guidelines has begun. Efforts to coordinate with American and European associations of electrical equipment manufacturers and make the green procurement survey a global standard are also underway.

## Hazardous Substance Elimination Team Introduced

In December 2002, we established the "G-Project," a team working toward the elimination of hazardous substances. The G-Project is charged with ensuring we are in compliance with the Restrictions on Hazardous Substances (RoHS)\*, which the EU began enforcing in February 2003.

The G-Project will perform product surveys and obtain reports on the use and content of 28 substances in approximately 1,500 materials and about 23,000 parts that Canon procures in Japan. Using these results, the team will then determine whether any of the six substance groups specified by the RoHS have been used in the parts or materials we procure and, if necessary, consider substitute products.

At operational sites outside Japan, G-Project and personnel from Product Group Operations have been dispatched to work with those responsible for materials as we strive to eliminate our use of hazardous substances designated in the RoHS throughout the world by the end of 2004.

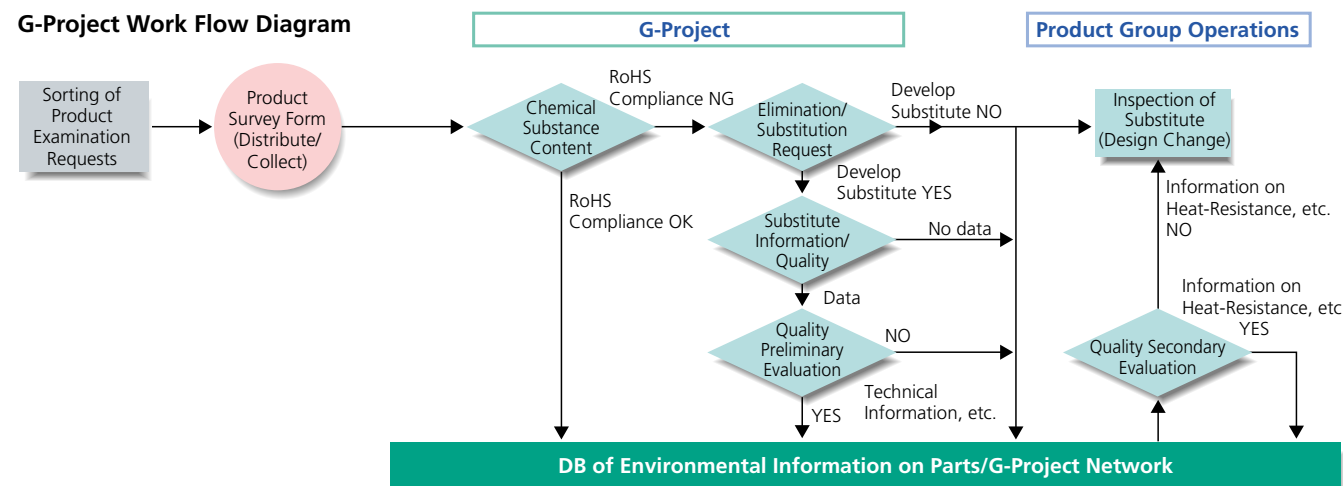
\*RoHS, or Restrictions on Hazardous Substances, addresses the use of hazardous substances in electrical and electronic equipment and products. RoHS outlaws the use of six substance groups (lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE) beginning on July 1, 2006.

- \*1 Excludes hexavalent chromium and chromium metal
- \*2 Excludes nickel metal
- \*3 Excludes chlorinated paraffin, PBB, and PBDE
- \*4 Azo compounds forming certain amines ("Certain amines" refers to "amine compounds" as that term is defined in Germany's Act on Food Commodities)
- \*5 Substances specified in the Montreal Protocol on Substances that Deplete the Ozone Layer

## Chemical Substances Monitored for Presence in Products

Category	No	Substances	Category	No	Substances
Metal Compounds	1	Antimony and its compounds	Organic Halogen Compounds	16	Chlorinated paraffins
	2	Arsenic and its compounds		17	Polybrominated biphenyls
	3	Beryllium and its compounds		18	Polybrominated diphenyl ethers
	4	Bismuth and its compounds		19	Halogenated resin additives*3
	5	Cadmium and its compounds		20	PCBs
	6	Chromium compounds*1		21	Polychlorinated Naphthalenes (with more than three chlorine atoms)
	7	Hexavalent chromium compounds		22	Polyvinyl chloride
	8	Cobalt and its compounds	Others	23	Asbestos
	9	Lead and its compounds		24	Azo compounds*4
	10	Mercury and its compounds		25	Cyanides
	11	Nickel compounds*2		26	Ozone depleting substances*5
	12	Organic tin compounds		27	Phthalates
	13	Selenium and its compounds		28	Radioactive substances
	14	Tellurium and its compounds			
	15	Thalium and its compounds			

## G-Project Work Flow Diagram



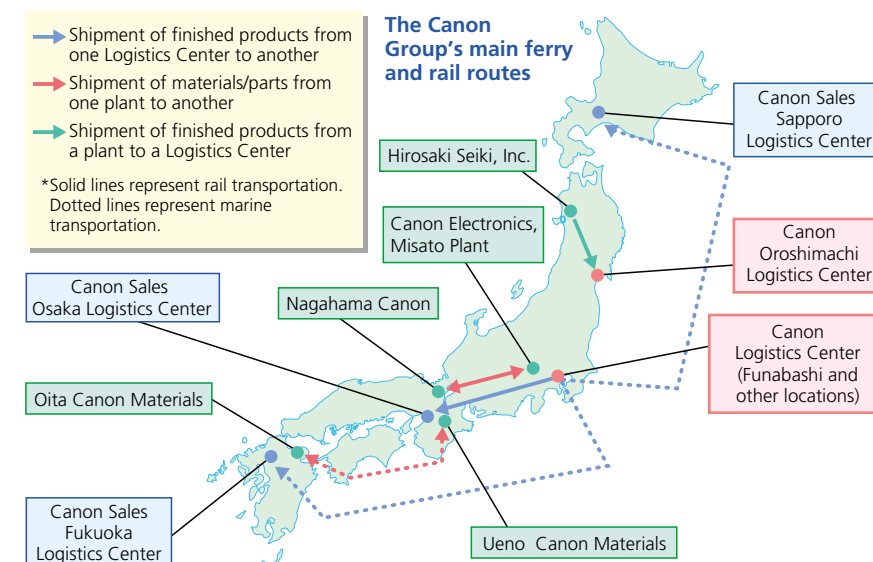
## Environmental Logistics Sub-committee

In 2002, we established a Group goal to reduce logistics-related CO<sub>2</sub> emissions, using 2000 figures as a base. The target was a reduction of 20% per unit of sales by 2006. To help achieve this, we created the Environmental Logistics Sub-committee, now leading our efforts in this regard.

In Japan, we have categorized logistics activities as being related to procurement, production, products or sales and created working groups to address CO<sub>2</sub> emissions from these activities. Each of these working groups sets reduction targets and performs other roles, examining ways to reduce CO<sub>2</sub> emissions through joint logistics or modal shifts. We have embarked on similar activities regarding logistics in countries other than Japan and in international shipping (from ports in countries where products are manufactured, to ports in countries where products are to be sold). To further boost logistics efficiency, we are studying ways to improve packaging specifications.

As the Japanese government worked to ratify the Kyoto Protocol, it also revised its Guideline for Measures to Prevent Global Warming. The Comprehensive Program of Logistics Policies a cabinet decision, set the goal of increasing Japan's modal shift percentage at least 50% by 2010. According to The Transportation White Paper issued by Japan's Ministry of Land, Infrastructure and Transport, marine transportation produces only about one-quarter the CO<sub>2</sub> emissions of truck transportation, while rail transportation produces only about one-eighth.

## Modal Shift



## Pursuing Modal Shift

Canon is actively changing its long-distance transportation methods for product logistics. In 2002, we began using ferries to ship products from our Kanto Logistics Center to our Fukuoka Logistics Center. Trains carry products from the Kanto Logistics Center to our Osaka Logistics Center.

For the October-to-December period of 2002, we used these new transportation modes to move 85% of the products bound for Fukuoka and 35% of the products bound for Osaka (52%\* overall). As a result, we cut product logistics CO<sub>2</sub> emissions by 14% (annualized).

\*Based on the Japanese government's definition of modal shifts as the switch to either ships or trains for the transportation of goods over distances of at least 500km.

## Participating in a Voluntary US Program to Reduce Logistics-Related Environmental Burden

The US Environmental Protection Agency inaugurated the SmartWay Transport program in 2003 as a method of reducing emissions of both air-polluting substances and greenhouse gases related to overland shipping. Canon U.S.A. is a partner company in this voluntary initiative to increase logistical efficiency and reduce environmental burden in the transportation of products.

## Environmentally Friendly Packaging

Canon uses various types of packaging materials and pallets to ship products and to move materials procured globally to production sites throughout the world. To reduce the massive amount of packaging materials that end up as waste, we began in 2000 to use collapsible containers and trays, plastic pallets and plastic pallet bands. These reusable alternatives are employed for both import and export purposes.

We have also been working to cut our use of polystyrene foam, employed as a shock-absorbing material. In 1991, we became the first company in the industry to use pulp molds made completely of recycled paper and have been steadily replacing foam with cardboard as a shock-absorbing material. At the same time, we have moved forward with the construction of a polystyrene recycling system.

To make it easier for our customers to dispose of packaging materials, we have introduced cardboard pallets, sheet pallets and other items made from materials for which recycling systems already exist.

# Customer Safety and Peace of Mind through a Robust Governance System

As part of our effort to manage various types of risks, we work to ensure compliance with laws and regulations throughout the world. Our efforts are thorough, addressing both physical and information security.

## Corporate Governance and Internal Audits

As required by the Companies Act, Canon has a board of directors and a board of corporate auditors and holds general meetings of shareholders. We have also set up various organizations and committees we believe are necessary to properly manage our operations. This system of corporate governance helps ensure we are in compliance with laws and regulations and adequately managing risks, wherever we conduct business.

Our Corporate Audit Center is responsible for internal audits and evaluates and makes proposals regarding compliance with laws, risk management, and internal control systems. Other divisions that are responsible for audits addressing quality and the environment, information security, physical security and various other issues, cooperate closely with the Corporate Audit Center.

## Global Legal Affairs Coordination Committee

Canon's Global Legal Affairs Coordination Committee studies and analyzes legal trends in Japan and abroad. It examines issues of legal compliance at both managerial and operational levels.

The committee also assembles working groups for individual legal topics to help with this study and analysis, as needed. The most important matters are brought before the Executive Committee. Guidelines and guidebooks for compliance with principal laws and regulations are created. Information is disseminated through our legal information homepage and other resources to achieve a thorough understanding throughout the company. Administrative support and assistance is provided to relevant areas of Group companies. We are also covering most legal areas regarding Canon's products.

## 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 activities
Global Environment Promotion Headquarters	Environmentally conscious management and its results
Information & Communication Systems Headquarters	Information security for IT and other information processing activities
General Affairs Headquarters	Physical security

## Activities 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 America, Europe, China and other countries.

## Striving for Security

After the tragedies of September 11, 2001 in America, companies worldwide have acted to reduce risk and increase security. For Canon this has meant, in particular, boosting security in the areas of information communication and ensuring the physical safety of its operations.

Our Information & Communication Systems Headquarters has taken the lead in IT and other aspects of information security. Our General Affairs Headquarters is doing the same for physical security. New internal rules are designed to enhance security by promoting effective management and strengthening security operations, risk management, audits, and training. These headquarters are implementing measures to prevent security problems through efficient, informed management.

## PL (Product Liability) Initiatives

One of Canon's management priorities is to take all precautions to prevent potential defects in our products or services from causing harm to consumers or their property. Accordingly, the first order of Canon PL initiatives is to provide safe products, among other things.

Nevertheless, although we do provide safe products, it is possible we could be subjected to a product liability suit and we must be prepared to mount a robust response should that occur. Consequently, in 1988 we supplemented our internal rules regarding the provision of safe products with Guidelines on Product Liability issued by our Global Legal Affairs Coordination Committee. After a few revisions, our executives and employees have achieved a thorough understanding of product liability laws.

To cope with the highly unlikely event of a recall or other quality problem that threatens our brand, we have also created a system for assembling a specialist team and swiftly responding to outside parties.

## Protection of Personal Information

The rapid adoption of IT in recent years has led to both increasing concern over privacy violations resulting from the leaking of personal information, and the development of legal measures throughout the world to cope with this growing problem. In keeping with the social responsibilities of an excellent global corporation, Canon started its Personal Information Protection Project in 2001.

In April 2002, we formulated our Principles and Rules for the Protection of Personal Information, and other compliance programs. The entire Canon Group has been working to implement them ever since.

Our goal is to avoid the risk of personal information leaks and promote even greater customer trust by making our systems and practices even more robust.

## Perspective on Information Disclosure

At Canon, we believe that as we pursue our business activities, disclosing the right information at the right time is critical as a matter of both social responsibility and operational risk management. We pay meticulous attention to preparing the information we release to ensure its accuracy and integrity.

For our advertising and public announcements, we go to great lengths to prevent the possibility of their inviting misunderstanding. We constantly review our ads to ensure they make no unfounded claims and do not use expressions or statements that could easily mislead consumers.

## Investor Relations Activities

At Canon, an important aim for our Investor Relations (IR) activities is to gain the trust of capital markets and improve corporate value through the communication of accurate, fair and timely information about management, strategy, and business performance. To achieve this, we developed our Disclosure Guidelines as a reference for pursuing IR activities. Our principal IR activities comprise briefings on quarterly results, management policies (presented by Canon's President and CEO) and business strategies.

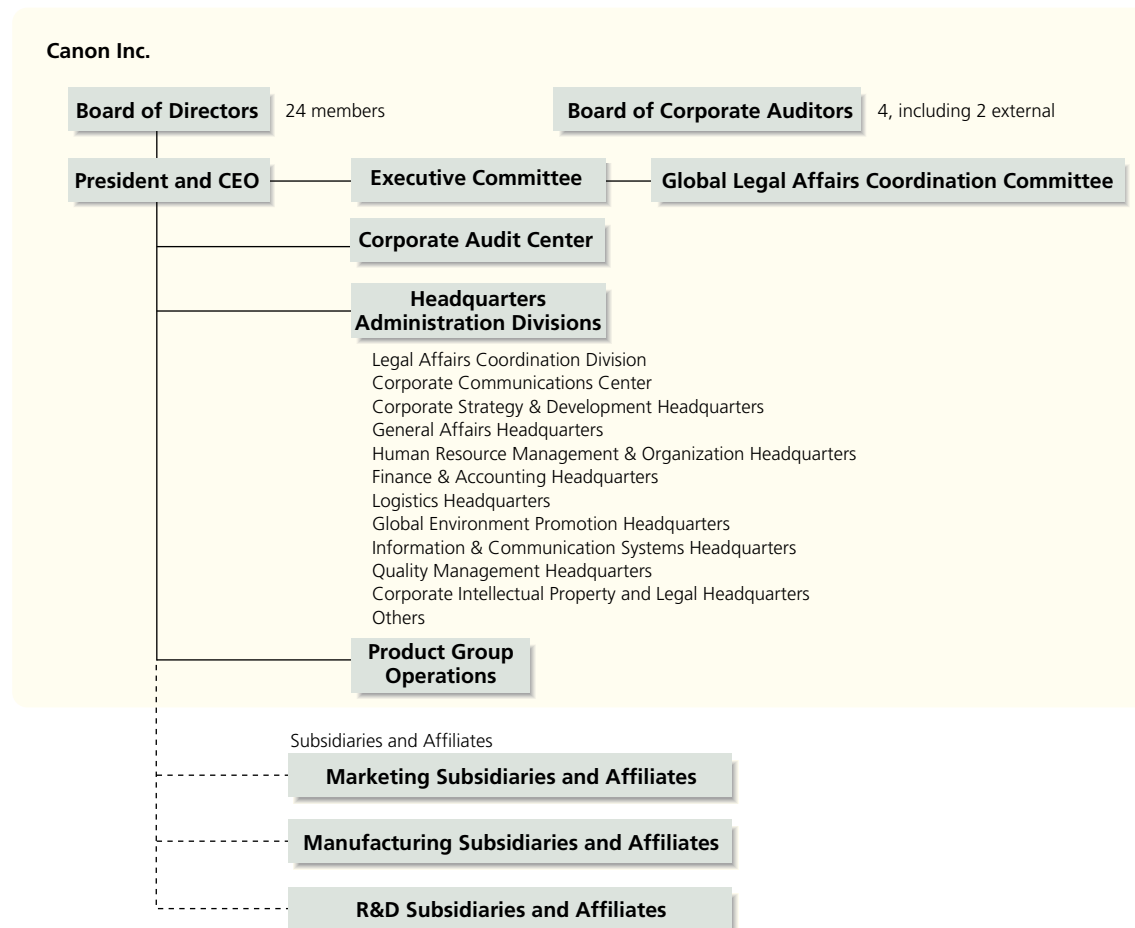
In addition to this, due to the fact that a large portion of our shares are held by foreign investors, approximately 46% at the end of 2002, we have set up IR offices in the US and Europe in order to respond rapidly to overseas investors' inquiries. On our homepage, we simultaneously post Japanese and English versions of the same information and employ audio and video data as much as possible.

With disclosure we exercise extreme care, strictly controlling confidential information and taking precautions not to encourage insider trading. At the same time, we internally disseminate relevant information to management and business operations on how capital markets view our company.



Management Policy Review Meeting for 2003

## Canon's Governance Structure



## Satisfying Customers through Solid Support Systems

We treat customer complaints and comments as valuable input for the entire Canon Group.  
We incorporate this user feedback into product development and work to increase customer satisfaction.

### Meeting Customers' Needs

Canon Sales in Japan spares no effort in responding swiftly to customer requests and providing support in various forms. For commercial customers, it offers e-Maintenance, taking full advantage of IT. For consumers it has established QR (Quick Response) Centers. Through such services, Canon Sales offers information like product specifications and assistance in how to use our products. Canon Sales works to increase customer satisfaction through its information centers, service centers, homepage, Digital House 01 shops, Canon Salons, and EOS Photo Schools.

#### ● e-Maintenance

For commercial customers, Canon Sales offers its e-Maintenance Service. This service uses the Internet to connect copying machines, printers, computers, and other Canon products in customers' offices to a central monitoring center. The monitoring center automatically gathers information on breakdowns, diagnoses their causes, and dispatches technicians or service personnel as needed. It also monitors customers' stocks of toner and other supplies and ships replenishments before supplies run out.

e-Maintenance helps to lighten the workload of our customers' network managers, reducing management and office maintenance costs and downtime.

#### ● QR Centers

Canon Sales has established QR Centers in Tokyo, Nagoya and Osaka to serve the needs of consumers. At these "quick repair" centers, expert technicians fix problems on the spot — usually requiring only about 30 minutes for printers, and 60 minutes for other consumer products.

### Serving Customers Overseas

#### ● America

Canon Information Technology Services (C.I.T.S.) responds to telephone, fax and e-mail inquiries from all across America in meeting customers' individual needs. It has also built an interactive support system that applies the latest IT technology to respond to customer questions and requests rapidly and accurately over the Internet. C.I.T.S. aims to provide users with the best possible service.

#### ● Europe

For Europe, we have established a central call center in Belgium to provide both Pan-European information on consumer products and the best possible responses to customer inquiries. We use several languages in replying to customer calls and on our homepage.

For commercial customers, we provide either our traditional maintenance service or a European version of our e-Maintenance service. We are able to gather information remotely on Canon products at customers' locations, respond rapidly when necessary and perform preventative maintenance.

#### ● Asia

In Asia, we are strengthening telephone, Internet and other forms of support. China is an important focus and we have added support centers and personnel to serve the needs of this rapidly growing market. Our call centers, moving to apply IT in the distribution of information, have enhanced their Internet services, including product information and software downloads.

We have also established a new Customer Service Center in Hong Kong to provide faster and even more far-reaching services to our customers in that area.

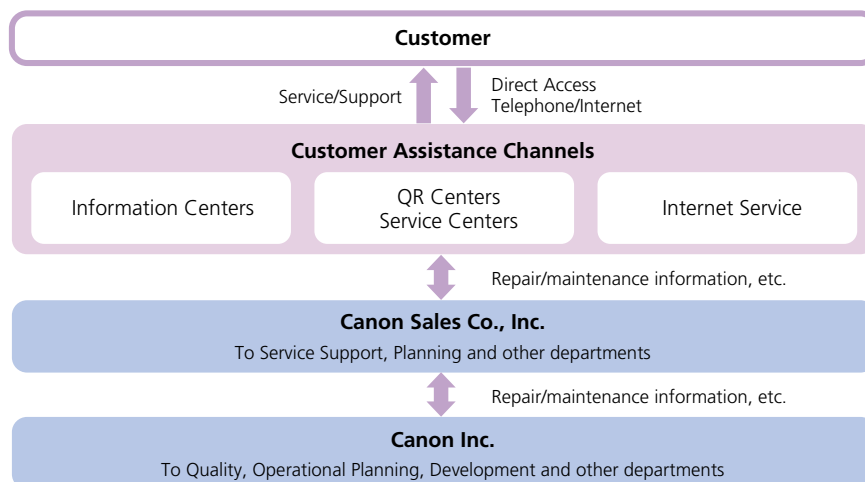


Canon Information Technology Services



Canon Hongkong Co., Ltd.'s Customer Service Center opened in March 2003

### Canon's Customer Communication System



### Universal Design Initiatives

Universal Design means creating products and environments that people of any cultural background and age can freely take advantage of, whether able-bodied or physically challenged. We are moving on various fronts and from multiple perspectives to improve the relationship between our products and their users.

#### ● Working with Other Corporations (CRX Project)

We believe there should be commonality in the way copying machines and other kinds of business machines are operated, regardless of the manufacturer. Similar thinking is expressed in the automobile and audio equipment industries. We are working together with three other business machine manufacturers\* in what is called the CRX Project. Led by the design departments of each company, this project seeks to standardize button colors and symbols, pictographs, control panel layout and other aspects of the user interfaces of copying machines, printers, and other business machines.

\*CRX Project participants include Canon, Ricoh Co., Ltd., Fuji Xerox Co., Ltd. and Seiko Epson Corporation.

#### ● Internal Working Groups

In 2002, our quality and design departments formed a working group with the aim of developing products under the concept of universal design. Making use of know-how accumulated in both departments, this working group meets regularly to explore ways to reflect universal design in Canon products.

The working group has already produced guidelines for colors and sizes of symbols used in digital cameras and other products. It is also actively considering ways to make screen displays more easily understandable and to otherwise concretely reflect survey responses from elderly customers.

### Barrier Free Initiatives

Canon products are designed based on the idea that they should be barrier-free. By improving product usability (ease-of-use, ease-of-understanding) and accessibility (the potential for a product to be used by an elderly or physically challenged person), we are putting into practice our corporate philosophy of *kyosei*.

#### ● Considering Needs of the Elderly and Physically Challenged

At Canon, we have created an internal monitoring test lab for evaluating our products. The monitors include employees and elderly people from outside the company. They evaluate the size and contrast of display characters primarily in cameras and printers, the ease of understanding the products and how to operate them.

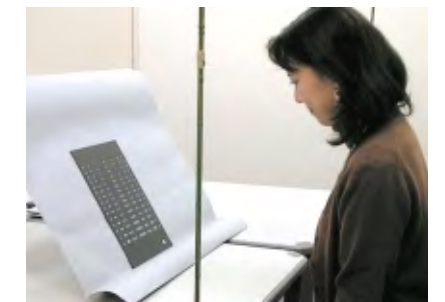
We have also initiated a program to give employees involved in planning, developing and evaluating products, further insight into creating office equipment that can be used easily by anyone. Participants put on devices that simulate conditions experienced by the elderly and physically challenged. We have created barrier-free design guidelines and educate employees by holding forums and workshops in which we invite experts to talk to our employees about the problems faced by elderly or physically challenged people.

#### ● Overseas Monitoring

At Canon, we use overseas monitors to help us develop products that can be conveniently and comfortably used by people all over the world. Monitors in America and Europe use our products and we analyze their reactions. Cultural norms, nationalities and customs of users are all factors in this analysis. The feedback from the foreign monitors is then used to good effect in product development.



Simulation of use by people of different heights



Testing symbols used in digital cameras



Evaluation by an employee monitor



## Respecting Individuals and Fostering a Corporate Culture That Lets Individual Abilities Shine

Canon has implemented compensation, training and other types of systems in creating an environment where all employees, including those of advanced age and those who are physically challenged, can exercise their abilities.

### Human Resources Principles

Since its founding, the Canon Group has operated with human resources policies based on principles expressed in three keywords, referred to as the "Three Selves" at our global businesses, and in Japan as the "Three Js":

- *Ji-hatsu*, or self-motivation to do every job right;
- *Ji-chi*, or self-management;
- *Ji-kaku*, or self-awareness of one's working environment and responsibilities.

Together with the philosophy of *kyosei*, they form the foundation for the human resources systems at our Group companies. While reflecting these principles and this philosophy, each of these systems also respects local laws, employment conditions, and culture, as well as other factors relevant to the operation of successful human resources systems.

We have also taken various measures to foster the development of a corporate culture where people can express the spirit of enterprise. An important element of this corporate culture is a just and fair performance evaluation system. It is founded on performance-based compensation and a fundamental respect for each individual employee's aspirations, sense of responsibility, and sense of mission.

### Compensation System

With the implementation of a new compensation system, Canon Inc. spent the better part of 2001 and 2002 further refining the ideas underlying our fundamental human resources policies. The new compensation system, which embodies a shift from a focus on personal circumstances to job performance:

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.

Within the salary range of each employee rank, raises are determined based on evaluations of factors such as job requirements and results achieved. Bonuses, too, are now linked to both individual and company performance.

Canon U.S.A., Canon Europe and other

Group companies in the Americas and Europe have implemented similar compensation systems focused on job performance, while Group companies in Asia are gradually moving to do the same.

### Other Human Resources Systems

#### ● Internal Recruiting System

The Canon Group has an internal recruiting system intended to fulfill three purposes: 1) to quickly meet the critical human resources needs of departments and businesses; 2) to make the most of each employee's aspirations and abilities; and 3) to invigorate the organization.

Canon Inc. also has an internal recruiting system for filling management positions. This system is used overseas, as well.

#### ● System for Re-Employing Retirees

Canon supports the idea that people should be active throughout life. In 1977, Canon Inc. became one of the first Japanese companies to raise the mandatory retirement age to 60 and in 1982 launched a system for re-employing people until age 63.

In 2000, we followed up these initiatives with a recruiting system to take advantage of the enthusiasm and capabilities of retirees. So far, we have re-employed approximately 150 people under this system, making full use of their many years of rich experience and expertise.

### Employment of the Physically Challenged

At the Canon Group, we work together with physically challenged employees to create work environments where their abilities can be exercised. When a physically challenged person is hired, the workplace environment is adapted, so that he or she is able to perform work in a variety of areas. That much is only natural. However, we have gone even further by, for instance, instituting programs to educate our employees on working with the physically challenged. As a result of these efforts, Canon Inc. had by June 2002 employed a sufficient number of physically challenged people to meet the Japanese government requirement that they comprise 1.8% of our workforce, and we did

so without creating a special subsidiary.

Working with a similar vision, other Canon Group companies are also moving to provide work environments that allow the physically challenged to fully exercise their aptitudes and abilities.

### Worker and Management Relations

At Canon Inc., the Central Worker/Management Conference, founded on faith in the value of dialogue between worker and management leaders, is held every month with the Canon Worker Union. The purpose is to share ideas and express opinions on management or working condition concerns. The conference involves several committees, including the Wage Action Committee, Working Hour and Work Research Committee, and Safety and Health Committee. Each is composed of both worker and management members. Through the committees, measures to implement new systems affecting union members, or modify existing ones, are examined and, if agreed upon by worker and management leaders, implemented.

Canon Group companies establish their own worker unions or similar organizations, respecting the laws of host countries and localities. In Europe, Group companies located in EU member countries hold Canon European Consultative Committee meetings.

### Employee Education System

Underpinning employee education at the Canon Group are concepts in which individual employees take the initiative in developing their abilities, and the company adopts positive action to support employee education. To create real results based on those ideas, we have implemented various types of training to help employees develop expertise in their respective areas. We have actively implemented e-learning. Classroom education offers sign language and other training programs and we work to diversify training topics.

Canon Group companies pursue training programs to meet their own unique needs. Canon Europe offers e-learning for employees throughout Europe and pursues training specific to the various levels of its human resources management system.

## Supporting Employees and Creating a Dynamic Corporate Organization

We strive to eliminate labor accidents and to maintain and improve our safety and health management. We have undertaken various initiatives to further mental and physical health management for individual employees.

### Eliminating Labor Accidents and Creating a Comfortable Work Environment

The Canon Group aims to eliminate all labor accidents. We analyze the causes of accidents to prevent recurrences of similar mishaps. Safety inspections are introduced for new equipment and we implement health management programs to protect workers from the effects of chemicals. Through such efforts, our Fukushima Plant (now Fukushima Canon Inc.) achieved the milestone of 50 million accident-free labor hours in November 2002.

When local conditions warrant, we also implement 5S\*1 Activities as a high priority to improve working environments. In August 2002, we completed safety and health standards for our Japanese Group production sites employing cell production. These standards represent another of our efforts to eliminate tasks that are wasteful or impossible to perform and improve our safety and health management to ensure proper working environments.

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

\*2 Occupational Safety and Health Management Systems

\*3 Labor Safety and Health Management System in Thailand



Ceremony to mark the achievement of 50 million accident-free hours of operation at the Fukushima Plant (now Fukushima Canon Inc.)



Ceremony at which Fukushima Canon received its JISHA OSHMS Standard Certification

### Implementation of Health and Safety Management Systems

In February 2000, Canon Group companies in Japan began implementing a health and safety management system based on a "Plan-Do-Check-Action" process. We are on track to setting up an internal audit system by the first half of 2003 and plan to have these measures introduced to all Canon Group entities by some time in 2004.

We have also taken positive action to undergo evaluations by the Japan Industrial Safety and Health Association (JISHA) in accordance with the International Labor Organization's (ILO) OSHMS\*2 Guidelines, and guidelines established by Japan's Ministry of Health, Labor and Welfare. In recognition of its advanced practices, Fukushima Canon was among the first companies to be considered for the JISHA OSHMS Standard Certification inaugurated by JISHA in 2002. It was named in May 2003 one of only nine companies to formally receive this certification.

Our efforts regarding health and safety are not limited to Japan. Canon Hi-Tech (Thailand) Ltd., for example, has become the first Thai company to receive TIS18001\*3 certification.



Emergency car used by Canon Hi-Tech (Thailand)

### Health Maintenance and Promotion Initiatives

Healthy minds and bodies are essential for employees to have fulfilling work lives and are the wellspring of organizational dynamism. The health management staff of Canon Inc.'s Health Insurance Union performs various diagnostic tests. Educational programs are offered and individual counseling provided. Other health services are available to employees at each of our operational sites. The vehicle for providing these services is the Canon Group Health-Care System (CHS21), helping employees personally see to their own health care needs.

Canon, Inc., for its part, is advancing mental healthcare initiatives including checkups and training, based on guidelines issued by Japan's Ministry of Health, Labor and Welfare.

In one example of employee health management support provided by an overseas Canon Group company, Canon Hi-Tech (Thailand), as part of the healthcare support it offers to employees, maintains its own emergency car to transport employees to a hospital in case of a medical emergency and offers healthcare training.

#### 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

- Self-Care
  - Regular mental health checkups (JMI)
- Line-Based Care
  - "Mental Health and Stress Management Training" (required training for new Managers) "Mental Health 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

## Practicing *Kyosei* in the Community through Support Activities

Our social contributions are benefiting communities in a wide array of fields. By supporting culture, art and sports, we aim to bring a higher quality of life to the young, physically challenged and other groups across the world.

### Policy on Social Contribution Activities

Under our corporate philosophy of *kyosei*, we at Canon are always thinking of what we can do to address the communal problems and issues that come to our attention. Our objective is to be a respected corporate citizen everywhere we have operations.

We support the arts and cultural activities to enrich peoples' minds. Safety and education of children, tomorrow's leaders, is of special interest to us. Encouragement of independent living and opportunity for the physically challenged is important. We help protect the environment to preserve the earth for future generations, contribute to disaster relief efforts, and maintain strong relationships with local communities. It is important for Canon to be involved with the community through these activities. We are working to gain understanding for our way of doing business and to win acceptance as a member of society.

### Support for Image Arts

To discover and support new talent in the world of imaging, we inaugurated the "New Cosmos of Photography" in 1991 and began sponsoring the "Canon Digital Creators Contest" in 2000.



Discovering, through the "New Cosmos of Photography," budding photographers who are finding new possibilities for photographic expression



Uncovering a new generation of talent in the world of image expression through the "Canon Digital Creators Contest"

Canon Sales has organized the Canon Club for amateur photography enthusiasts and teaches photography at its EOS Photo Schools. It also supports and sponsors photo exhibits and contests, publishes a photo club magazine and provides backing for the CG-Arts Society to train computer graphics engineers.

### Support for Culture and Academic Research

Since 1999, Canon U.S.A. has supported Harbor Branch Oceanographic Institution in their scientific efforts to research and protect wild dolphins through a photo identification system, which utilizes Canon's digital imaging equipment.

In 1987, Canon Europa established the Canon Foundation in Europe to support the work of selected European and Japanese researchers. It also sponsors popular *Saltimbanco* performances, which transcend traditional entertainment genres.

### Support for Sporting Events

In 2001, we began sponsoring Canon Cup Junior Soccer, helping boys and girls experience the exhilaration of participating in one of the world's major sports.



Canon Foundation in Europe scholarship recipient receiving a certificate commemorating the completion of her research from Hajime Tsuruoka, president of Canon Europa



"Canon Cup Junior Soccer" lets kids experience life overseas and international goodwill

Canon Sales also sponsors "Kids' Tennis," a children's tennis school taught by Kimiko Date, who achieved the highest-ever world ranking (4<sup>th</sup>) for a Japanese professional tennis player.

### Educational Support for Children and Teens

#### ● International Support Activities

Since 1997, we have been holding an internal bazaar to support education in South East Asia. Books and CDs from employees throughout Japan are sold at a charity bazaar. The proceeds and matching funds from Canon are then donated to non-profit organizations, which use them to establish school libraries, publish picture books and books of folktales, and provide scholarships.

In 1998, we established the "Beijing University Canon Scholarship Fund" to commemorate the 100<sup>th</sup> anniversary of that institution. We are working to support students' education and promote understanding of Japanese culture to develop further friendly relations between China and Japan. The scholarship fund will function through 2003 and is expected to support 280 students.



"Kimiko Date's Come On! Kids' Tennis" brings children together in the joy of sport



Charity bazaar held to support children's education in Laos, Thailand and Vietnam

#### ● Canon U.S.A.'s Program to Help Children

Canon U.S.A. supports The LensCrafters Foundation's "Give the Gift of Sight" program, whose mission is to provide eye exams and glasses to people in need around the world. Canon's support also enables two "Gift of Sight" Vision Vans equipped with Canon Medical equipment to travel across North America providing free exams and new glasses to needy children.

Since 1998, Canon U.S.A. has supported the National Center for Missing & Exploited Children through the "Bring Missing Children Home" Program. The program helps raise public awareness to the growing national issue of child abduction and exploitation. Also, Canon provides imaging technology products to law enforcement agencies nationwide to aid in the recovery of missing children.

#### ● Canon Dalian Business Machines' Hand of Friendship

Canon Dalian Business Machines sponsors the "Canon Cup," an annual Japanese speech contest promoting cultural exchange between China and Japan by encouraging the people of Dalian to study the Japanese language. It also contributes to "Hope," a scheme to help schools short of operating funds. Since 1995 it has established, and provided supplies for, three Canon Hope Elementary Schools. For such efforts, in



The LensCrafters Foundation's "Give the Gift of Sight" campaign supports programs to help children to see better



Annual Japanese speech contest for the "Canon Cup" held in Dalian, China

March 1999, the Dalian city government presented Canon Dalian Business Machines with the Hope Contribution Award.

### Foreign Student Internship Program

Internship programs, based on cooperation between industry and academia, are an integral part of university education in Europe and America. These programs aim to provide the multidimensional professional education currently in demand, by incorporating company internships into university curricula.

Every year, Canon accepts about 10 foreign student interns from selected educational institutions. Its objectives are twofold:

1. To contribute to international society through the acceptance of foreign student interns;
2. To promote globalization inside the company by giving our employees opportunities to understand other cultures and improve their communications skills through contact with foreign student interns.

### Helping the Physically Challenged Achieve Independence and Develop Their Talents

Canon uses its homepage and the covers of its publications to showcase the works of physically challenged artists. We have also used our Bubble Jet printers to print t-shirts, picture books and postcards featuring the works of physically challenged artists. Proceeds from our charity sales were donated to social welfare organizations.

In February 2003, we participated in the Footloose\* Physically Challenged International Exchange Program in Tokyo. For this program, Footloose invited 11 people from the US to Tokyo for two weeks and



Opening ceremony for a Canon Hope Elementary School

as part of this program, we hosted a forum at our headquarters to discuss working conditions and employment of the physically challenged at Canon. Program participants also met with our physically challenged employees.

\*Since 1996, Footloose, a Japanese organization, has undertaken several exchange programs with organizations for the physically challenged in the US. Footloose has two purposes. One is to provide opportunities for the physically challenged and able-bodied to work toward common goals and share experiences as equals. The other is to help the physically challenged live independently in society.

### Environmental Events

At Canon, we actively organize and participate in environmental events as a way to live up to our corporate philosophy of *kyosei*. In February 2002, we joined in the EcoFesta Wonderland with its environmental theme. Through games and information panels we helped to further education on the environment and contributed to the local community. In August 2002, we worked with Tokyo's Ohta Ward and the Environmental Study Group, an NPO, to hold the Canon Eco-Festival 2002. This event was praised for providing an opportunity to think about environmental issues in an enjoyable setting. We also supported children's presentations at Eco-Products 2002.



At "Canon Eco-Festival 2002" many families on summer vacation visited Canon's Shimomaruko headquarters



Environmental presentations at "Eco-Products 2002"

## Environmental Social Contributions

Since 1981, we have been running a series of ads emphasizing the importance of protecting wildlife. Titled, "Wildlife As Canon Sees It," these ads have appeared in *National Geographic* magazine.

In North America, since 1990, Canon U.S.A. has conducted the "Clean Earth Campaign." Since 1997, the company has supported the Canon Envirothon, the largest high school environmental science competition in North America. In the same year, Canon U.S.A. established the Canon National Parks Science Scholars Program, which grants three-year, \$78,000 scholarships to graduate students whose research will address specific issues of concern to national park ecosystems. Canon U.S.A. provides financial support to the Yellowstone Park Foundation. Canon's digital imaging products and solutions are being used in a remotely operated visual analysis system to help protect the park's wildlife and create virtual fields trips on Yellowstone's website for use by millions of school children throughout the world. Since 1990, Canon has sponsored the Public Broadcasting Service's NATURE series.



"Wildlife as Canon Sees It" ads stress the importance of protecting endangered wildlife



"Canon Envirothon," North America's largest high school environmental science competition

In other parts of the world, Canon Europe supports WWF as a Conservation Partner. Canon Singapore Pte. Ltd. joined in the "Shred-it Shredding" Recycling Programme in 2000 to protect the environment. And Canon Hi-Tech (Thailand) operates a Teak Forestation Program.

## Support for People in Need

Canon Group companies in Japan hold Donation Campaigns to aid those suffering from major disasters, no matter where they occur. Contributions are gathered from employees and donated for disaster relief via the Japanese Red Cross Society. Unused foreign currency and postcards are also collected from employees at these Japanese companies. The money is sent to the Japan Committee for UNICEF. The postcards are converted to cash by the Minsai Center (Darunee Fund), which uses the money to provide scholarships\* to children in northeast Thailand and Laos.

At a personal level, individual employees throughout the Canon Group voluntarily participate in blood donations and other humanitarian work.

\*The cash value of 250 unused postcards is sufficient to send one Thai or Laotian primary or junior high school student to school for one year.



Making active contributions as a WWF Conservation Partner



Clean-up activities at the Fukushima Plant (now Fukushima Canon Inc.)

## Local Contributions

Throughout the world, Canon Group companies hold clean-up activities in areas surrounding operational sites and plants. The Shimomaruko Headquarters and the Tamagawa Plant, for example, have participated in beautification work along the Tama River in Tokyo.

Canon (UK) Ltd., via CARE\*, contributes to charity fund-raising events and supports local business communities, assisting with educational, artistic/cultural, humanitarian and environmental activities.

Canon Australia Pty. Ltd. is working to protect the environment as a sponsor of "Clean Up Australia." Employees at Canon Zhuhai, in China, volunteer to plant trees as part of efforts to bring some green relief to the city of Zhuhai. And Canon Inc., Taiwan is getting behind a project to install streetlights in the new residential area of Tan Tzu Hsiang.

\*Community Action Review Enterprise



"Clean-Up Australia" protecting the environment for future generations



Blood donation at Canon (UK)



In 2002, 200 employees of Canon Zhuhai worked together with the Construction Bureau of the city of Zhuhai to plant trees

## GRI Guideline Implementation

Below is a list of GRI Guidelines and the pages of the *Canon Sustainability Report 2003* where relevant content has been provided.

### 1. Vision and Strategy

1.1	P3-4, P13-14, Overall report
1.2	P3-4, P13-14, Overall report

### 2. Profile

Organizational Profile	
2.1	P2
2.2	P5-6
2.3	P5-6, P31, P43, P66
2.4	P5-6, P66
2.5	P66
2.6	P2
2.7	P5-6, P37-38
2.8	P5-6, P11-12, P53
2.9	P39-40, P58, P70, Overall report

### Report Scope

2.10	Back cover
2.11	P2
2.12	P1
2.13	P2, P66
2.14	P66
2.15	P66
2.16	No significant re-statements

### Report Profile

2.17	GRI guidelines referred to throughout
2.18	Overall report (Particularly P53-65), AR (Accounting and other principles)
2.19	No significant re-statements
2.20	P2, P11-12, P17, P31-32, P43-44, P69, AR (Accounting and other principles)
2.21	P2, P69 (Third-Party Opinion)
2.22	Overall report (Relevant URLs, etc. are provided)

### 3. Governance Structure and Management Systems

Structure and Governance	
3.1	P31, P43
3.2	Omitted (Refer to P43)
3.3	Omitted (Refer to P43)
3.4	P31, P43-44
3.5	Omitted (Refer to P15, P31-32, P47)
3.6	P31, P33, P43-44, FB (P4-5)
3.7	P7-10, P15
3.8	P39, P43-44

### Stakeholder Engagement

3.9	P39
3.10	P39-42, P44-51, P70
3.11	P39-42, P44, P45-51, P58, P70
3.12	P39-42, P44, P45-51, P58, P70

### Overarching Policies and Management Systems

3.13	P33-34, P43-44
3.14	P58
3.15	P58
3.16	•Supply chain management: P28 (Material Flow Cost Accounting), P41-42 •Products and services: P11-12, P19-26, P35
3.17	Overall report (Particularly P3-14)
3.18	P66
3.19	Addressed individually throughout the report (Refer to below)
3.20	P33, P48, P57

### 4. GRI Content Index

4.1	P52
-----	-----

### 5. Performance Indicators

Integrated Indicators	
Systemic and Cross-cutting Indicators	P13-14

### Economic Performance Indicators

Direct Impacts	
Customers	EC1. P5-6, P53 EC2. Omitted
Suppliers	EC3. Omitted EC4. Omitted
Employees	EC5. Omitted
Providers of Capital	EC6. P53 EC7. P53
Public Sector	EC8. Omitted EC9. Omitted EC10. Omitted

### Environmental Performance Indicators

Materials	
EN1.	P11-12, P60
EN2.	P38
EN3.	P61
EN4.	P11-12
EN5.	P62
EN6.	Omitted
EN7.	Omitted

### Emissions, Effluents, and Waste

EN8.	P61
EN9.	Already eliminated (P63)
EN10.	P11-12
EN11.	Omitted
EN12.	Omitted
EN13.	P34

### Products and Services

EN14.	P11-12
EN15.	P60
EN16.	Omitted

### Compliance

EN16.	Omitted
-------	---------

### Social Performance Indicators

Labor Practices and Decent Work	
Employment	LA1. P53 LA2. Omitted
Labor/Management Relations	LA3. P65 LA4. P47
Health and Safety	LA5. P65 LA6. P47-48, P65 LA7. Omitted LA8. Omitted
Training and Education	LA9. P65
Diversity and Opportunity	LA10. P47, P65 LA11. Omitted
Human Rights	HR1. P47, P65 HR2. Omitted (Refer to P41) HR3. Omitted (Refer to P41)
Non-discrimination	HR4. P47
Freedom of Association and Collective Bargaining	HR5. P47
Child Labor	HR6. P65
Forced and Compulsory Labor	HR7. P65
Society	SO1. Omitted
Community	SO2. Omitted SO3. Omitted
Product Responsibility	PR1. P45
Customer Health and Safety	PR2. Omitted
Products and Services	PR3. P44
Respect for Privacy	

### Environmental Performance Indicators

EN1.	P11-12, P60
EN2.	P38
EN3.	P61
EN4.	P11-12
EN5.	P62
EN6.	Omitted
EN7.	Omitted

### Emissions, Effluents, and Waste

EN8.	P61
EN9.	Already eliminated (P63)
EN10.	P11-12
EN11.	Omitted
EN12.	Omitted
EN13.	P34

### Products and Services

EN14.	P11-12
EN15.	P60
EN16.	Omitted

### Compliance

EN16.	Omitted
-------	---------

\*AR = Canon Annual Report  
FB = Canon Fact Book

### Related URLs

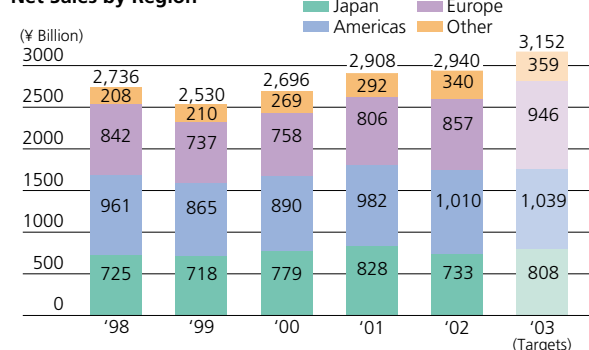
Canon Annual Report ⇒ URL: [www.canon.com/finance/annual](http://www.canon.com/finance/annual)  
Canon Fact Book ⇒ URL: [www.canon.com/about/library/canon\\_factbook.pdf](http://www.canon.com/about/library/canon_factbook.pdf)

## Economic Performance

### Net Sales & Net Income

Net sales and net income have risen each year since 2000. (Consolidated Basis)

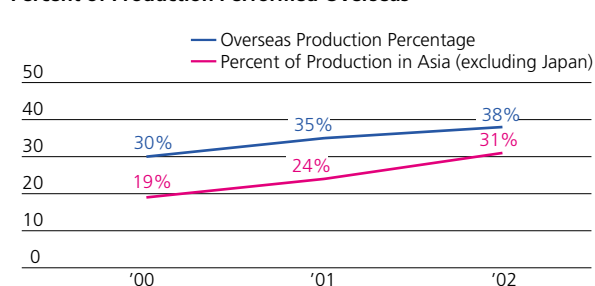
#### Net Sales by Region



### Suppliers

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)

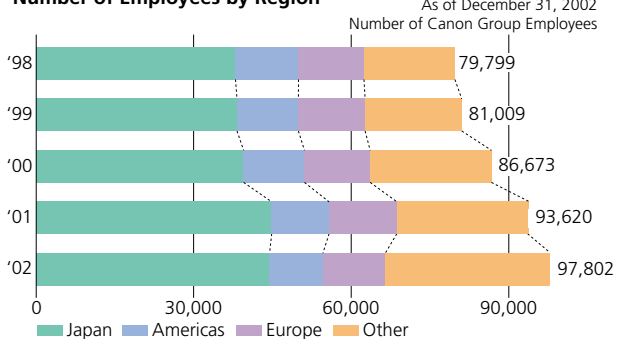
#### Percent of Production Performed Overseas



### Employees

The number of employees in other regions has risen due to increased production in Asia, excluding Japan. (Consolidated)

### Number of Employees by Region

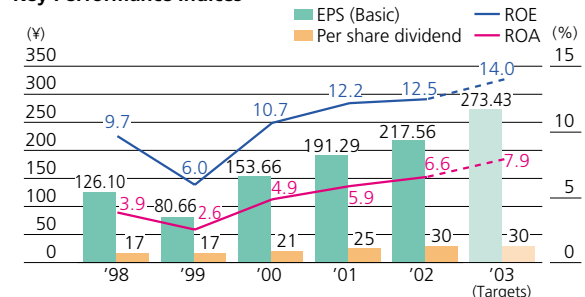


### Investors

#### Dividends

In light of 2002 performance, the annual per share dividend was increased from 25 yen to 30 yen. Canon has now raised its dividend three years in a row. (All Canon shares are common shares.)

#### Key Performance Indices



#### Credit Rating

The world's leading credit-rating institutions, Standard & Poors (S&P) and Moody's Investors Service, have raised their assessments of Canon's creditworthiness. In March 2002, S&P raised its long-term debt rating to AA- from A+ and its short-term debt rating to A-1+ from A-1. Moody's kept its unsecured long-term debt rating at A1, but in January 2003 raised its outlook to "positive" from "stable." In Japan, Rating and Investment Information has assigned Canon a rating of AA+.

### Other Financial Data (Consolidated)

	1998	1999	2000	2001	2002
Net Income (¥ Million)	109,569	70,234	134,088	167,561	190,737
Total Assets (¥ Million)	2,728,329	2,587,532	2,832,125	2,844,756	2,942,706
Interest-bearing Debt (¥ Million)	583,652	463,676	391,613	295,630	148,103
Retained Earnings & Legal Reserve (¥ Million)	714,059	769,493	888,761	1,036,178	1,203,248
Stockholders' Equity (¥ Million)	1,155,520	1,202,003	1,298,914	1,458,476	1,591,950
Capital Investment (¥ Million)	221,401	200,386	170,986	207,674	198,702
R&D Expenditures (¥ Million)	176,967	177,922	194,552	218,616	233,669
Dividends Paid (¥ Million)	15,619	14,797	14,820	20,144	23,663
Investment Gains/Losses (¥ Million)	-16,305	-10,134	-3,590	-1,141	2,410
Year-end Share Price (¥)	2,415	4,060	4,000	4,510	4,470
Shares Issued & Outstanding at Year End (Thousands)	870,306	871,556	875,627	876,212	879,136
Year-end Market Capitalization (¥ Million)	2,101,789	3,538,516	3,502,508	3,951,718	3,929,739

For more details and additional data, please refer to the following URL: [www.canon.com/finance/index.html](http://www.canon.com/finance/index.html)

\*Targets for 2003 are as of April 30, 2003

The business performance forecasts included in this report were made by Canon Inc. using data available as of April 30, 2003 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.

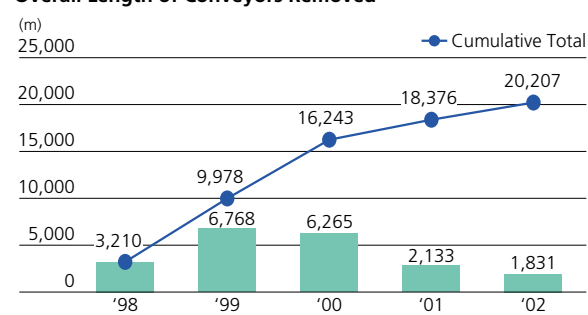
## Production Reform/Logistics

### Results of Cell Production Introduction

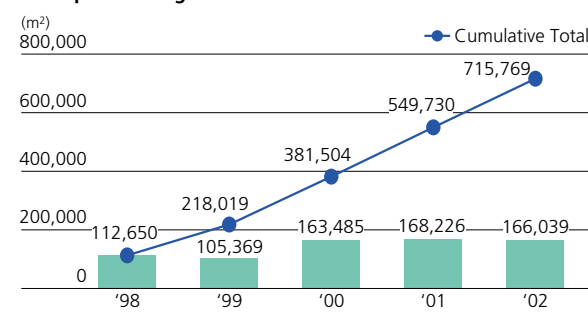
To meet the challenges of international competition and address changes in our operating environment, Canon has been engaged in production-reform activities since 1998. Examples of these activities include the adoption of the "just-in-time" production system and a switch from belt conveyors to cell production. We have also introduced systems such as factory vanning, in which we load direct-export containers right at our plants. All of these activities have contributed to our success in implementing flexible production.

As a result of our adoption of cell production and our pursuit of other production-reform activities over the last five years, we have eliminated 20km of belt conveyors, created 720,000m<sup>2</sup> of usable space and reduced our use of leased warehouse space by 130,000m<sup>2</sup> (all figures approximate). This has translated into 173.8 billion yen in cumulative cost savings and a total emissions reduction equivalent to about 54,000 tons of CO<sub>2</sub>.

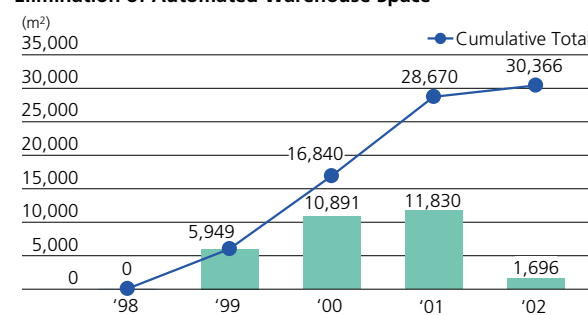
#### Overall Length of Conveyors Removed



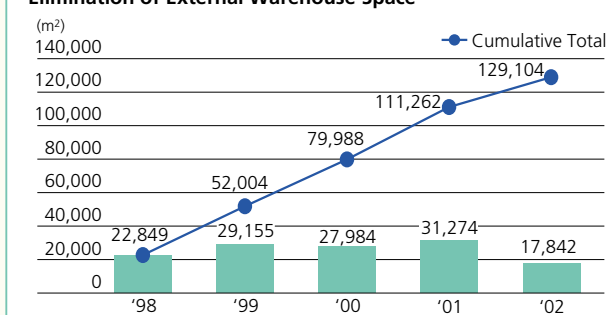
#### Workspace Savings



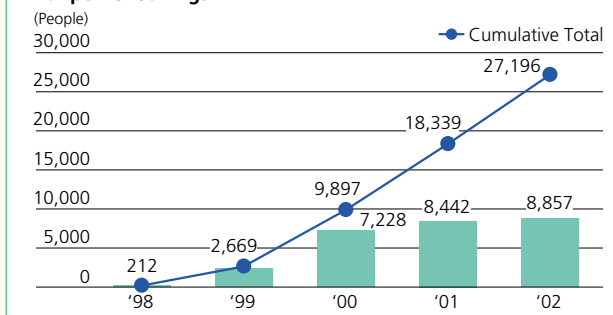
#### Elimination of Automated Warehouse Space



### Elimination of External Warehouse Space



### Manpower Savings



### Logistics

#### Total Distance Traveled in 2002

More efficient logistics resulted in a 2,502-ton reduction in CO<sub>2</sub> emissions in 2002. The primary components of this reduction were a 450-ton reduction achieved by shifting from truck to rail and marine transport (modal shift), a 270-ton reduction resulting from container round use (elimination of the movement of empty containers by using them to transport goods on return trips), and a 1,700-ton reduction won through joint logistics (shorter routes). Lower CO<sub>2</sub> emissions also resulted from the use of uniform container sizes to improve loading efficiency and waste was reduced by using plastic pallets and pallet bands. In total, logistics-related economic benefits came to some 320 million yen.

#### Total Distance Traveled in 2002 and Improvement in Environmental Performance

	2002 Logistics Statistics	Reduction from 2001
Total Distance Traveled (10,000 km)	9,819	335
Fuel (kL)	2,237	960
Environmental Burden	CO <sub>2</sub> (t-CO <sub>2</sub> )	60,808
	NOx (t-NOx)	187
	SOx (t-SOx)	74

2002 Logistics Statistics includes data for procurement logistics.

#### Use of Low-Emissions Vehicles (fuel-efficient automobiles) as of December 31, 2002

As one of its environmental goals, Canon Sales is gradually increasing its use of Low-Emissions Vehicles. When it purchases new vehicles, it makes sure that more than half are either low-emissions-gas vehicles\*1 or high-energy-efficient vehicles\*2.

Total Vehicles Purchased	Low-Emissions Vehicles	Percent of Total
90	65	72%

\*Canon Sales owns 1,210 vehicles (including 66 three-wheeled scooters)

\*1 Low-emission vehicles are certified as "good" or "better" by Japan's Ministry of Land, Infrastructure and Transport in its rating of "Low-Emissions-Gas Certified Vehicles."

\*2 High-energy-efficient vehicles are recognized as meeting or exceeding certain fuel consumption standards set by the Ministry of Land, Infrastructure and Transport.

## Environmental Accounting

### Views 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.

### Results for 2002

In 2002, our environmental protection outlays included approximately 6.7 billion yen in capital investments and about 10.4 billion yen in expenses. Compared to the prior year, our capital investments increased by approximately 2.7 billion yen (40%) to cover long-term measures to counter global warming and other environmental issues. Our expenses for environmental protection rose by approximately 1.2 billion yen (11%) over the year. This increase was due primarily to higher human resources expenses we incurred after strengthening our environmental protection organization, enhanced maintenance for environmental protection facilities, and actions taken to improve our anti-global-warming measures.

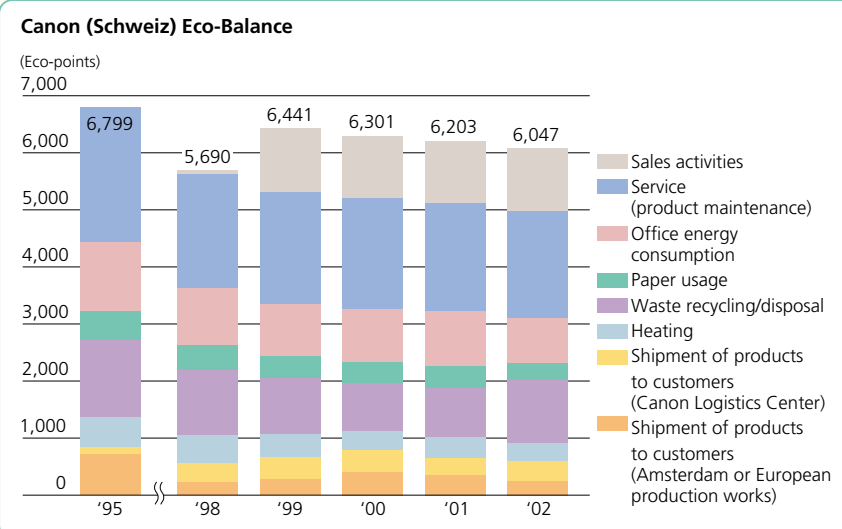
Regarding the cost-effectiveness of our outlays, we have determined the amount by which we have reduced our environmental burden. Energy-saving measures taken by our operational sites reduced CO<sub>2</sub> emissions by 35,770 tons and production reforms produced energy savings that reduced CO<sub>2</sub> emissions by 11,816 tons. Absolute amounts of emissions actually rose, but emissions per unit of net sales fell. Our discharges of chemical and other types of waste all declined: discharges into the air by 116 tons (23%), discharges into the water by 19 tons (36%), and discharges of waste by 280 tons (15%).

Calculation of the upstream and downstream effects of our environmental protection measures revealed that our sales of energy-efficient products saved energy equivalent to 491,003 tons of CO<sub>2</sub> and customer costs of 20.1 billion yen. Including profits from sales of collected used products (for conversion into higher-value items), we estimate that Canon realized economic benefits of 2.6 billion yen, in return for expenses of 1.6 billion yen.

Through environmental accounting, Canon is seeking to develop information necessary for making investments and expenses for environmental assurance activities an integral part of our operations.

### Eco-Balance Initiatives

Canon (Schweiz) uses Eco-Indicator 99\* 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. Canon is considering implementing a similar quantitative, integrated method for clearly expressing its environmental burden throughout the Group. By determining our eco-balance and using it to set targets for improvement, we hope to achieve even greater understanding, both internally and externally, of where we stand in regard to the environment.



\*At the request of the Netherlands' Ministry of Housing, Spatial Planning, and the Environment, a team of environmental and LCA experts from the Netherlands and Switzerland was assembled to devise a system for measuring environmental impact. This team, working from 1997 to 1999, developed the LCA weighting method known as Eco-Indicator 99.

### Environmental Accounting Results for 2002

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

Environmental Protection Costs		Investment	Expense
Category	Main Implementation		
(1) Business operations costs		64.4	62.4
Details			
① Pollution prevention	Air, water, and soil pollution prevention, etc.	27.4	35.4
② Global environmental protection	Energy conservation, logistics streamlining, prevention of global warming, etc.	29.4	7.4
③ Resource recycling	Efficient resource use, waste reduction, sorting, recycling, etc.	7.6	19.6
(2) Upstream/downstream costs	Green procurement initiatives, product recycling <sup>1)</sup> , etc.	0.0	11.9
(3) Management activities costs	Environmental education, environmental management system, tree planting, information disclosure, environmental advertising, management personnel, etc.	3.0	26.5
(4) R&D costs <sup>2)</sup>	R&D for reducing environmental burden	0.2	2.3
(5) Social activities costs	Contributions to environmental and other organizations, sponsorships, memberships, etc.	0.0	0.03
(6) Environmental damage costs	Soil remediation	0.04	1.0
<b>Total</b>		<b>67.6</b>	<b>104.1</b>

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 Indices		
Details of Effects	Index	Index Value	Change Compared to Prior Year	
				Effects related to business operations costs
		Water conserved (10,000m <sup>3</sup> )	9	2% decr.
		Resources used (steel sheets, plastic) (t)	20,480	9% incr.
	Environmental burden and waste effects of business activities	Reduction in atmospheric emissions (t) <sup>3)+4)</sup>	116	23% decr.
		Reduction in discharges into water (t) <sup>5)+6)</sup>	19	36% decr.
		Reduction in waste (t)	280	15% decr.
Effects related to upstream/downstream costs	Goods/services effects calculated based on business activities	Reduction in product energy consumption (t-CO <sub>2</sub> ) <sup>7)</sup>	491,003	—
		Quantity of used products recycled (t) <sup>8)</sup>	28,875	—
Other environmental protection effects	Shipping and other effects	Reduction in fuel consumption (t-CO <sub>2</sub> )	2,502	—

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) CO<sub>2</sub> equivalent for forecasted electric energy consumption for the number of business machines with on-demand fixing technology shipped in 2002  
8) Number of copying machines, cartridges, etc. recycled (including third-party material recycling and thermal recycling)

Economic Effects of Environmental Protection		Monetary Value
Details of Effects		
Revenue	Sales revenue from waste recycling	1.0
Cost savings	Energy expense reduction from energy conservation	12.1
	Expense reduction from green procurement	1.3
	Waste handling expense reduction from resource conservation and recycling	6.8
	Expense reduction from logistics streamlining	3.2
<b>Total</b>		<b>24.4</b>

Economic Effects of Upstream/Downstream Costs		Monetary Value
Lower electric energy expense from reduced product energy consumption <sup>9)</sup>		208.7
Profits from used product recycling		2.0
9) Calculated as the reduction in annual energy consumption of a machine equipped with on-demand fixing technology × ¥12/kWh (economic effect for the customer)		

Environmental Protection Costs at Overseas Operational Sites		Investment	Expense
Americas		0.3	0.2
Europe		0.9	0.5
Asia		2.0	2.9
<b>Total</b>		<b>3.2</b>	<b>3.6</b>

## Group Data

### ISO14001 Certifications Obtained

#### ISO14001 Certified Sites and Subsidiaries

Site/Subsidiary*	Certification Date
<b>Japan</b>	
Ami Plant	February 1995
Ueno Canon Materials Inc.	February 1995
Toride Plant	May 1995
Fukushima Plant	September 1995
Hirosaki Seiki, Inc. Ishiwatari/Kitawatoku Plants	September 1995
Canon Electronics Inc. Misato Plant	October 1995
Canon Aptex 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	July 1996
Canon Chemicals Inc. Headquarters, Tsukuba Site	July 1996
Copyer Co., Ltd. Kofu Office	November 1996
Copyer Co., Ltd. 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 (97 locations in all)	December 2000
Ayase Office	June 2001
<b>Americas</b>	
Canon Virginia, Inc.	December 1997
South Tech, Inc.	December 1997
Custom Integrated Technology, Inc.	December 1999
<b>Europe</b>	
Canon Bretagne S.A.S.	November 1995
Canon Giessen GmbH	October 1997
Canon (Schweiz) AG	December 1997
Canon Danmark A/S	March 1998
Canon Svenska AB and Canon Centers (22 sites)	April 1999
<b>Asia (excluding Japan)</b>	
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
<b>Oceania</b>	
Canon Australia Pty. Ltd.	November 2002

\*Company and operational site names are those that were still in use during 2002

### Environmental Audits

#### Descriptions of Environmental Audits

<b>Environmental Audits by Canon Headquarters</b>	These audits are performed by a qualified environmental 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 and are remedied within three months.
<b>Environmental Audits by Each Operational Site</b>	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.

#### Focus of Environmental Audits by Canon Headquarters

Primary Audit Items for Environmental Audits by Canon Headquarters	
1	Employee familiarity with the operational site's environmental policies
2	Relationship of specified environmental goals with important environmental aspects of the operational site
3	Status and functioning of system for managing progress in achieving mid-term and annual plans
4	Planning and implementation of general and specialized education
5	Handling of important environmental information from headquarters
6	Keeping of management documentation in updated condition
7	Implementation of training to handle accidents and other emergency situations
8	Confirmation that the latest information on applicable laws, regulations, and standards* is on hand *Water quality, soil, air, waste, noise, vibration, foul odors, hazardous substances, energy conservation, high-pressure gas, etc.
9	Acquisition of necessary authorizations from governmental authorities
10	Confirmation that laws relating to the consignment of waste disposal are being complied with (consignment agreement, manifest management, etc.)
11	Planning and implementation of environmental measurement plans that are in compliance with the law and Canon standards
12	Planning and implementation of environmental audit plans
13	Holding of discussions of ways to continuously improve the environmental management performance system
14	Construction and functioning of a system for promoting environmentally conscious design in R&D divisions

#### 2002 Results of Environmental Audits by Canon Headquarters

Month Performed	Operational Site Audited	Remarks (Number of audit, date of previous audit)
January	Canon Precision Inc.	1 <sup>st</sup>
	Canon Aptex Inc. Shimomaruko Office	1 <sup>st</sup>
February	Meguro Office	1 <sup>st</sup>
	Copyer Co., Ltd. Mitaka Headquarters	1 <sup>st</sup>
March	Ayase Office	1 <sup>st</sup>
April	Canon Electronics Inc. Chichibu Plant	2 <sup>nd</sup> /October 1999
May	Canon Electronics Inc. Akagi Plant	1 <sup>st</sup>
June	Canon Inc., Taiwan	2 <sup>nd</sup> /November 1997
July	Canon Electronics Inc. Misato Plant	2 <sup>nd</sup> /June 1999
	Canon Zhuhai, Inc.	2 <sup>nd</sup> /June 1999
September	Hiratsuka Development Center	3 <sup>rd</sup> /September 1999
	Copyer Co., Ltd. Kofu Office	2 <sup>nd</sup> /February 1999
October	Oita Canon Materials Inc.	1 <sup>st</sup>
	Canon Dalian Business Machines, Inc.	2 <sup>nd</sup> /April 1998
November	Copyer Co., Ltd. Fukui Office	2 <sup>nd</sup> /April 1999

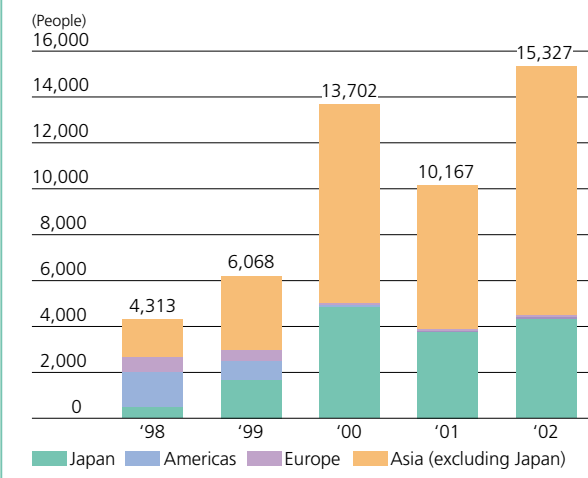
\*Company and operational site names are those that were still in use during 2002.

#### Primary Types of Failures Noted

- Compliance with Group and other standards regarding management of waste and the use of outside waste disposal services
- Planning and implementation of environmental measurements
- Planning and implementation of environmental audits by operational sites

### Education and Training

#### Employees Receiving Environmental Training



#### Primary Training Programs and Results for 2002

	Japan	Overseas	Total
<b>Training Programs for Different Ranks</b>			
Training for newly hired employees	672	9,941	10,613
Training for general employees	2,688	959	3,647
Training for newly appointed Assistant Managers and Foremen	12	0	12
<b>Specialist Training</b>			
Training for environmental staff	335	28	363
Environmental Auditor Training	244	44	288
Standard seminar on Design for Environment	15	0	15
Seminars on environmental technology and safety technology for chemicals	15	0	15
Green Procurement Basic Course/ Green Procurement Environment Improvement Structure Course	265	0	265
External training programs, seminars, and lectures, etc.	109	0	109
<b>Total</b>	<b>4,355</b>	<b>10,972</b>	<b>15,327</b>

#### Green Purchasing

At Canon, when we procure parts and materials or purchase other items, we give priority to those that we have judged to be environmentally friendly. We issued our Green Procurement Standards in 1997 and updated them as necessary. In 2002, we issued a completely revised version, which we have posted on our homepage. Because our green procurement standards have changed over the years, comparisons to historical data on our green procurement are not strictly meaningful, but we believe we have achieved positive results through environmentally conscious product design and priority procurement/purchasing of goods we have certified as environmentally friendly.

Special order production materials and parts certified environmentally friendly	83.3%
Other purchased items certified environmentally friendly	79.0%

### Environmental Protection Relationships

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 Subcommittee on Industry and the Environment
Japanese Ministry of the Environment	Investigative Committee on the Application of Environmental Accounting
Japanese Environmental Management Association for Industry	Eco-Products Organizing Committee Eco-Leaf Environmental Label Management Committee New Pj Planning Committee on LCA Method Application
Japan Electronics and Information Technology Industries Association	General Committee on Environment and Product Safety IT 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
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	Green Productivity Association
Yokohama National University	Eco-Chemistry Research Group
Sustainable Management Forum of Japan	Environmental Business Association
Nikkei Business Publications, Inc.	Steering Committee of the Nikkei BP Forum on Environmentally Conscious Management
The Society of Non-Traditional Technology	Eco-Materials Research Committee

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	America, Europe, Africa, Middle East, Asia, etc. (over 100 countries in all)
Clean Up Australia	Australia
Yellowstone Park Foundation	America
Public Broadcasting Service's NATURE series	America
<b>Canon Environmental Protection Programs</b>	
Toner Cartridge Collection Program	All
Canon National Parks Science Scholars Program	Americas
Teak forestation programs	Thailand
"Shred-it Shredding" Recycling Programme	Singapore
Environmental protection programs for rivers (Kano River, Sagami River, Tama River, Tone River, and others)	Japan
Charity campaign	Japan

## Products and Services

### Energy Efficiency

#### Mid-Term Environmental Goals

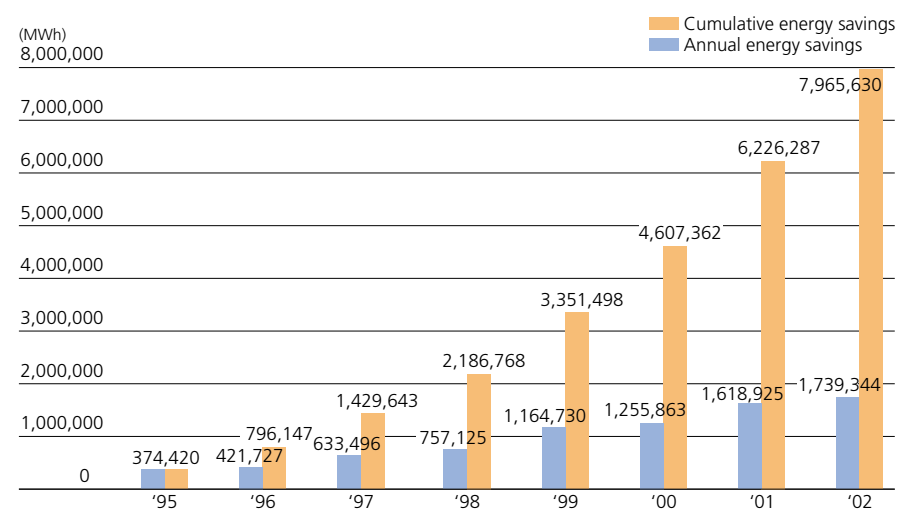
2003 Bring all business machine products into compliance with the International ENERGY STAR® Program (copying machines, printers, facsimile machines, image scanners)  
Power consumption during operation (for new products): Reduce with each new model

#### 2002 Results

Compliance with the International ENERGY STAR® Program: 92% achieved (60 of 65 products)  
Power consumption during operation (for new main products): 100% achieved

In 2002, we began offering IH fixing technology in our LBP products, which have long used (and continue to use) on-demand technology, applied energy efficiency design to our Bubble Jet printers and took other steps to enhance the energy efficiency of our various business machine products. We have also been able to maintain high actual results versus goals. Some products are not yet in compliance with the International ENERGY STAR® Program, but we continue to consider actions to take and are working to further improve the energy efficiency of our products.

Energy Efficiency of Canon Products Equipped with On-Demand Fixing Technology



### Elimination of Hazardous Substances

#### Mid-Term Environmental Goals

2004 In 2001, begin sales of products from which designated substances\*1 have been eliminated. Gradually eliminate these substances from all products.  
2003 Develop substitute technologies for PVC\*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

#### 2002 Results

Sales of products free of hazardous substances: Sales of some products underway  
PVC substitutes: For some products, considering prototypes using olefin-based plastic  
Brominated flame retardant: Used phosphate-based flame retardant V2 for 1,280 tons of ABS plastic in office machines

In 2002, the G-Project was launched to accelerate the elimination of hazardous substances from Canon products and enhance efforts to meet the 2004 goal. Hazardous substances have been completely eliminated from some products, which are being sold.

### Resource Conservation

#### Mid-Term Environmental Goals

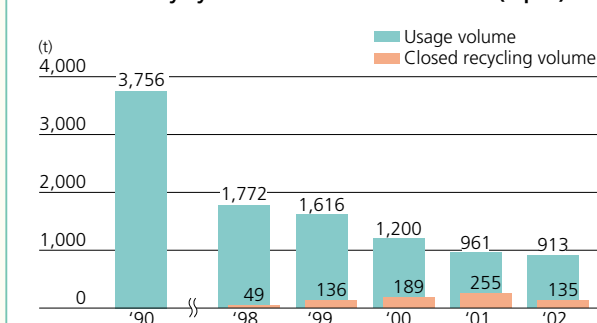
2003 Gradually increase use of recycled parts and materials, and include them in the design of all products  
• Implement reuse of products/parts  
• Use of recycled plastic materials  
Plastic materials\*1: Reduce number of plastic grades to 1/3 2000 levels  
100% recycling of collected used products\*2  
• Copying machines  
• Cartridges (Bubble Jet, toner)

#### 2002 Results

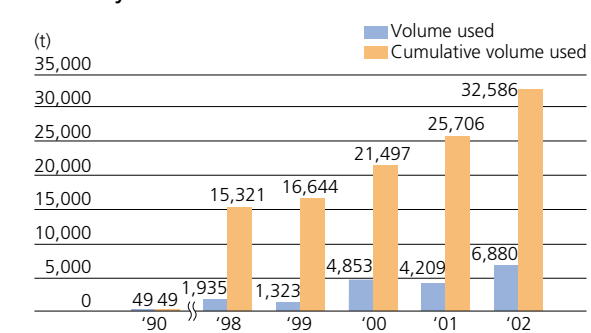
• Implemented reuse of products/parts for copying machines and Bubble Jet printers  
• Use of recycled plastic materials: 6,880 tons used  
• Plastic materials: 47% reduction to 67 grades of plastic  
• 100% recycling of collected used products: 92% for copying machines, 100% for cartridges

Based on close cooperation, reuse of copying machine parts, recycling of copying machine materials for use in Bubble Jet printers and other recycling/reuse efforts are being pursued inside Canon. However, we are also working with our competitors to recycle PET from outside sources and are actively using this recycled PET in our own products.

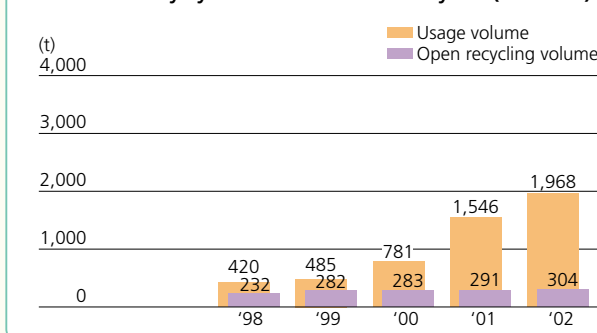
Volumes of Polystyrene Foam Used and Collected (Japan)



Use of Recycled Plastic

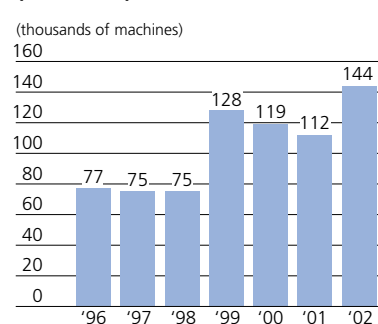


Volumes of Polystyrene Foam Used and Recycled (Overseas)

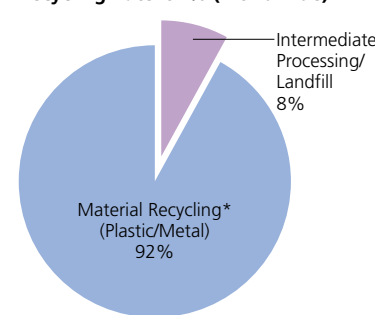


\*1 Excluding coloring agents  
\*2 Includes thermal recycling

Used Copying Machine Collections (worldwide)

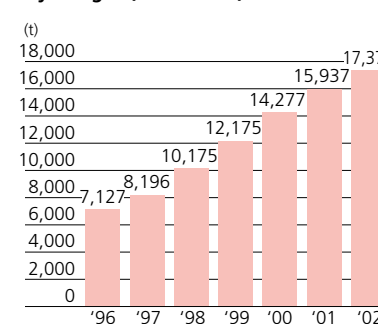


2002 Recycling Rate: 92% (worldwide)

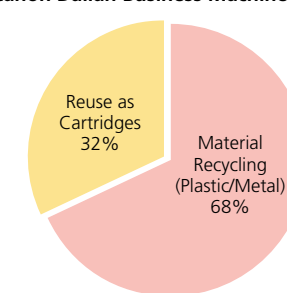


\*Includes reuse of parts and remanufacturing of used copying machines

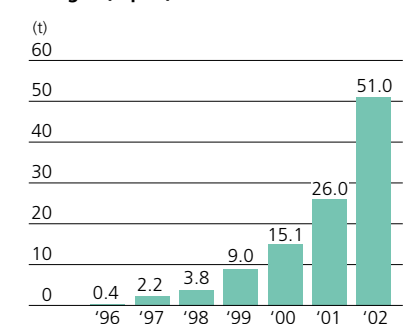
Used Toner Cartridge Collections by Weight (worldwide)



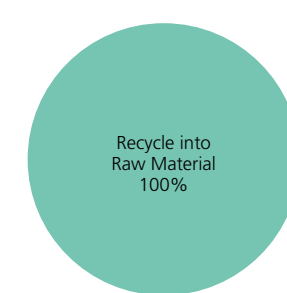
2002 Recycling Rate: 100% (Canon Dalian Business Machines, Inc.)



Used Bubble Jet Cartridge Collections by Weight (Japan)



2002 Recycling Rate: 100% (Japan)



\*1 Hazardous substances designated by the European Union's Restrictions on Hazardous Substances (RoHS) (Cd, Hg, Pb, Cr (VI), PBB, PBDE)  
\*2 Prohibit use of soft PVC containing phthalic acid esters. Use of PVC packaging materials was halted in 1996.

## Global Warming Prevention and Energy Conservation

### Energy Usage

#### Mid-Term Environmental Goals

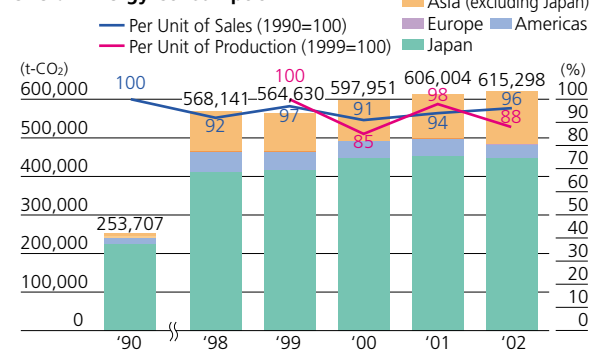
- 2010 Reduce CO<sub>2</sub> emissions by 25% compared to 1990 levels (per unit of production)
- 2003 Reduce CO<sub>2</sub> emissions by 15% compared to 1999 levels (per unit of production)

#### 2002 Results

- Overall energy usage: 615,000 t-CO<sub>2</sub>/yr. (9,000 t-CO<sub>2</sub>/yr. increase compared to prior year)
- CO<sub>2</sub> emissions per unit of production: 88% of 1999 level (10.3% lower than prior year level) 126% of 1990 level (10.0% lower than prior year level)

Energy usage per unit of production in 2002 was 88% of the level for 1999 and 126% of the level for 1990, both figures reflecting approximately 10% reductions from the prior year. Considering all of Canon's activities, including sales and R&D, energy usage per unit of sales was 94% of the level for 1990, about the same as last year. Consolidations to improve efficiency at operational sites inside and outside of Japan were particularly influential in bringing about these results. Energy conservation activities at individual operational sites reduced CO<sub>2</sub> emissions by 44,000 tons worldwide (approximately 7% of overall energy usage in 2002).

#### Overall Energy Consumption

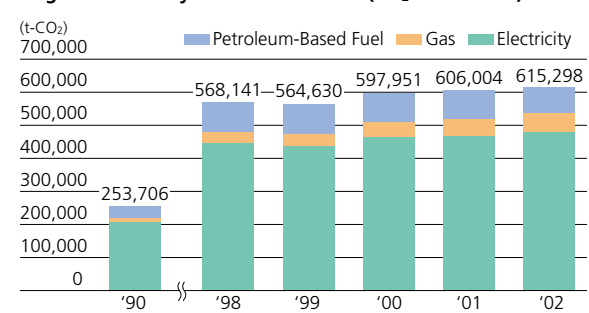


\*Per Unit of Production data covers only production sites (all)

\*Greenhouse gas conversion coefficients

Conversion coefficients used in calculations for Japan are those announced by the Japanese Ministry of the Environment in 2000. Conversion coefficients used in calculations for overseas locations are those announced by the Greenhouse Gas Protocol (<http://www.ghgprotocol.org>) in 2001.

#### Usage of Electricity and Various Fuels (CO<sub>2</sub> conversion)



#### 2002 Consumption of Electricity, Gas, and Petroleum-Based Fuel by Region

	Electricity	Gas	Petroleum
	MWh	km <sup>3</sup>	kL
Japan	918,990	17,558	29,905
Americas	58,564	971	0
Europe	15,413	300	39
Asia (excluding Japan)	165,277	205	691
<b>Total</b>	<b>1,158,244</b>	<b>19,034</b>	<b>30,635</b>

#### 2002 Results of Principal Energy Policies

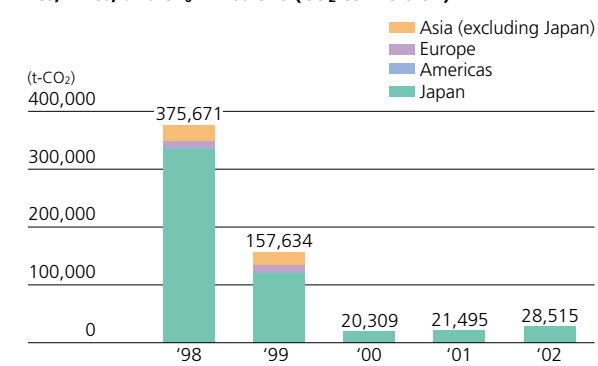
Region	(t-CO <sub>2</sub> )
<b>Japan</b> Cell production activities, improvement of production equipment and processes (toner production), introduction of cogeneration (Oita Canon Materials), upgrades to high-efficiency equipment (heat source equipment, air conditioning equipment, etc.), improvement of lighting equipment, upgrade of various types of power equipment to employ inverters	35,770
<b>Americas</b> Energy savings through production consolidation	3,994
<b>Europe</b> Elimination of three electrical transformers, operation optimization for air conditioning equipment, energy savings through use of people sensors (lighting equipment)	115
<b>Asia (excluding Japan)</b> Upgrade of heat source equipment, introduction of energy-efficient molding equipment, time-controlled operation of air conditioning equipment (installation of calendar function), use of fewer heat source equipment units at any one time, introduction of energy-efficient lighting equipment	4,935

#### Elimination of Non-Energy-Derived Greenhouse Gases

In 1998, we established our Countermeasure Sub-committee (PFCs) and began working to eliminate PFCs, HFCs, SF<sub>6</sub>, 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 equipment for eliminating non-energy derived greenhouse gases used in the cleaning of deposition systems used in the manufacture of semiconductors and the dry etching of semiconductor materials.

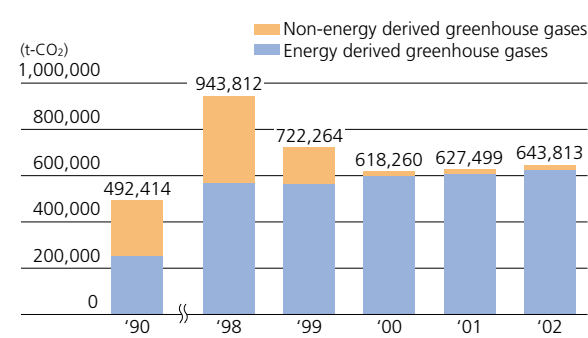
#### PFCs, HFCs, and SF<sub>6</sub> Emissions (CO<sub>2</sub> conversion)



\*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.

#### Overall Greenhouse Gas Emissions



Energy derived greenhouse gases .....CO<sub>2</sub>  
Non-energy derived greenhouse gases.....PFCs, HFCs, SF<sub>6</sub>

## Waste Reduction and Resource Conservation

### 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

#### 2002 Results

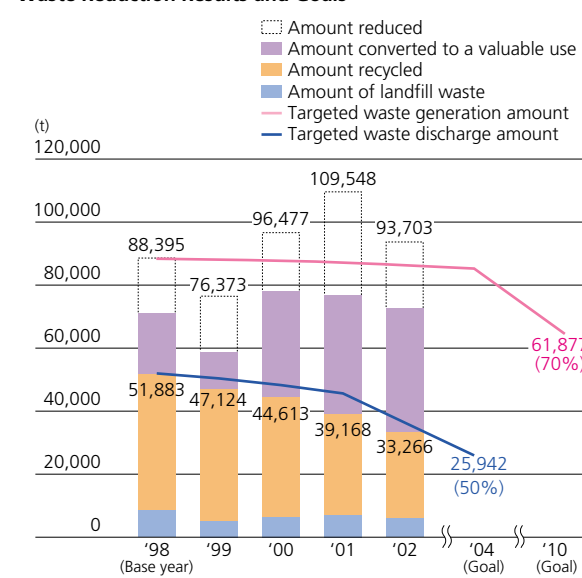
- Gross waste generation: 93,703 t/yr. (15,845 t/yr. increase compared to prior year) (6.0% increase compared to 1998 level)
- Gross waste discharge: 38,912 t/yr. (6,745 t/yr. reduction compared to prior year) (35.9% reduction compared to 1998 level)
- Zero landfill waste: Achieved at 27 of 39 operational sites

After re-examining the basic elements of waste measures, "reduce," "reuse" and "recycle," it was decided that steps aiming for greater added value should be taken. Through measures such as more thorough collection, sorting and disassembly activities, and the introduction of recycling technologies, all of which were undertaken in pursuit of a policy of producing higher-value recycled items, 27 of 39 operational sites in Japan succeeded in reducing their landfill waste to zero.

#### Materials Recycled (t)

	2000	2001	2002
Plastics	144,390	127,000	138,260
Steel	70,621	91,000	100,424
Aluminum	—	9,123	9,248
Glass	—	2,994	3,192
Indirect materials	—	8,019	7,492

#### Waste Reduction Results and Goals



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

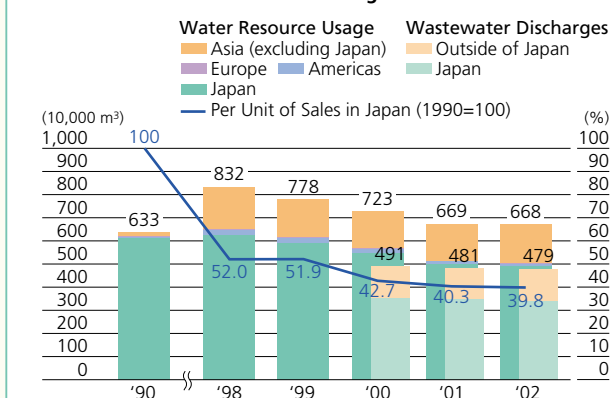
### Usage of Water Resources

- Water resource usage in 2002: Totaled 6.68 million m<sup>3</sup> (99.8% of 1996 level)
- Water resource usage per unit of sales: 39.8% of the 1990 level
- Applications (using Japan as an example):
  - Drinking, personal hygiene 29%
  - Production processes 34%
  - (Principal uses: Lens production, semiconductor production)
  - Air conditioning equipment, etc. 37%

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\*.

\*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. And in 1999, when we established Oita Canon Materials, 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.

#### Use of Water Resources and Discharge of Wastewater



#### Water Recycling

Ultra-Pure Water Recycling Systems at semiconductor plants (Hiratsuka, Ayase) and closed recycling systems at a lens plant (Utsunomiya) and chemical products plant (Oita Canon Materials) together processed 590,000 m<sup>3</sup> of water in 2002.



# Management of Chemical Substances and Elimination of Hazardous Substances

## Elimination of Hazardous Substances

### Mid-Term Environmental Goals (Japan)

- 2003 A-Rank Substances: Eliminate use
- B-Rank Substances: Reduce use by 20% compared to 1998 levels
- B-Rank Substances: Reduce emissions by 90% compared to 1998 levels
- C-Rank Substances: Reduce emissions by 20% compared to 1998 levels
- Reduce emission of PRTR Law\*1 designated substances by 50% compared to 1998 levels

### 2002 Results (Japan)

- A-Rank Substances: 0.1t used (reduced 99.9% compared to 1998 levels)
- B-Rank Substances: 97.2t used (reduced 39.3% compared to 1998 levels)
- B-Rank Substances: 4.2t discharged (reduced 87.3% compared to 1998 levels)
- C-Rank Substances: 355.1t discharged (reduced 71.5% compared to 1998 levels)
- Emission of PRTR Law designated substances: 75.1t reduction (reduced 76.0% compared to 1998 levels)

Progress toward 2003 targets was faster than planned. Elimination of certain operations in Japan, collection of solvents and internal recycling resulted in reduced usage and smaller discharges. Use of dichloromethane for thin-film coating at overseas operational sites was halted and this chemical will no longer be used by the Canon Group once Canon Virginia ceases to use it in 2003.

### Substances Canon No Longer Uses

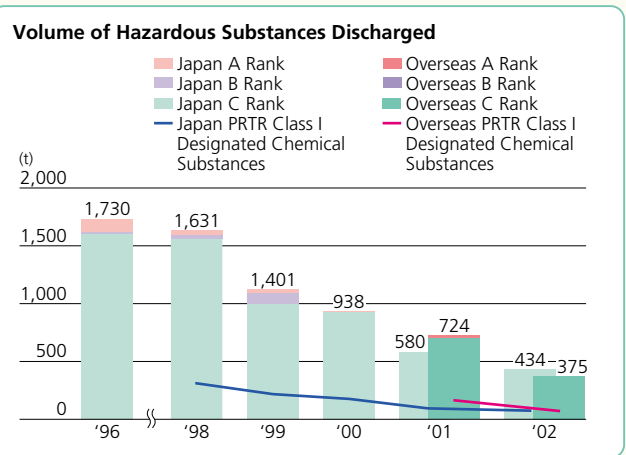
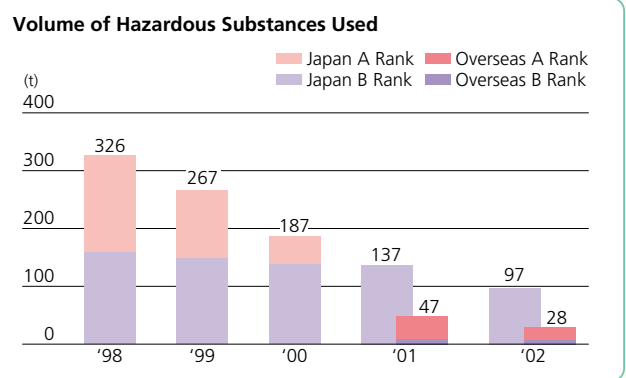
Substance Name	Eliminated
Ozone Depleting Substances	
● CFCs (chlorofluorocarbons) 15 types	December 1992
● 1,1,1-Trichloroethane	October 1993
● HCFCs (hydrochlorofluorocarbons) 34 types	October 1995
Greenhouse Gases*2	
● PFCs (perfluorocarbons)	December 1999
● HFCs (hydrofluorocarbons)	December 1999
Soil Contaminants	
● Trichloroethylene	December 1996
● Tetrachloro ethylene	December 1996
● Dichloro methane (for cleaning)	December 1997
● Dichloro methane (for thin film coating)*3	December 2001 (in Japan)

### PRTR Control Balance Sheet for 2002 (Data for Japan and overseas locations)

No.	Substance No.	Chemical Substance	Hazardous Substance Discharges			Amounts of Transfers	
			Atmospheric Discharges	Discharges into Waterways	Discharges into Sewage Systems	Waste	Recycled
1	1	Water-soluble zinc compounds (Zn portion)	0.00	0.00	0.00	0.00	1.31
2	16	2-Amino ethanol	0.00	0.00	0.00	0.06	19.89
3	25	Antimony and its compounds	0.00	0.00	0.00	0.00	0.30
4	40	Ethylene benzene	0.00	0.00	0.00	0.00	5.10
5	43	Ethylene glycol	2.77	0.00	0.00	0.00	1.76
6	63	Xylene	4.68	0.00	0.00	1.33	27.53
7	68	Trivalent chromium (Cr portion)	0.00	0.00	0.00	0.00	0.02
8	93	Chlorobenzene	45.71	0.00	0.00	26.69	320.26
9	96	Methyl chloride	0.00	0.00	0.00	0.00	1.44
10	139	o-dichlorobenzene	0.02	0.00	0.00	0.00	1.55
11	145	Dichloromethane	2.31	0.00	0.00	5.38	13.07
12	172	N, N-dimethylformamide	3.25	0.00	0.00	0.00	78.96
13	177	Styrene monomer	1.14	0.00	0.00	0.00	85.11
14	181	Thiourea	0.00	0.00	0.00	0.00	1.75
15	224	1, 3, 5-Trimethylbenzene	5.99	0.00	0.00	0.00	11.41
16	227	Toluene	43.45	0.00	0.00	0.04	9.95
17	230	Lead and lead compounds (Pb portion)	0.08	0.00	0.00	0.66	1.69
18	232	Nickel compounds (Ni portion)	0.00	0.00	0.02	0.00	4.34
19	283	Water-soluble hydrogen fluoride salts (F portion)	0.10	0.00	1.78	0.01	0.78
20	311	Manganese and its compounds	0.00	0.00	0.00	0.00	0.00
Total			109.51	0.00	1.80	34.17	586.21

\*Canon used 45 Class I Designated Chemical Substances in quantities of at least 0.1 ton. The PRTR discharge and quantity data above is for those 354 Class I Designated Chemical Substances of which yearly usage was at least five tons and there were discharges or transfers. Substances recycled into non-valuable materials are counted under the column "Recycled."

\*Totals have been calculated by summing quantity figures with three decimal places and, therefore, are not equal to the sums of figures appearing in the table above.



\*1 Japan's Pollutant Release and Transfer Register  
\*2 Excludes use in semiconductor production  
\*3 Overseas usage scheduled to be ceased in 2003

# Site Topics

## Initiatives by the Hiratsuka Development Center

The Hiratsuka Development Center performs R&D and production related to display materials, semiconductor devices, and recording technology, all the while placing greatest emphasis on lower environmental burden. It is ISO14001 certified, performs voluntary audits twice each year, has set and upholds its own water quality, air quality, noise, vibration, foul odor and other standards, all of which are tougher than legal requirements, and monitors its operations 24 hours a day, 365 days a year. In 2002, it experienced no incidents leading to discharges in excess of legal standards.

Among its more unique initiatives is the promotion of "idling stops" (turning engines off when stopped at a traffic signal, etc.) for commuter buses and personal cars, which helps to enhance employees' environmental awareness. It is also lending a hand in activities that benefit the local community, participating in beautification activities for the Kaname River in September and similar activities for the Sagami River in October. Both were sponsored by the *Sagamigawa wo Kirei ni Suru Kyogikai* (Sagami River Clean Up Committee). Communication about environmental issues is another key interest of the Hiratsuka Development Center, which maintains contacts with government agencies and various committees and networks.

## Water Quality (Operational Site Wastewater Discharges)

Item	Regulatory standards*1	Operational site standards*2	Highest measured values*3
<b>Items Impacting Health</b>			
Cadmium (mg/l)	0.1	0.08	<0.005
Cyanide (mg/l)	1	0.8	<0.05
Organic Phosphorous (mg/l)	0.2	0.16	<0.05
Lead (mg/l)	0.1	0.08	<0.005
Hexavalent chromium (mg/l)	0.5	0.4	<0.05
Arsenic (mg/l)	0.1	0.08	<0.005
Total mercury (mg/l)	0.005	0.004	<0.0005
Alkyl mercury (mg/l)	None detected	None detected	None detected
Dichloromethane (mg/l)	0.2	0.16	<0.001
Carbon tetrachloride (mg/l)	0.02	0.016	<0.001
1,2-dichloroethane (mg/l)	0.04	0.032	<0.001
1,1-dichloroethylene (mg/l)	0.2	0.16	<0.001
Cis-1,2-dichloroethylene (mg/l)	0.4	0.32	<0.001
1,1,1-trichloroethane (mg/l)	3	2.4	<0.001
1,1,2-trichloroethane (mg/l)	0.06	0.048	<0.001
Trichloroethylene (mg/l)	0.3	0.24	<0.001
Tetrachloroethylene (mg/l)	0.1	0.08	<0.001
1,3-dichloropropene (mg/l)	0.02	0.016	<0.001
Thiuram (mg/l)	0.06	0.048	<0.001
Simazine (mg/l)	0.03	0.024	<0.001
Thiobencarb (mg/l)	0.2	0.16	<0.001
Benzene (mg/l)	0.1	0.08	<0.001
Selenium (mg/l)	0.1	0.08	<0.005
Boron (mg/l)	10	8	<0.1
Fluorine (mg/l)	8	6.4	6.3
Ammonia nitrogen, nitrite nitrogen, nitrate nitrogen (mg/l)	125	100	14
<b>Items Impacting Living Environments</b>			
Potential of hydrogen (pH)	5.7-8.7	5.9-8.5	6.8-7.5
Biochemical oxygen demand (BOD) (mg/l)	300	240	100
Suspended solids (SS) (mg/l)	300	240	32
n-hexane extracts (mineral oil) (mg/l)	5	5	<5
n-hexane extracts (animal and vegetable oils) (mg/l)	30	24	<5
Phenol (mg/l)	0.5	0.4	<0.5
Copper (mg/l)	3	2.4	<0.2
Zinc (mg/l)	3	2.4	<0.2
Soluble iron (mg/l)	10	8	<0.5
Soluble manganese (mg/l)	1	0.8	<0.1
Chromium (mg/l)	2	1.6	<0.2
Nickel (mg/l)	1	0.8	0.016
Iodine consumption (mg/l)	220	176	48

\*1 Regulatory standards: The strictest legal and regulatory standards (Sewage Law, Kanagawa Prefecture sewage ordinances)

\*2 Operational site standards: 80% of the strictest legal and regulatory standards

\*3 Figures denoted with a "<" symbol indicate levels lower than the lowest detectable level.

## Hiratsuka Development Center 2002 Management Data

- Location: 6770 Tamura, Hiratsuka-shi, Kanagawa
- Business activities: Development and production of electronic devices, semiconductors and displays
- Site area: 30,962m<sup>2</sup>
- Establishment: 1981
- Number of employees: 759
- Designation of land use: Exclusive industrial

## Air Quality

Item	Operational site standards	Highest measured values
NOx (ppm)	150	120
Boiler Soot and dust (g/Nm <sup>3</sup> )	0.3	<0.003

\*Operational site standards: The stricter of either the Clean Air Act or the applicable Kanagawa Prefecture ordinance

\*Boilers emit no SOx, because they use LNG

## Noise (Unit: dB)

Category	Operational site standards	Highest measured values
Morning	67.5	54
Day	70.0	55
Evening	67.5	62
Night	65.0	55

\*Operational site standards: Applicable Kanagawa Prefecture ordinances related to the protection of living environments

## Vibration (Unit: dB)

Category	Operational site standards	Highest measured values
Day	65	32
Night	60	30

\*Operational site standards: 5dB lower than the applicable Kanagawa Prefecture ordinances related to the protection of living environments

## Odor

Category	Operational site standards	Highest measured values
Odor	10	<10

\*Operational site standards: Applicable Kanagawa Prefecture ordinances related to the protection of living environments

Information on this and all other sites is available at the following URL: [www.canon.com/environment/](http://www.canon.com/environment/)

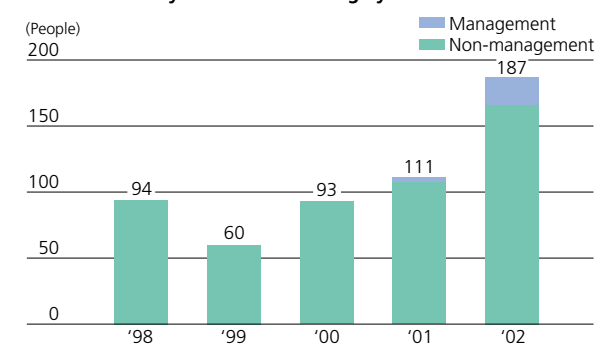
## Labor Practices and Fair Working Conditions/Human Rights

### Diversity and Opportunity

#### Internal Recruiting (Canon Inc.)

Canon Inc. implemented an internal recruiting system for management positions in October 2002. Four employees successfully used this system in 2001 and 24 in 2002.

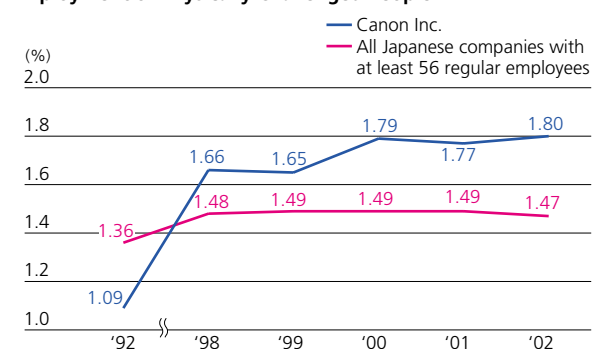
Positions Filled by Internal Recruiting System



#### Employment of the Physically Challenged (Canon Inc.)

Reaching the legally mandated employment rate for physically challenged people required considerable time. However, as a result of efforts to fulfill the corporate philosophy of *kyosei* by creating a working environment in which the physically challenged can naturally exercise their capabilities, Canon Inc. achieved (in June 2002) the goal of employing physically challenged people at the rate of 1.8% of the entire Canon Inc. workforce, and without creating a special subsidiary. Canon Inc. will continue to hire physically challenged people and meet this responsibility to society.

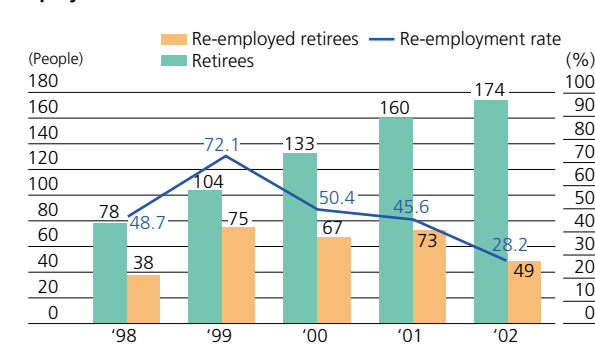
Employment of Physically Challenged People



#### Re-Employment of Retirees (Canon Inc.)

Canon Inc. currently employs approximately 150 of its retirees, who are making full use of their long years of experience and rich knowledge.

Employment of Retirees



### Education and Training

#### Training

Employees of Canon Inc. received an average of 19.6 hours of training in 2002.

#### Primary Types of Training at Canon Inc.

<b>Training Programs for Different Ranks*1</b> Business Skills Training	Includes training for the physically challenged
<b>Internationalization Training</b>	Management training for managers of overseas affiliates and subsidiaries*2, Asia Trainees, etc.
<b>R&amp;D Engineer Training</b>	Includes system for sending employees to foreign educational institutions
<b>Quality-Related Training</b>	Product safety, regulatory matters, etc.
<b>Training on Intellectual Property and Product-Related Legal Issues</b>	Patents, design, etc.
<b>Procurement Training</b>	Green procurement, procurement ethics/conduct, regulations, etc.
<b>Manufacturing Technology/Skills Training</b>	Equipment control, glass processing, electronic circuits, etc.
<b>Production Training</b>	Production reform*3, VE, QC, etc.
<b>Environmental Training</b>	Environmental staff training, environmental auditor training, etc.

- \*1 Also includes coverage of topics such as compliance and risk management
- \*2 Training for Managers of overseas affiliates and subsidiaries (held in Tokyo), training for Managers and above at manufacturing affiliates and subsidiaries in China (Zhuhai, Dalian) (held in China), and other types of training
- \*3 Training focused on cost cutting and production lead time reduction (inventory reduction)

### Human Rights

#### 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

Worker union membership among Canon Inc. employees is equivalent to 79.2% of the workforce (16,938 of 21,382 total employees as of December 2002).

### Safety and Health

The Canon Group's workforce totaled 97,802 as of the end of 2002. A breakdown of labor accidents that occurred during the year is given below.

#### 2002 Labor Accidents (Worldwide)

	Accidents Requiring Time Off*1	Accidents Not Requiring Time Off*2	Total
Japan	8	115	123
Americas	69	124	193
Europe	58	8	66
Asia (excluding Japan)	20	138	158
<b>Total</b>	<b>155</b>	<b>385</b>	<b>540</b>

- \*1 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.

### Plants and Offices Covered in This Report

(Company names, operational site names and activities are those that still applied during 2002)

Name	Location	Activities
<b>Canon Inc.</b>		
Shimomaruko Headquarters	Tokyo	R&D, corporate administration, others
Meguro Office	Tokyo	R&D, others
Tamagawa Plant	Kanagawa	Development of Bubble Jet printers, Bubble Jet chemical products; manufacturing of Bubble Jet chemical products
Kosugi Office	Kanagawa	Development of software for office imaging products
Hiratsuka Development Center	Kanagawa	Development of displays, electronic devices
Ayase Office	Kanagawa	R&D, manufacturing of semiconductor devices
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 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
Fukushima Plant	Fukushima	Manufacturing of Bubble Jet printers and Bubble Jet chemical products
Utsunomiya Optical Products Plant	Tochigi	R&D, manufacturing, sales, 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 equipment

#### Domestic Marketing Subsidiaries and Affiliates

Canon Sales Co., Inc.	Chiba	All products
Makuhari Headquarters		

#### Domestic Manufacturing Subsidiaries and Affiliates

Canon Electronics Inc. Headquarters, Chichibu Plant	Saitama	Magnetic components
Canon Electronics Inc. Misato Plant	Saitama	IMS and business machines components business
Canon Electronics Inc. Akagi Plant	Gunma	LBPs
Copier Co., Ltd. Headquarters	Tokyo	Development and sale of inkjet products
Copier Co., Ltd. Tachikawa Plant	Tokyo	Logistics for copying machines and other products
Copier Co., Ltd. Kofu Office	Yamanashi	Manufacturing of page printers, MFPS, large-scale printers/plotters and chemical products
Copier Co., Ltd. Fukui Office	Fukui	Development and manufacturing of photosensitive paper, chemical products
Canon Precision Inc.	Tokyo	DC micromotors, ultrasonic motor-related unit development and sales
Hirosaki Seiki, Inc. Headquarters, Kitawotoku 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
Canon Aptex Inc. Headquarters, Ibaraki Plant	Ibaraki	Manufacturing of business machines peripherals, Bubble Jet color card/label printers and Bubble Jet cartridges
Canon Aptex Inc. Shimomaruko Office	Tokyo	Label printer development

Name	Location	Activities
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, Bubble Jet cartridges
Nagahama Canon Inc.	Shiga	LBPs, chemical products, solar cells, Bubble Jet 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 production
Canon N.T.C., Inc. Saitama Plant	Saitama	Business machine remanufacturing
Ueno Canon Materials Inc.	Mie	Chemical products for copying machines and printers

#### Overseas Manufacturing Subsidiaries and Affiliates

Canon Virginia, Inc.	U.S.A.	LBPs, toner cartridges, copying machines
South Tech, Inc.	U.S.A.	Parts for molds, presses and units
Custom Integrated Technology, Inc.	U.S.A.	Copying machine remanufacturing
Industrial Resource Technologies, Inc.	U.S.A.	Toner cartridge recycling
C.S. Polymer, Inc.	U.S.A.	Chemical product materials
Canon Giessen GmbH	Germany	Copying machines, copying machine remanufacturing
Canon Bretagne S.A.S.	France	Low-speed copying machines, LBPs, toner cartridges, recycling of toner cartridges
Canon Inc., Taiwan	Taiwan	SLR and compact cameras, EF and other lenses, precision-metal molds
Canon Opto (Malaysia) Sdn. Bhd.	Malaysia	Optical lens parts, digital cameras, EF lenses
Canon Hi-Tech (Thailand) Ltd.	Thailand	Bubble Jet printers, personal-use copying machines, multifunction facsimile machines
Canon Engineering (Thailand) Ltd.	Thailand	Plastic molds, molded parts
Canon Dalian Business Machines, Inc.	China	Toner cartridges, toner cartridge recycling, LBPs
Canon Zhuhai, Inc.	China	LBPs, compact cameras, image scanners and other products

#### Overseas Marketing Subsidiaries and Affiliates

Canon U.S.A., Inc.	U.S.A.	All products
Canon Canada, Inc.	Canada	All products
Canon Business Solutions, West, Inc.	U.S.A.	Business machines
Canon Business Solutions, Central, Inc.	U.S.A.	Business machines
Canon Business Solutions, Southeast, Inc.	U.S.A.	Business machines
Canon Financial Services, Inc.	U.S.A.	Business machine leasing
Canon Latin America, Inc.	U.S.A.	All products
Canon Panama, S.A.	Panama	All products
Canon do Brasil Indústria e Comércio Limitada	Brasil	Copying machines, facsimile machines
Canon Chile, S.A.	Chile	Business machines
Canon Mexicana S. de R.L. de C.V.	Mexico	All products
Canon Europa N.V.	Netherlands	All products
Canon (UK) Ltd.	United Kingdom	All products
Canon Deutschland GmbH	Germany	All products
Canon France S.A.	France	Business machines
Canon Italia S.p.A.	Italy	All products
Canon (Schweiz) AG	Switzerland	All products
Canon España S.A.	Spain	All products
Canon Svenska AB	Sweden	All products
Canon Norge A.S.	Norway	All products
Canon Oy	Finland	All products
Canon GmbH	Austria	All products
Canon Singapore Pte. Ltd.	Singapore	Business machines
Canon Hongkong Co., Ltd.	China	All products
Canon Australia Pty. Ltd.	Australia	All products

- The Ueno Plant was spun off as Ueno Canon Materials Inc. in April 2002.
- The Fukushima Plant was spun off as Fukushima Canon Inc. in April 2003.
- The Makuhari/Mita Area headquarters functions of Canon Sales Co., Inc. were transferred to the newly established Shinagawa headquarters in April 2003.
- Canon Aptex Inc. and Copier Co., Ltd. were merged to create Canon Finetech Inc. in January 2003.
- Canon Business Machines, Inc., Canon Business Machines de Mexico, S.A. de C.V. and Hanawa Seiki, Inc. were all closed in May 2002.

Detailed information on each operational site can be found at the following URLs:  
[www.canon.com/about/group/list.html](http://www.canon.com/about/group/list.html)  
[www.canon.com/gateway/index.html](http://www.canon.com/gateway/index.html)

## History and Recognition of Environmental Activities

Developments
<p><b>2003</b></p> <ul style="list-style-type: none"> <li>• Soil Contamination Countermeasures Law takes effect</li> <li>• EU's Directive on Waste Electrical and Electronic Equipment (WEEE) takes effect</li> <li>• EU's Restrictions on Hazardous Substances (RoHS) takes effect</li> </ul>
<p><b>2002</b></p> <ul style="list-style-type: none"> <li>• Johannesburg Earth Summit held</li> <li>• GRI Sustainability Reporting Guideline 2002 issued</li> <li>• End User Equipment (EUE) Directive proposed</li> <li>• Law Concerning Special Measures Against PCB Waste takes effect</li> <li>• Law on Promoting Green Purchasing takes effect</li> </ul>
<p><b>2001</b></p> <ul style="list-style-type: none"> <li>• 7<sup>th</sup> Conference of the Parties to the UN Framework Convention on Climate Change held in Marrakesh</li> <li>• Printer Eco-Mark established (type: 122)</li> <li>• Special Measures Law on PCBs passed</li> <li>• Law on Promoting Green Purchasing passed</li> <li>• Waste Management and Public Cleansing Law revised</li> <li>• PRTR Law takes effect</li> <li>• Home Appliance Recycling Law passed</li> <li>• Law for Promoting Effective Use of Resources passed</li> <li>• Directive on the Impact on the Environment of Electrical and Electronic Equipment (EEE) proposed.</li> </ul>
<p><b>1980–2000</b></p> <ul style="list-style-type: none"> <li>• Enactment of the Law on Promoting Green Purchasing</li> <li>• Enactment of the Basic Law for Establishing the Recycle-based Society</li> <li>• Revision of the Waste Management and Public Cleansing Law</li> <li>• Enactment and revision of the Law for Promotion of Effective Use of Resources</li> <li>• Enactment of the Container and Packaging Recycling Law</li> <li>• Promulgation of recycling-related laws</li> <li>• 6<sup>th</sup> Conference of the Parties to the UN Framework Convention on Climatic Change (COP6) held</li> <li>• Law for the Promotion of Effective Use of Resources (the Recycling Law) enacted</li> <li>• Agenda 21, Rio Declaration on Environment and Development, Earth Summit</li> <li>• BS7750 takes effect</li> <li>• ISO/TC207 international standardization of environmental management begins</li> <li>• International ISO14001 standards established</li> <li>• 3<sup>rd</sup> Conference of the Parties to the UN Framework Convention on Climatic Change (COP3) held</li> <li>• Pollutant Release and Transfer Register (PRTR) established</li> </ul>

Organization/Activity
<p><b>2003</b></p> <ul style="list-style-type: none"> <li>• Global Environment Expert Committee established</li> <li>• Gained Eco-Leaf certification in inkjet printer field (first in the industry)</li> </ul>
<p><b>2002</b></p> <ul style="list-style-type: none"> <li>• Started environmental analysis enterprise</li> <li>• Established Global Environment Promotion Headquarters</li> <li>• Established Environmental Logistics Sub-committee</li> <li>• Inaugurated G-Project (for RoHS compliance)</li> <li>• Launched homepage for Global Warming Countermeasures Plan</li> <li>• Gained Type III Eco-Label (Eco-Leaf) certification for copying machines and LBPs (first in the industry)</li> <li>• Gained certification for Product Environmental Information Disclosure System (first in the industry)</li> </ul>
<p><b>2001</b></p> <ul style="list-style-type: none"> <li>• Established Environment New Business Center</li> <li>• PIXUS F/S Series Bubble Jet printers become the world's first Bubble Jet printers to gain Eco-Marks</li> <li>• Gained accreditation as a Guide 25 environmental calibration and testing laboratory and entered the commercial field of environmental measurement</li> <li>• Began using recycled PET in product parts</li> <li>• Completed nationwide (in Japan) development of system for returning used copying machines</li> <li>• Canon Group Environmental Charter revised</li> <li>• Eco-Label Type III Ver. 2 announced</li> <li>• Moved forward with development of a standardized green procurement survey</li> <li>• Completed development of a cleaning technology using photo-activated water</li> <li>• Succeeded in making internal circuits for copying machines lead-free</li> <li>• Introduced Environmental Evaluation System (part of evaluation system on a consolidated basis)</li> </ul>
<p><b>1980–2000</b></p> <ul style="list-style-type: none"> <li>• Expanded application of Type III Eco-Label to the products manufactured overseas</li> <li>• Dry ice cleaning equipment developed</li> <li>• Announced the environmental accounting</li> <li>• Introduced the plastic sandwich molding technology</li> <li>• Formulated Green Procurement Standards</li> <li>• Announced the VOC decomposition technology by plasma</li> <li>• Makuhari headquarters of Canon Sales gains ISO14001 certification</li> <li>• Established Global Environment Promotion System</li> <li>• Initiated toner cartridge recycling</li> <li>• Established Canon Environmental Charter</li> <li>• Initiated cartridge recycling at Canon Dalian</li> <li>• Canon Europa becomes a WWF Conservation Partner</li> <li>• Eliminated use of CFCs</li> <li>• Canon U.S.A. launches its Clean Earth Campaign</li> <li>• Formulated Voluntary Environmental Plan</li> <li>• Introduced product environmental assessments</li> <li>• Acquired BS7750 certification (Ami, Ueno and other plants)</li> <li>• Initiated ISO14001 (DIS) certification</li> <li>• Started the recycling of Bubble Jet cartridges in Japan</li> <li>• Established Canon Group Mid-Term Environmental Policies and Goals</li> <li>• Disclosed the Japan's first Type III Eco-Label</li> </ul>

Principal Awards
<p><b>2003</b></p> <ul style="list-style-type: none"> <li>• Canon Inc. receives "Excellence Award" at the 6<sup>th</sup> Environmental Report Awards (Toyo Keizai Inc.)</li> <li>• Canon U.S.A. receives the ENERGY STAR® Partner of the Year Award (U.S. EPA)</li> <li>• Canon Group receives Environmental Protection Award at the 13<sup>th</sup> Company Social Contribution Awards (Asahi Shimbun Foundation)</li> <li>• Canon Group receives "Outstanding Performance Award" at the 6<sup>th</sup> Environment Report Awards ceremony (Global Environmental Forum, National Association Promotion of Environmental Conservation)</li> <li>• Canon (Schweiz) wins second prize for the best environmental report published by a large-scale enterprise in Switzerland (Swiss Association for Environmentally Conscious Management)</li> <li>• Canon Group named "Outstanding Company" at the 12<sup>th</sup> Global Environment Awards (FujiSankei Communications Group, Japan Industrial Journal)</li> <li>• LBP-2810/2710/2510 win the "Director-General of Natural Resources and Energy Award" at the Energy Conservation Awards (The Energy Conservation Center)</li> </ul>
<p><b>2002</b></p> <ul style="list-style-type: none"> <li>• Canon U.S.A. receives the ENERGY STAR® Partner of the Year Award (U.S. EPA)</li> <li>• Canon U.S.A. receives the Wastewise Program Champion Award (U.S. EPA)</li> <li>• Canon U.S.A. receives the Environmental Progress Award (EIA)</li> <li>• Canon Group receives the Judging Committee Special Award at the 5<sup>th</sup> Annual Grand Awards for the Protection of the Ozone Layer (Ministry of Economy, Trade and Industry, Ministry of the Environment, The Nippon Kogyo Shimbun, Ltd.)</li> <li>• imageRUNNER IR3300 receives Commendation from the Chairman of The Energy Conservation Center (ECCJ)</li> <li>• Canon France receives Return Mark (French Environment and Energy Management Agency)</li> </ul>
<p><b>2001</b></p> <ul style="list-style-type: none"> <li>• Canon Italia receives Ecohitech Award 2001 (WWF Italia, Ecoqual' It)</li> <li>• Canon (Schweiz) wins first prize for the best environmental report published by a large-scale enterprise in Switzerland (Swiss Association for Environmentally Conscious Management)</li> <li>• Canon Inc. receives Award for Excellent Companies at the 10<sup>th</sup> Global Environment Awards (Japan Industrial Journal and the WWF Japan)</li> <li>• Canon U.S.A. receives ENERGY STAR® Partner of the Year Award (U.S. EPA)</li> <li>• 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)</li> <li>• Canon Group receives Environmental Stewardship Award (Council on Economic Priorities)</li> <li>• Canon Inc. receives 40<sup>th</sup> Japan Industrial Journal Industrial Advertising Award's Multi-Advertising Category Gold Medal</li> </ul>
<p><b>1980–2000</b></p> <ul style="list-style-type: none"> <li>• Canon Svenska named Environmental Supplier of the Year (Oscar Dellert CO.)</li> <li>• Canon Inc. receives "Excellence Award" at the Environmental Report Awards (Toyo Keizai Green Reporting Forum)</li> <li>• Canon Inc. receives Copier of the Future IEA-DSM "Award of Excellence" (International Energy Agency)</li> <li>• Canon U.S.A. receives the Wastewise Program Champion Award (U.S. EPA)</li> <li>• Canon Australia receives Sustainable Energy Development Authority Silver Award (Government Body-SEDA)</li> <li>• Canon Inc. receives Science and Technology Agency Award at the 8<sup>th</sup> Global Environment Awards (Fuji Sankei Group, Japan Industrial Journal)</li> <li>• Canon Inc. receives Award for Excellence of the Eco-Life Lake Biwa Awards (Shiga Pref., Nihon Keizai Shimbun Inc.)</li> <li>• Canon France receives Return Mark (French Environment and Energy Management Agency)</li> <li>• Canon Italia receives Eco Hitech Award 1999 (Ecoqual' It)</li> <li>• Canon Inc. receives Outstanding Performance Award at the 3<sup>rd</sup> Environment Report Awards (Japanese Environment Agency, Mainichi Shimbun, Nihon Keizai Shimbun Inc.)</li> <li>• Canon Inc. receives Grand Prize at the 1<sup>st</sup> Global Environment Award held by the Japan Committee of the WWF</li> <li>• Canon U.S.A. receives ENERGY STAR® Award for Technical Innovation</li> <li>• Canon Inc. receives Outstanding Company Award at the 1<sup>st</sup> Green Procurement Awards (Green Procurement Network)</li> </ul>

## Glossary

### Clean Energy

Clean energy refers to hydro, wind, natural gas, solar and other sources of energy use of which results in relatively little pollution. Clean energy sources must be evaluated taking account of all stages of their life and uses, since some substances, such as hydrogen gas, are nonpolluting during combustion but may involve the creation of pollutants when they are produced.

### DMR (Digital Mockup Review)

During the development and design phase for new products, digital 3D product models are created. Evaluation of product characteristics such as ease of assembly/disassembly, usability, safety, and operating structure, is known as Digital Mockup Review.

### Eco-Balance

Eco-balance means companies expressing in quantitative terms that are as clear as possible the environmental performance of their operations, comparing data on the environmental burden of inputs to data on outputs.

### Eco-Design

Eco-design is a design concept for products and packaging and stresses the exclusion of hazardous substances; extension of product life; facilitation of disassembly, reuse and disposal; and conservation of energy during production and use phases. Eco-design is alternatively referred to as environmentally conscious design or environmentally friendly design.

### Eco-Labels

Eco-labels are used to identify products that place a relatively small burden on the environment. The Japan Environmental Association's Eco-Mark is one example of an eco-label. Germany's Blue Angel program and the International ENERGY STAR® Program also authorize the use of eco-labels. In addition to these third-party authorized eco-labels, the International Organization for Standardization (ISO) is leading consideration of the adoption of self-declared claims and quantitative indications of environmental burdens.

### ECP (Environmentally Conscious Products) Design

ECP stands for Environmentally Conscious Products. A product's environmental burden is basically determined during the planning, development and design stages. To help realize a resource-recycling society, manufacturers have begun considering the possible environmental implications of products as early as possible in the product life cycle and incorporating designs to promote efficient, rational recycling, to increase product competitiveness.

### Environmental Audits

Environmental audits are conducted to determine, based on objective evidence, whether a company is in compliance with environmental standards required by law, or its own environmental policies and goals. As environmental audits are a prerequisite for ISO14001 certification, the number of companies undergoing them has risen sharply in Japan. At the same time, systems to publicly train and certify environmental auditors have been established.

### Environmental Charter

An environmental charter defines a company's fundamental stance on environmental issues, and provides specific environment-related guidelines. Two such charters — the Industry Charter of the International Chamber of Commerce and the Environmental Charter of Japan's Keidanren (now The Japan Business Federation) — are particularly well known. The latter identifies 24 environmental guidelines in 11 areas.

### Factor

One concept for reducing resource consumption, while increasing prosperity. The Wuppertal Institute, a German think tank, proposed "Factor 10" in 1991. Factor 10 holds that the realization of economic and social sustainability requires the industrialized nations to increase their resource efficiency by a factor of 10 within 50 years.

### Greenhouse Gases

Greenhouse gases allow sunlight to pass through, but absorb infrared rays that reflect off bodies of land and water, inhibiting their escape from the earth's atmosphere, and resulting in global warming. At the 1997 COP3 meeting in Kyoto, six greenhouse gases — CO<sub>2</sub>, methane, nitrous oxide, HFCs, PFCs, and SF<sub>6</sub> — were singled out for reduction efforts.

### Green Procurement and Purchasing

This concept calls for the preferential procurement and purchase of items that place less burden on the environment. In Japan, green procurement and purchasing began to grow very rapidly with the establishment of the Green Purchasing Network. The green procurement of materials and parts is essential for manufacturers that seek to reduce the environmental burden of their products.

### GRI (Global Reporting Initiative)

The Global Reporting Initiative was established in fall 1997 with the mission of developing globally applicable Sustainability Reporting Guidelines for business organizations. The GRI Guidelines provide a framework for sustainability reporting with emphasis on the linked aspects of an organization's environmental, social, and economic aspects.

### ISO14000

ISO14000 is a series of environmental management standards promulgated by the International Organization for Standardization (ISO). These standards comprise environmental management systems, environmental audits, environmental labeling and environmental performance assessments, as well as LCA and the use of specific terminology and definitions. Certification under one standard in this series, the ISO14001 standard for environmental management systems, is becoming an increasingly common requirement for doing business in Europe and other regions.

### JEMAI Program

JEMAI stands for the Japan Environmental Management Association for Industry, an external body of the former Ministry of International Trade and Industry, and the JEMAI Program was set up to prepare the Japanese version of the Type III Eco-Label. The purpose of the program is to raise consumer awareness of the environmental burden of the products or services they select and use, by providing them with accurate, verifiable, and fair quantitative information.

### LCA (Life Cycle Assessment)

Life Cycle Assessment is a method for objectively and quantitatively evaluating the burden of a product on the environment throughout its entire life cycle, from raw materials to production, logistics, consumption and finally disposal or recycling. Although the need for a standardized methodology for evaluating the environmental burden of products is acknowledged, putting LCA into practice still faces many challenges. Full agreement on its implementation has not yet been reached.

### Material Flow Cost

Material flow cost is the sum of the raw material put into and waste substances emerging from a particular process, expressed in monetary terms. Material flow cost is an internal environmental accounting tool and is used by companies to detect internal losses.

### MSDS (Material Safety Data Sheet)

Material Safety Data Sheets are used to provide information on chemicals. This information is intended to permit those who use the subject chemicals to do so safely and take appropriate measures to protect the environment and human health. Generally, manufacturers of chemical products prepare Material Safety Data Sheets and provide them to users of their products. In an effort to make such information available internationally, the International Labor Organization passed the Convention Concerning Safety in the Use of Chemicals at Work, in June 1990.

### Product Environmental Assessment

A product environmental assessment is performed at the product development stage to assess the burden that a product will exert on the environment throughout its entire life. Using the information produced through this assessment, features to reduce environmental burden are then incorporated into the product. In Japan, product environmental assessments are mandatory for certain products designated under the Law for Promotion of Effective Use of Resources. Many companies also voluntarily conduct such assessments for other products.

### PRTR (Pollutant Release and Transfer Register)

The Pollutant Release and Transfer Register keeps track of the emissions and transfers of chemicals that are potential environmental pollutants. Based on reports by companies, it summarizes data on releases into the air, water, and soil, and on transfers to waste treatment companies.

### Remanufacturing (REM)

Remanufacturing means refurbishing used products to make them equal in quality to new products. Remanufacturing exerts less burden on the environment than turning parts back into raw materials for input into the manufacturing system or reusing parts in other products.

### Resource-Recycling Society

This phrase describes a new type of economic society that makes effective use of limited natural resources and aims to minimize society's burden on the environment. As a way to renounce the current system of mass consumption and mass disposal, a resource-recycling society is proposed within the Basic Environment Plan as an ideal for the 21<sup>st</sup> century. This plan is based on Japan's Environment Basic Law.

### Sustainability

The idea that the ongoing survival of the global environment and development of society require economic, environmental and social issues to be considered in an integral fashion when pursuing business and other types of activities.

At the core of sustainability reporting is the belief that companies have a responsibility to account to society for their performance. This accountability is a precondition of trust, which is more important than ever in today's world.

But how can we be assured that a company's report helps create the conditions for accountability? The Institute of Social and Ethical Accountability\* defines assurance as consisting of three principles:

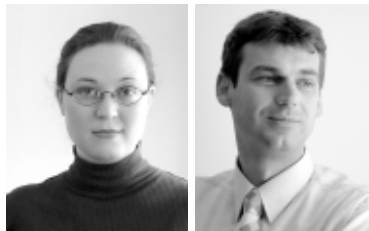
- Materiality** — Emphasis on the issues and impacts considered of most significance to stakeholders
- Completeness** — Complete and accurate information to assess and understand the company's performance in all these material areas
- Responsiveness** — Responding coherently and consistently to stakeholders' concerns and interests

We asked leaders from two different stakeholder groups — investors and environmental scientists — to comment on how well Canon's *Sustainability Report 2003* meets these principles. As Canon evolves its approach to reporting and assurance in the future, these principles will become increasingly important.

\*URL: [www.accountability.org.uk](http://www.accountability.org.uk)

**SustainAbility™**

Judy Kuszewski  
Tell Muenzing  
SustainAbility Ltd.



I congratulate Canon on this report, which provides rich data on their environmental performance. It is also very encouraging to see social criteria described and accounted for in this year's report. Investors will welcome Canon's continuing progress in publishing comprehensive triple bottom line reporting.

As Canon has been publishing environmental reports since 1999 it has built a solid base of data to benchmark its present and future performance. I hope in the future to see more comparative data that would show Canon's progress across its wide-ranging environmental and social programs.

The emphasis on *kyosei* shows the importance that Canon places on fostering a supportive culture for its environmental and social initiatives within the company, and an awareness of Canon's role within the wider global environment and society. I believe that development of a strongly supportive culture is key

to the success of its environmental and social programs in the years ahead.

Finally, I look forward to seeing even more balance and integration between environmental and social reporting in the future.

David St. Maur Sheil  
Director  
Association for Sustainable &  
Responsible Investment in Asia (ASRIA)



The western lifestyle is currently unsustainable for two reasons: first, the material resources of the earth are insufficient. And secondly, the economic consequences of natural resource consumption are rising alarmingly (witness climate change, flood damage, and loss of forests and species). A tenfold increase in resource productivity is called for.

To approach sustainability, economic, social, and ecological dimensions must be pursued simultaneously and equitably. For companies, the strategic challenges include:

- Seek long-term economic viability
- Increase product societal value, emphasizing service rather than ownership of products
- Optimize social justice and workers' safety along product chains
- Maximize resource productivity, from cradle to grave
- Avoid all waste

- Minimize use and emissions of dangerous materials
- Energize staff and stakeholders to innovate, communicate and take personal responsibility.

Transparency, accountability and long-term trust depend upon taking these goals seriously and reporting accordingly.

Only a few companies are seriously involved in changing course. Judging from its *Sustainability Report 2003*, Canon is one of them.

Prof. Dr. Bio F. Schmidt-Bleek  
President, Factor 10 Institute and  
International Factor 10 Club



## Information Disclosure (2002)

### 1. Canon Environmental Report 2002

1-1. Copies Issued: 24,000 (Japanese: 11,500, English 12,500)

In addition, 10,000 copies of an environmental report for children were also issued (Japanese only).

1-2. Copies downloaded from Canon's homepage: 113,016

### 2. Environmental Homepage

2-1. Accesses\*1: 313,615

\*1 Conditions for counting accesses

1. Multiple accesses by the same IP address within 30 minutes are counted as one session.
2. Views of multiple files under the same directory are counted as one session.

## Opinions and Inquiries\*2 by Stakeholders (2002)

\*2 Received by e-mail and postcard. Excludes requests for copies of the *Environmental Report*.

### 1. Opinions and inquiries received: 401

### 2. Types of stakeholders from whom opinions or inquiries were received

Product users 65%, environmental experts (industry, government, association, NGO/NPO, investment/ratings institution, researcher, etc.) 18%, other 17%

### 3. Topic of opinion or inquiry

Recycling 48%, environmental report/environmentally conscious management in general 21%, products 16%, other 15%

### 4. Responses to opinions

Opinions about the *Environmental Report 2002* were considered in creating the *Sustainability Report 2003*. Below are a few of the ways in which these opinions had an impact.

- Whereas Canon's *Environmental Reports* have featured mainly environmental information, coverage of economic and social issues was expanded to create this *Sustainability Report*.
- The focus of the 2003 report was turned to the systematic reporting of Canon's sustainability activities. The report has been organized into chapters to that effect and created to provide clear information for various needs.
- Coverage of Canon's global operations was enhanced with information on reuse and recycling, and resource recycling management.
- Factor 2 was introduced as a new target for environmentally conscious management and is included among the New Mid-Term Environmental Goals.

# Tell Us Your Opinions

FAX: +81-3-3758-8225

Thank you for taking the time to read the *Canon Sustainability Report 2003*. 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 help us to shape our future activities and produce even better Sustainability Reports in the future.

Environment Management and Engineering Center  
Canon Inc.

## ■ In what capacity did you read this report?

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Customer   | <input type="checkbox"/> Stockholder/investor                                     | <input type="checkbox"/> Government/regulatory authority                |
| <input type="checkbox"/> Residential neighbor of a Canon operational site/plant | <input type="checkbox"/> Environmental manager of a company or other organization | <input type="checkbox"/> Employee of a research/educational institution |
| <input type="checkbox"/> Student  | <input type="checkbox"/> Press  | <input type="checkbox"/> Representative of an environmental NGO/NPO     |
| <input type="checkbox"/> Canon employee or a member of an employee's family     | <input type="checkbox"/> Other ( )  |   |

## ■ How did you come to know about this report?

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Canon's homepage   | <input type="checkbox"/> Newspaper, magazine        | <input type="checkbox"/> Seminar, lecture, etc. |
| <input type="checkbox"/> Product exhibition | <input type="checkbox"/> Canon sales representative |   |
| <input type="checkbox"/> Other ( )          |   |   |

## ■ How would you rate this report in terms of its clarity?

- Very clear       Clear       Not so clear       Not clear at all

Please write any comments you would like to make.

## ■ How would you rate this report in terms of its detail?

- Very detailed       Detailed       Not so detailed       Not detailed at all

## ■ Which parts of the report did you find most interesting?

- Vision and Strategy  
 2002 Highlights  
 Environmentally Conscious Management  
 Socially Responsible Management  
 Performance Data

If you can, please tell us the reason for your interest.

## ■ If there are parts of this report you found to be lacking, or in need of improvement, please let us know what they are.

## ■ If you have other opinions you would like to express about this report or about Canon's environmental activities, please write them in the space below.