CANON ENVIRONMENTAL REPORT 2002

Canon

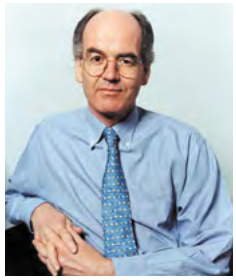
We welcome this new report from Canon

One of the most striking — and positive — trends since the 1992 Earth Summit has been the growth in corporate environmental and sustainability reporting. Japanese companies have been among the leaders, although most still focus on environmental issues.

That narrow focus may need to be reconsidered after the 2002 World Summit on Sustainable Development. Here the spotlight will be on a wider range of social, ethical and economic issues linked to the sustainability agenda — and to the global and corporate debates.

Japanese companies stress consensus and harmony, rather than discussing the controversies, stakeholder challenges and management dilemmas that are a strong feature of western-style reports. This is neither right nor wrong. Instead, we must keep an eye on all these efforts to see which lead most directly, most effectively and most efficiently to the corporate and market changes that sustainable development will require.

June 2002



John Elkington
Chair, SustainAbility
London and New York

Editorial Notes

The current edition of the Canon Environmental Report provides an account of the Canon Group's environment assurance activities for 2001. In preparing this report, we have referred to both the Environmental Reporting Guidelines (Fiscal Year 2001 Version) put forth by Japan's Ministry of the Environment and the Sustainability Reporting Guidelines issued in June 2000 by the Global Reporting Initiative.

Our intent in creating this report was to make information on our environmental activities accessible to the general public as well as environmental experts. In our effort to produce a report that would be valuable to a wide audience, we requested a third-party review by Sustainability Ltd. of Great Britain and gathered comments by experts in areas concerning the environment and society.

As a tool for communicating with you, we have prepared a survey, which you will find at the end of this report. Your input will be very valuable to us as we work to improve both our environment assurance activities and our reporting about them, so by all means please let us know your reaction to the information contained herein.

For even more details on our environment assurance activities, please see our homepage at **www.canon.com/environment/**. It is our sincere hope that you will find the Canon Environmental Report 2002 and our homepage to be valuable resources for understanding the environment assurance activities that the Canon Group pursues across the globe.

Reporting Scope

Period Covered: January 1, 2001–December 31, 2001
Operational Sites* Covered:
Canon Inc. (14 operational sites),
Canon Sales Co., Inc. (1 operational site),
Production subsidiaries and affiliates in Japan (26 operational sites),
Overseas production subsidiaries and affiliates (15 operational sites),
Overseas sales subsidiaries and affiliates* (22 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.
* For overseas sales subsidiaries and affiliates, only product recycling and ISO14001 certification data are presented.

Background of the Canon Group

Canon Inc. was founded in 1937 and was the first company to develop and produce 35mm focal plain cameras and indirect X-ray cameras in Japan. It later entered the field of business machines, developing Japan's first plain-paper copying machine in 1970, and diversifying and expanding its operations with the launch of laser beam printers (LBPs) and bubble jet printers (BJ printers) in the 1980s.

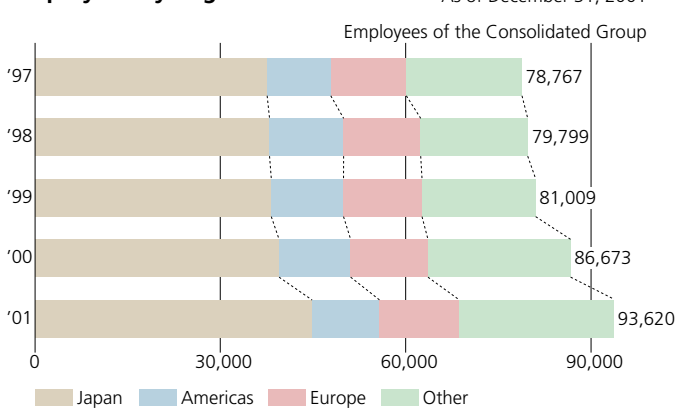
Canon's overseas business began with the opening of a New York branch office in 1955 and a European sales company in 1968. On the production side of its operations, it established Canon Inc., Taiwan in 1970 and gradually built a tri-region organization for development, production, and sales, with bases in the Americas, Europe, and Asia.

Constantly seeking to improve itself, the Canon Group embarked in 1996 on Phase I of its Excellent Global Corporation Plan, which aimed to strengthen the Group financially. Having achieved this goal, the Group proceeded to launch Phase II of the plan in 2001. In broad terms, the objective of this phase is for the entire Group to achieve recognition as an excellent global corporation.

Overview of Canon Inc.

Company Name:	Canon Inc.
Establishment:	August 10, 1937
Headquarters:	3-30-2 Shimomaruko, Ota-ku, Tokyo
President and CEO:	Fujio Mitarai
Value of Common Stock:	¥165,287 million
Group Companies:	203 consolidated subsidiaries/21 companies accounted for under the equity method (as of December 31, 2001)

Employees by Region



Main Products

Business Machines
- Copying machines (office copying machines, personal copying machines, color copying machines, etc.)
- Computer peripherals (laser beam printers, BJ printers, scanners, etc.)
- Information/Telecommunications equipment (facsimile machines, etc.)

Cameras
Single-lens reflex cameras, compact cameras, digital cameras, video cameras, interchangeable lenses, etc.

Optical and Other Products
Semiconductor manufacturing equipment, television broadcasting lenses, ophthalmic equipment, X-ray equipment, etc.

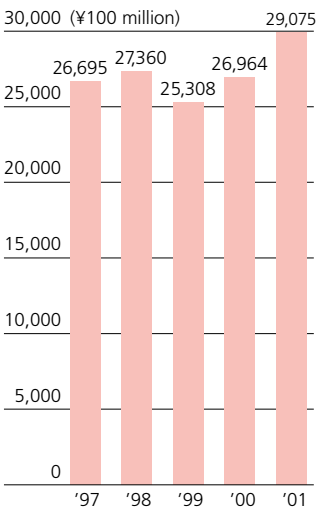
Overview of 2001

Despite weakness in the overall economy, the Canon Group reported its highest ever profit in 2001, the first year of Phase II of its Excellent Global Corporation Plan (to be achieved by 2005). This impressive result was achieved through management innovation and the offering of products that meet customers' needs.

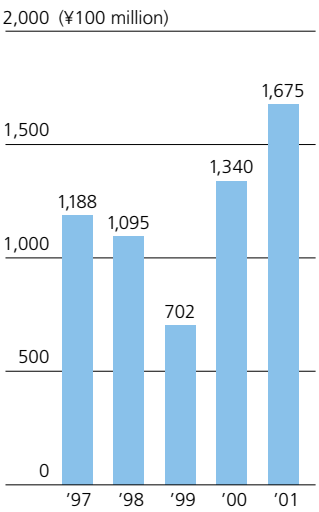
Notable events took place with regard to both products and the Group's organization. Continuing progress in implementing digital technology in all product lines and innovations that benefit the environment made it possible to introduce the imageRunner iR3300 digital multifunction office system — already acknowledged as a leader among environmentally conscious products — the BJ F9000 printer, and other new products. Meanwhile, strategic initiatives were launched to expand the Group's operations, including the creation of a comprehensive operational strategy for China.

As a result of management efforts such as these, consolidated net sales reached ¥2,907,573 million (7.8% increase over the previous year) and consolidated net income totaled ¥167,561 million (25% increase over the previous year). Both are record highs.

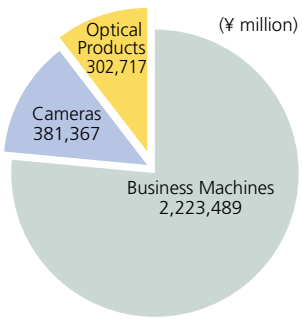
Consolidated Net Sales



Consolidated Net Income



2001 Net Sales by Segment



2001 Net Sales by Region

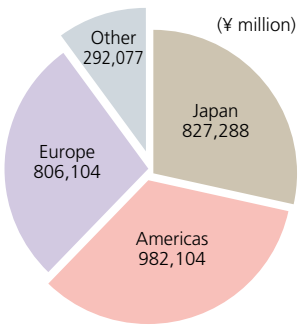


Table of Contents

For the Coexistence of Humankind and Nature

In the spirit of our corporate philosophy of *kyosei* — living and working together for the common good — we at the Canon Group take an approach to business that is both socially responsible and economically logical.

In the 20th century, rapid population growth and economic development gave rise to dramatic increases in the consumption of resources and energy. Regretfully, little was known about the consequences for the global environment. As we prepared to enter the 21st century, the Century of the Environment, we at Canon were acutely aware that to create a recycling-oriented society — the only kind of society truly capable of sustainable development — we would need an environmentally conscious management that integrated the needs of business and the environment. In Phase II of our Excellent Global Corporation Plan, the plan we are committed to achieving by 2005, we have made environmental consciousness a top management priority.

The Canon Group bases its global business development on new innovations and applications for imaging technology. As such, we have to deal with significant environmental issues associated with research, development, and production. Notwithstanding, at Canon we believe that is imperative to reduce the burden on the environment at each stage of the product life cycle, including during product use. While we have put significant effort into the development of innovative environmental technologies — primarily those for saving energy, conserving resources, and eliminating hazardous substances — we have also improved the environmental efficiency of our production processes and pushed forward with the development of eco-cycle-based products. We have also achieved steady progress in our efforts to implement the collection of used products, and the reuse/recycling of parts and materials. These efforts are being made on a global scale throughout our operations in Asia, Europe, and North America.

We are also taking steps to allow others outside of Canon to benefit from our environmental technologies. In 2001 we launched service businesses in fields such as environmental analysis, environmental assessment, and decontamination based on various environmental technologies that Canon has spent many years and significant resources developing.

Through the proactive disclosure of environmental information on all of our business activities and other means, we will continue to put forth initiatives that are beneficial for the future of the earth and humankind. By integrating the opinions of stakeholders in our environmental success, we will take a leading role in building a society that practices sustainable development.

Your ongoing support for our endeavors will be greatly appreciated.

June 2002

Fujio Mitarai
President and CEO
Canon Inc.

A Successful First Year and Prospects for the Future

In the Canon Environmental Report 2002, we review the Canon Group's environmental initiatives in 2001 and discuss our future plans.

Entering the Century of the Environment

In 2001, we marked our entry into the Century of the Environment by revising our environmental management goal, making the maximization of resource efficiency the Canon Group's paramount objective. In April of that year, we revised the Canon Environmental Charter, publicly declared our intention to proactively fulfill our environmental responsibilities to society, and redoubled our efforts to do business in a way that harmonizes environmental and economic objectives (see P4).

In order to improve our ability to efficiently carry out our environmental initiatives, we have also overhauled our environment assurance system. In the past, the Canon Group's environment assurance activities were managed through a matrix of committees liaising with the Group's regular organization. Now, understanding that environmental issues require immediate action rather than debate, we have progressively disbanded the committees and integrated management of our environment assurance system into the Group's regular organization (see P6).

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

Yusuke Emura

2001 Results

Thanks to these initiatives, we are making steady progress on our first set of Mid-Term Environmental Goals for the 21st century. The deadline for meeting these product-related and common goals is December 2002, and we are well on our way to doing so.

As part of our contribution to the building of a society based on sustainable development, we, as one of a group of 18 electrical and electronic product manufacturers, have also pushed forward with the development of a unified, international set of green procurement standards. This unification of industry standards promises more efficient and precise procurement examinations and a speedier transition to green products (see P22).

Issues for the Future

Building on these results, we at the Canon Group will continue to search for new ways to eliminate waste, essential for maximizing resource efficiency. In our efforts to develop environmentally friendly products and combat global warming, we will strive to make our goods more energy efficient, strengthen recycling systems, and eliminate hazardous substances from our products.

At our operational sites, we will also strengthen internal environmental accounting methods to promote more rigorous management of energy conservation, waste reduction, and chemical substances.

Lastly, we will actively disclose information on our products and business activities in an effort to promote environmental awareness and encourage more urgent and efficient measures to protect our planet.

Product-Related Results

In 2001, we established our Environmentally Conscious Product Design Guidelines and Product Environment Assessment Guidelines to support product planning, design, and development in a way that emphasizes environmental consciousness. These guidelines raise our already rigorous environmentally conscious design standards to a higher level for each environmental impact item (see P12).

Product-related results were significant. We reduced (compared to the prior year) the electric energy consumption of our main products, including copying machines and printers, and made good progress in eliminating hazardous substances by, among other measures, introducing alternatives to lead solder and steel plates processed with hexavalent chromium (see P14–21).

We also made advances in product reuse and recycling (see P32–34), and have now quantitatively determined the environmental burden of every one of our main products. This information is displayed on Type III Eco-Labels (see P42).

Results Related to Operational Sites

●Energy Conservation

In 2001, the total energy consumption of our operational sites was equivalent to emissions of 606,000 tons of CO_2. This is 42,000 tons less than the previous year (see P26) and we achieved this result primarily by reducing space and introducing energy-efficient equipment.

●Resource Conservation

Our operational sites generated 12.2% less waste material in 2001 than in the previous year (see P28). Even more significantly, by introducing recycling technology and new methods to break down and sort waste, 25 of our 41 operational sites in Japan achieved their goal of generating zero landfill waste.

●Elimination of Hazardous Substances

One of our key areas of concern has been the reduction of discharges of chemicals specified as Class I Designated Chemical Substances under the PRTR Law. In 2001, we used 19 of these substances. We succeeded in reducing discharges and transfers of these chemicals by 45% compared to the year earlier, meeting one of our Mid-Term Environmental Goals two years ahead of schedule (see P29).

Results in Achieving Common Group Goals

●Social Contributions

Throughout the world, we make social contributions that are respectful of local communities and further their prosperity in a wide variety of fields, including education, the environment, social welfare, culture and the arts, and international fellowship (see P50–55).

●Development of Environmental Technology and Business

We at Canon are developing environmental analysis, assessment and restoration as commercial services, so that the technology and expertise we have introduced through our own efforts to protect the environment can benefit industry in general (see P35–37).

●Other Initiatives

In 2001, we took further charge of our environmental responsibilities by implementing an internal environmental evaluation system (see P7). We also improved our internal environmental programs to take our employee education to a higher level (see P40) and endeavored to make public relations even more proactive.

Recognition by Third Parties

Feb. 2001	Chairman's Award for Recycling Technology at the Recycling Technology and System Awards (Clean Japan Center; Japanese Ministry of Economy Trade and Industry; Japan Business Federation)
Mar. 2001	ENERGY STAR®*1 Partner of the Year Award-Product Manufacturers (U.S. E.P.A.)
Mar. 2001	Canon (Schweiz) AG awarded first prize for the best environmental report published by a large-scale enterprise in Switzerland (Swiss Association for Environmentally Conscious Management)
Apr. 2001	Award for Excellent Companies at the 10th Global Environment Awards (Japan Industrial Journal and the WWF Japan)
June 2001	Environmental Stewardship Award (Council on Economic Priorities)
Oct. 2001	Canon Italia S.p.A. presented with the Ecohitech Award 2001 (WWF Italia, Ecoqual'It*2)
Nov. 2001	Gold Medal in the Multi-Advertising Category of the Industrial Advertising Awards (Japan Industrial Journal)

*1 ENERGY STAR is a U.S. registered mark.
*2 Environmental organization composed of information equipment companies in Italy

An environmentally conscious "top runner." The imageRUNNER iR3300 Digital Multifunction Office System named the winner of the Commendation from the Chairman of the Energy Conservation Center at the 12th Energy Conservation Awards. (see P14–21)

Seven PIXUS F/S Series BJ printers, including the environmental flagship model BJ F9000 (shown above), become the first in the industry to obtain Printer Eco-Marks. (see P14–21)

In the Interest of *Kyosei* with the Global Environment

The corporate philosophy of Canon is *kyosei*. A concise definition of this word would be "living and working together for the common good," but our definition is broader: "all people, regardless of race, religion or culture, harmoniously living and working together into the future." Unfortunately, the presence of imbalance in our world — in areas such as trade, income levels and the environment — hinders the achievement of *kyosei*. Addressing these imbalances is a mission for the future, and Canon is doing its part by actively pursuing *kyosei*. True global companies must foster good relations, not only with their customers and the communities in which they operate, but also with nations, the environment and the natural world. They must also bear the responsibility for the impact of their activities on society. For this reason, Canon's goal is to contribute to the prosperity of the world and the happiness of humanity, which will lead to continuing growth and bring the world closer to achieving *kyosei*.

In pursuit of our goal of "maximization of resource efficiency," which means producing high added value using as little as possible in resources and energy, we have implemented a wide variety of measures to protect our environmental heritage. We will move this agenda forward with activities that are faithful to the revised Canon Environmental Charter, and our corporate philosophy of *kyosei*.

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.

EQCD Concept

Environment	Companies are not qualified to manufacture goods if they cannot provide 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.

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 environment 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 protecting the environment.

Canon's Environmental Initiatives

In 1988 we adopted *kyosei* as our corporate philosophy, and made the environment a central pillar of our management policies. We drew up our Environment Assurance Promotion Plan in 1991, New Environmental Assurance Concept in 1993, and committed ourselves to environment assurance*.

Responding to serious concerns regarding the depletion of the world's resources, in 2000 we adopted "maximization of resource efficiency" as our paramount objective. In November of that year we set ourselves "Mid-Term Environmental Goals" to achieve by 2003. In April 2001, we revised the Canon Environmental Charter — principles which guide the environmental practices of the entire Canon Group.

*Environment assurance goes a step beyond environmental protection. It is a comprehensive effort to reduce energy consumption, conserve resources, eliminate hazardous substances, etc., at every phase of the product cycle, from research, design and development, to materials procurement, production, logistics, sales, and, finally, waste recovery and recycling.

●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.

Using this idea, we believe we can integrate the interests of the environment and business by developing new technologies and showing society new ways of coexisting with the environment. We are using resources more efficiently in all product life cycle areas and contributing to the betterment of the global environment and society.

Canon's Mid-Term Environmental Goals and Achievements as of 2001

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

		Goals	Deadline	2001 Performance Assessment	Compared to Prior Year	Refer to pages
Product-Related Goals	Global Warming Prevention and Energy Conservation	Bring all business machine products into compliance with the international ENERGY STAR® Program (Copying Machines, Printers, Facsimile Machines, Scanners)	2003	94% achieved (74 of 79 products)	◎	P16
		Power consumption during operation (for new products): Reduce with each new model.		100% achieved	◎	
	Resource Conservation	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		• Implemented for copying machines and BJ printers • 213 tons used	◎ ◎	P18
		Plastic materials*1: Reduce number of plastic grades to 1/3 2000 levels		66 Grades of plastic	◎	
		100% recycling of collected used products*2 • Copying machines • Cartridges (BJ, toner)		 • 96% • 100%	◎	
	Elimination of Hazardous Substances	In 2001, begin sales of products from which designated substances*3 have been eliminated. Gradually eliminate these substances from all products.	2004	Began sales of some products from which designated substances have been eliminated	◎	P20
		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	• Began fundamental examination of possible substitutes. • 10,980 tons of ABS materials; 956 tons of PS materials	○ ◎	
Goals Related to Operational Sites	Global Warming Prevention and Energy Conservation	Reduce CO_2 emissions by 25% compared to 1990 levels (production sites)	2010	39.8% increase	—	P26
		Reduce CO_2 emissions by 15% compared to 1999 levels (production sites)	2003	2.5% decrease	○	
	Resource Conservation	Reduce gross waste generation by 30% compared to 1998 levels	2010	23.9% increase	—	P28
		Reduce gross waste discharge by 50% compared to 1998 levels	2003	24.5% decrease	◎	
		Achieve zero landfill waste at all operational sites in Japan	2003	Achieved at 25 of 41 operational sites	◎	
	Elimination of Hazardous Substances	Reduce use or emissions of materials in Canon's A, B, and C substance ranks (compared to 1998 levels) (Usage Reductions) A-Rank Substances: Eliminate use B-Rank Substances: Reduce use by 20%	2003	 0.1t used 14% reduction	◎	P29
		(Emissions Reductions) B-Rank Substances: Reduce emissions by 90% C-Rank Substances: Reduce emissions by 20%		87% reduction 62% reduction	◎ ◎	
		Reduce emission of PRTR Law designated substances by 50% compared to 1998 levels		69% reduction	◎	
Common Group Goals	Environmental Management Indices	Implement Environmental Evaluation System in 2001	2001	Implemented in 1st half	◎	P7
	Human Resource Development	Enhance internal environmental education programs	2003	Implemented basic and advanced programs	◎	P40
	Social Contributions	Enhance social contribution programs	2003	Participated in environmental events and local environmental programs	◎	P50
	Communications	Expand and promote environmental communications	2003	Introduced environmental labeling for 20 products	◎	P42
	Environmental Businesses	Promote environmental businesses	2003	Established Environment New Business Center	◎	P35

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

Pursuing Environment Assurance According to a Single Global Standard

Led by our Global Environment Promotion Headquarters, we are pursuing environment assurance throughout the world. To help us carry out this work, we have developed an information system linking Canon Group companies in 26 countries, created an environmental evaluation system, and adopted a framework of rules for protecting the environment. Administrative and procedural reforms have been carried out to give full support to our environment assurance activities, and our Group companies abide by standards that we apply uniformly across the globe.

Canon's Global Environment Assurance Activities

Under the direction of our Global Environment Promotion Headquarters, we pursue our environment assurance program through regional Environment Promotion Committees in Europe, the Americas, Asia, and Oceania. As part of this work, we are building a network database on chemical substance management, green procurement, waste, and other environmental information, accessible to Canon Group companies in 26 countries.

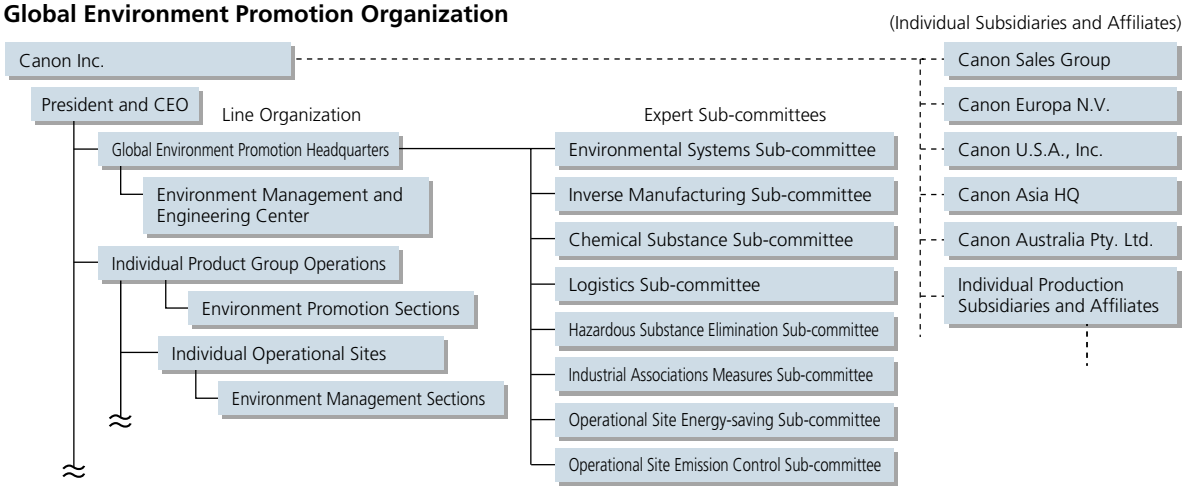
In February 1995, Canon Inc. became the first company in Japan to gain BS7750 certification. This was the precursor to the ISO14001 certification for environmental management systems, obtained by Canon Inc.'s Ami and Ueno plants. The stage was now set for a worldwide push at Canon Group production and sales sites to gain ISO14001 certification. By the end of 2001, 42 operational sites, including Canon Sales Co., Inc. had successfully obtained ISO14001 certification.

Canon's Global Environment Promotion System

In the past, we managed our environmental activities through a matrix of line organizations and supporting committees. By 2001, it became clear the growing momentum of our environmental projects required a new system. We began reorganizing to clarify responsibilities and institute a chain of command that would provide more responsive and effective decision-making.

In January 2002, we upgraded our Global Environment Promotion Committee, turning it into our Global Environment Promotion Headquarters. The revamped organization, which is composed of individual product, production, and sales line organizations, will set up a global system to share information on outstanding environmental initiatives within the Canon Group, and allow managers to devote even more of their attention to environmental problems.

Global Environment Promotion Organization



Commentary on Canon's Environment Assurance Activities

Modern economies are increasingly service-orientated: more added value is created with less material-based products. Knowledge about Product Service Systems enables companies to find strategic options for business growth, renewal, innovation and diversification. This is especially inspiring for Canon who regards sustainability as a co-pilot for management strategies. Measuring changes in environmental impact at the level of the individual products is an essential element on the way to a more sustainable business. However, the reduction in environmental impacts for a single product may be outweighed by direct and indirect 'rebound' effects. For example, single office equipments are designed be more energy-efficient, but the overall electricity use increases through the use of more office equipment. For achieving an absolute Factor 10 improvement regarding environmental impacts, wider system boundaries need to be considered. Hereby, the satisfaction of human needs in the most efficient way is a essential. Those functional design innovations will need creativity, new thinking and courage on the way — Canon is prepared to take up the challenge.

Michael Kuhndt
European Senior Researcher
Wuppertal Institute — Eco-Efficiency and Sustainable Enterprise Group
www.wupperinst.org

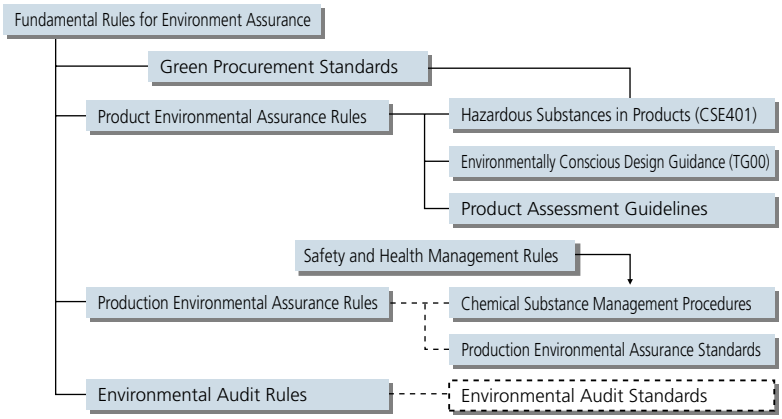
Revamping Our Environment Assurance Systems

In overhauling our environment assurance system, we have clarified the standards that the Canon Group will use to do business, creating a new roadmap for dealing with environmental issues. New rules for environment assurance have been created, and old ones revised.

To ensure that these rules and standards are upheld, Canon has drawn up Environmental Audit Rules and made clear the lines of responsibility for internal and third-party audits.

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

Rules for Environment Assurance and Related Areas

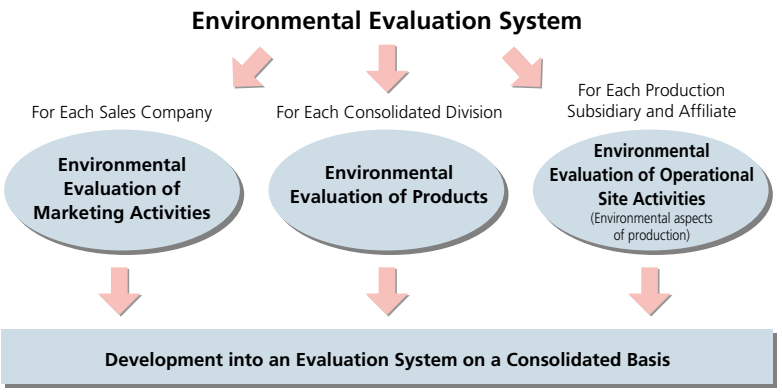


Environmental Evaluation System and Environmental Investment Standards

To add muscle to our environmental protection initiatives and enhance our performance measurement system, we introduced an environmental evaluation system on a consolidated basis in 2001. This new system will assess the environmental performance of each consolidated product group operation, production subsidiary and affiliate, and sales company (implementation scheduled for 2002). The results of these evaluations will be announced every six months by the President and CEO of Canon Inc. at the company-wide management meeting (attended by managers at the General Manager level and higher). Progress in carrying out environmental policies will now be a standard evaluation item used to assess the performance of each department.

Recently implemented environmental investment standards also set priorities for spending on environmental facilities and activities. These rules give our managers the guidance and policy focus they need to create budgets for environmental initiatives and successfully carry them out.

Environmental Evaluation System Implementation Method



Environmental Investment Standards

Priority	Definition		Specific Activities
Rank A	Require immediate investment		•To clean up contamination •To correct violations of legal standards •To respond to complaints
Rank B	Require investment within planned period	To achieve within legally designated period	•To reduce energy consumption per production unit by 1% in accordance with the Law Concerning the Rational Use of Energy •To achieve within the mid- to long-term plan (3–5 years)
Rank C		To achieve industrial standards and goals	•25% reduction energy consumption per production unit in 2010 •To control emissions of hazardous substances: 50% reduction in dichloromethane by 1999 (compared to the 1996 level)
Rank D	To achieve corporate goals and standards		•Investment for achieving mid-term goals
Rank E	Other environment-related investment		

Aiming for Maximization of Resource Efficiency

To gauge the impact of our businesses, we analyze and identify both the direct and indirect environmental burden at various phases of the product life cycle, including production, use and waste. Studying environmental burden by tracking material and product movements allows us to implement more effective measures in our drive to make more efficient use of resources.

Environmental Burden

Our efforts at the Canon Group to offer quality products and services, with the least possible burden on the environment in terms of resources and energy, are comprehensive and ongoing. To achieve this dual mission, we believe it is essential to identify and analyze both the direct environmental burden of our business operations and the indirect environmental burden on society.

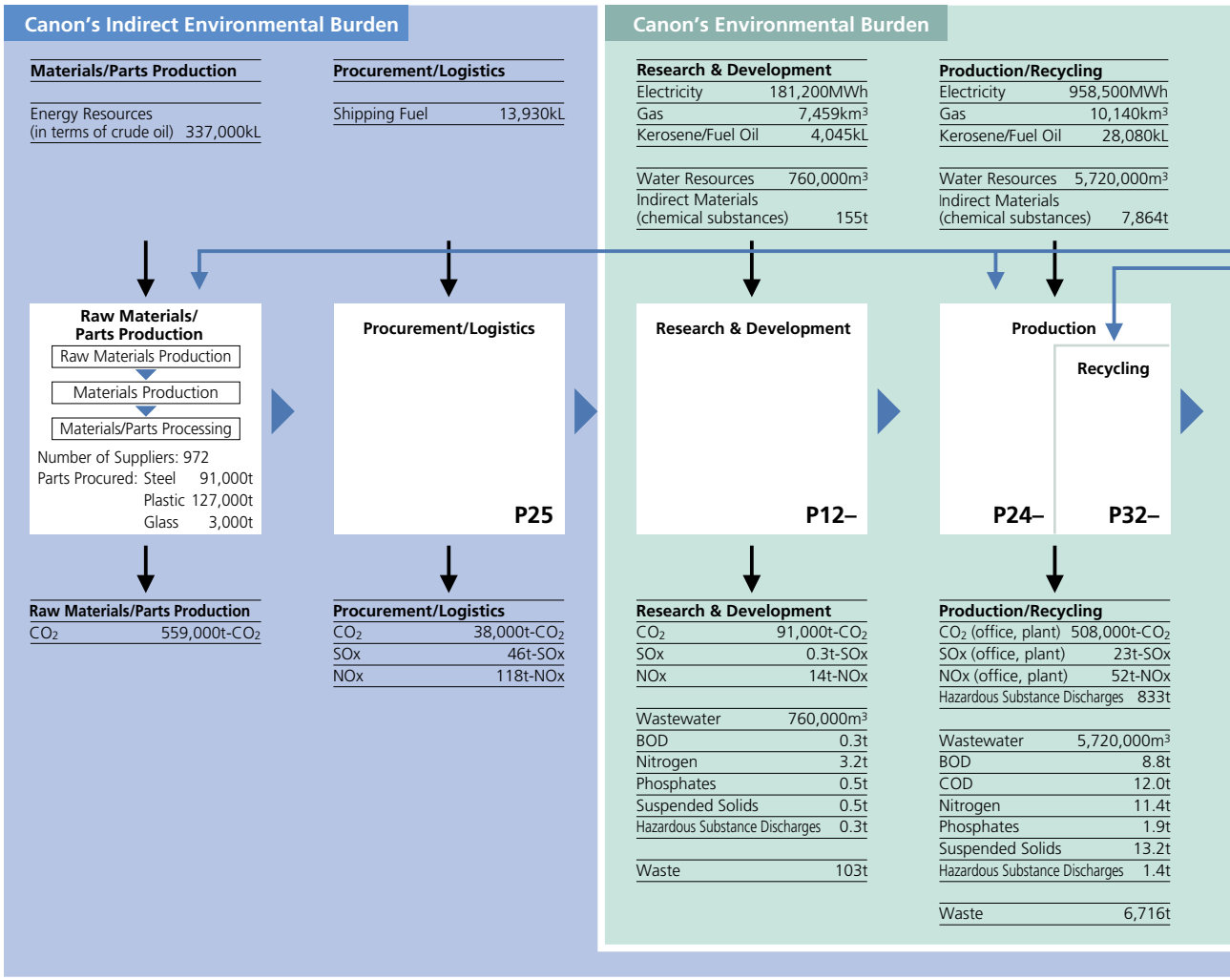
The diagram below shows the direct and indirect impact Canon had on the environment in 2001, in terms of both materials and products. Direct environmental burden (from research and development, production, sales, and logistics) includes the emission of approximately 617,000 tons of CO_2 from total energy consumption, the discharge of 834 tons of hazardous substances into the atmosphere and water, and the generation of 7,033 tons of waste. Canon's upstream (production of raw materials and parts) and downstream (product use, processing of used products) indirect environmental burden was equivalent to approximately 1,673,000 tons of CO_2.

These data show that most of Canon's environmental burden is indirect, and remind us that attention should be focused on reducing environmental burden throughout a product's life cycle.

In future studies, we plan to collect more precise data. The aim is to use it as a yardstick to measure the effectiveness of our environmental management and set new environment-related goals.

For specific information on initiatives, please refer to the pages noted within the diagram below.

2001 Material Balance



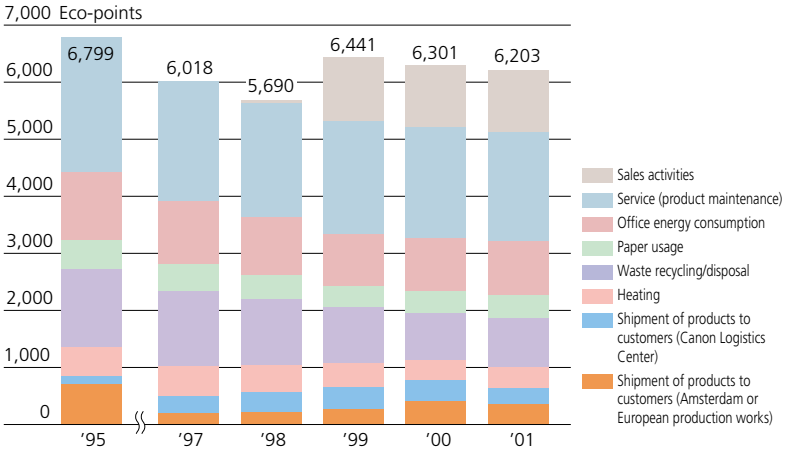
* Energy consumption and CO_2 discharges associated with customer product usage were calculated based on usage estimates for products selected as representative of Canon's copying machines, LBPs, and BJ printers. Usage periods employed were 5 years for copying machines and LBPs, and 3 years for BJ printers.
* Energy consumption figures for production of materials and parts were calculated based on amounts of steel, plastic, and glass (only glass used in copying machines) used.

Eco-Balance Initiatives

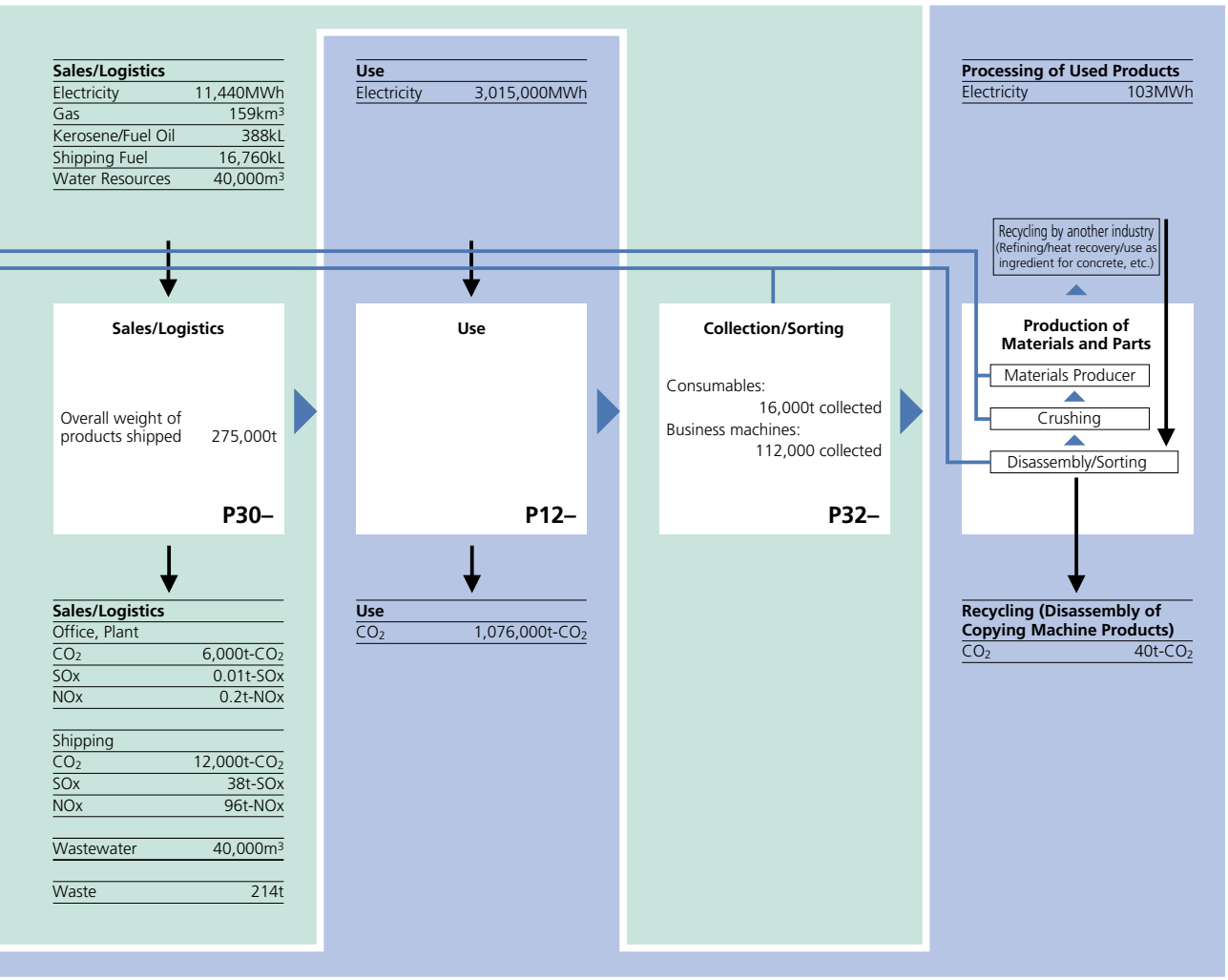
Canon (Schweiz), a sales subsidiary in Switzerland, has comprehensively identified the environmental burden of its operations. It is now using this data to assess its activities and bring them into an ecologically balanced and sustainable relationship with the environment, known as eco-balance. The graph to the right uses the LCA concept to measure the specific impact of sales and service activities (product maintenance, etc.) in terms of eco-points calculated using the Eco-Indicator 99* weighting method. Canon (Schweiz) has been using eco-points to assess its eco-balance since 1994. In 2001, it achieved 6,203 eco-points — a figure that reflects an improvement of approximately 10% compared to the result for 1995.

To help in the assessment of the Canon Group's environmental initiatives, we plan to quantify and integrate our analysis of environmental burdens. This will increase internal and external understanding of the impact our businesses have on the environment and give us incentive to make further improvements. We intend to implement a similar system of eco-balance analysis throughout the Canon Group.

Canon (Schweiz) Eco-Balance



* 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.



* Discharge figures for CO_2, SOx, and NOx as indirect environmental burden include discharges related to the production of electricity, petroleum, and gas, as well as discharges related to product use.
* Figures for Sales/Logistics are for sales companies in Japan only.
* Discharge figures for BOD, COD, phosphates, nitrogen, and SS are for Japan only and do not include discharges into sewers.

Measuring Environmental Investments and Expenses, in Pursuit of Environmentally Conscious Management

Closing the gap between environmental accounting and financial accounting, we have developed systems for evaluating both environmental protection effects and economic effects in a manner that is consistent for all of our operational sites. We will continuously expand disclosure for global environment-related investments and expenses, economic effects, etc., as we step up our program of environmentally conscious management.

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 or not we are investing our resources — people, materials, and money — in ways that are best for the environment.

In 2001, we expanded our environmental accounting guidelines to include the disclosing of information to stakeholders and the providing 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 in March 2001.

Disclosure practices have also been revised. Beginning in 2001, we added "product energy consumption reduction" (reduction in energy used to operate Canon products) and "quantity of used products recycled" as "effects of upstream/downstream costs." For reference purposes, we are now also calculating the economic effect of "product energy consumption reduction." Moving into the future, we will continue to expand our disclosure of our environment-related investments and expenses, and their economic and quantitative effects.

Investments and Expenses for 2001

For 2001, our investments to protect the environment came to ¥4.1 billion, while our expenses reached ¥9.1 billion. We invested ¥700 million (17%) more than in the prior year because of long-term measures we took to counter global warming. In contrast, expenses remained at nearly the same level as the previous year, despite the fact that we began accounting for recycling expenses (¥770 million) in 2001 and increased our personnel expenses as we undertook measures to strengthen the part of our organization devoted to protecting the environment. We achieved this result by reducing maintenance expenses for environmental protection facilities, a natural outcome of our years of experience in this field.

As for the payoff coming from our expenditures to protect the environment, in 2001 we succeeded in saving energy equivalent to 21,073 tons of CO_2 at our operational sites. Though our CO_2 emissions increased in absolute terms, our emissions per unit of sales decreased. On other fronts, we cut discharges into the air by 189 tons (27%), discharges into the water by 39 tons (43%), and discharges of waste by 83 tons (4%).

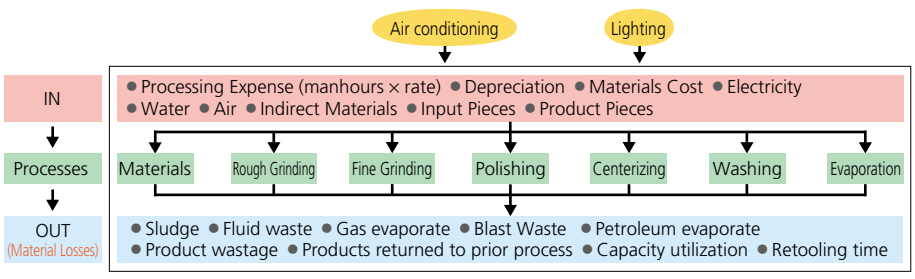
In 2001, we began gathering information on the upstream and downstream effects of our environmental protection expenditures. As a result, we estimate the amount of energy saved by the energy-efficient products we sold in 2001 was equivalent to 441,606 tons of CO_2 and ¥18.9 billion in cost savings for customers. As for economic benefits to Canon, we estimate the net gain from investments and expenses to protect the environment, including earnings from the sale of collected used products, amounted to ¥2.2 billion. These estimates are based on data and relationships that are clearly understood. As we come to understand even more about the upstream and downstream effects of our expenditures to protect the environment, we will expand our reporting of this kind of information, which will also serve as feedback for improving the effectiveness of our future environmental expenditures and management initiatives.

Material Flow Cost Accounting

In 2001, Canon began participating in a test introduction of material flow cost accounting overseen by the Japan Environmental Management Association for Industry (JEMAI). In this internal environmental accounting method, material inputs in each production process are identified and discharge volumes (waste discharge volumes) are accounted for. This is done by converting the material inputs to monetary values, which exposes the discharge volumes incurred during production processes operating under normal conditions. This accounting method not only contributes to the reduction of discharge volumes, it also reveals ways to save energy and makes investment decisions from a true environmental management perspective possible.

We implemented material flow cost accounting in 2001 for lens production. The information we gleaned from this procedure helped us identify hidden discharge volumes, resulting in significant reductions in material waste and energy consumption costs. We intend to make extensive use of this accounting method, introducing it at other plants and business operations to help lessen our environmental burden.

Material Flow Chart (Lens Processing)



Environmental Accounting Results for 2001

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

(¥100 million)

Environmental Protection Costs

Category		Main Implementation	Investment	Expense
(1) Business operations costs			37.6	54.9
Details	**① Pollution prevention**	Air, water, and soil pollution prevention, etc.	24.8	32.8
Details	**② Global environmental protection**	Energy conservation, logistics streamlining, prevention of global warming, etc.	11.1	4.7
Details	**③ Resource recycling**	Efficient resource use, waste reduction, sorting, recycling, etc.	1.7	17.4
(2) Upstream/downstream costs		Green procurement initiatives, product recycling[1], etc.	0.0	8.5
(3) Management activities costs		Environmental education, environmental management system, tree planting, information disclosure, environmental advertising, management personnel, etc.	2.0	23.8
(4) R&D costs[2]		R&D for reducing environmental burden	0.8	3.9
(5) Social activities costs		Contributions to environmental and other organizations, sponsorships, memberships, etc.	0.0	0.1
(6) Environmental damage costs		Soil decontamination	0.1	0.2
Total			40.5	91.4

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

Details of Effects		Environmental Protection Indices		
		Index	Index Value	Change Compared to Prior Year
Effects related to business operations costs	Effects related to resources used for business activities	Energy efficiency savings (t-CO_2)	21,073	—
		Water conserved (10,000m^3)	60	11% decr.
		Resources used (steel sheets, plastic) (t)	2,991	1% incr.
	Environmental burden and waste effects of business activities	Reduction in atmospheric emissions (t)[3)+4)]	189	27% decr.
		Reduction in discharges into water (t)[5)+6)]	39	43% decr.
		Reduction in waste (t)	83	4% decr.
Effects related to upstream/downstream costs	Goods/services effects calculated based on business activities	Reduction in product energy consumption (t-CO_2)[7)]	441,606	—
		Quantity of used products recycled (t)[8)]	23,421	—
Other environmental protection effects	Shipping and other effects	Reduction in fuel consumption (t-CO_2)	1,624	2% decr.

3) Amount of atmospheric emissions of substances Canon treats as controlled substances (including PRTR substances).
4) Amounts of NOx and SOx emissions resulting from consumption of boiler fuel.
5) Amount of discharges into public waterways of substances Canon treats as controlled substances.
6) Amount of discharges into public waterways of BOD, COD, nitrogen, phosphate, and SS.
7) CO_2 equivalent for forecasted electric energy consumption for the number of business machines shipped with on-demand fixing technology.
8) Number of copying machines, cartridges, etc. recycled (including third-party material recycling and thermal recycling).

(¥100 million)

Economic Effects of Environmental Protection

Details of Effects		Monetary Value
Revenue	Sales revenue from waste recycling	0.7
Cost savings	Energy expense reduction from energy conservation	12.2
	Waste handling expense reduction from resource conservation and recycling	4.8
	Expense reduction from logistics streamlining	4.6
Total		22.3

(¥100 million)

Economic Effects of Upstream/Downstream Costs

Lower electric energy expense from reduced product energy consumption[9)]	187.7
Sales revenue from used product recycling	0.01

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).

(¥100 million)

Environmental Protection Costs at Overseas Operational Sites	Investment	Expense
Americas	0.3	0.3
Europe	1.1	1.2
Asia	1.6	3.2
Total	3.0	4.7

Making Products that Maximize Resource Efficiency Through Eco-Design

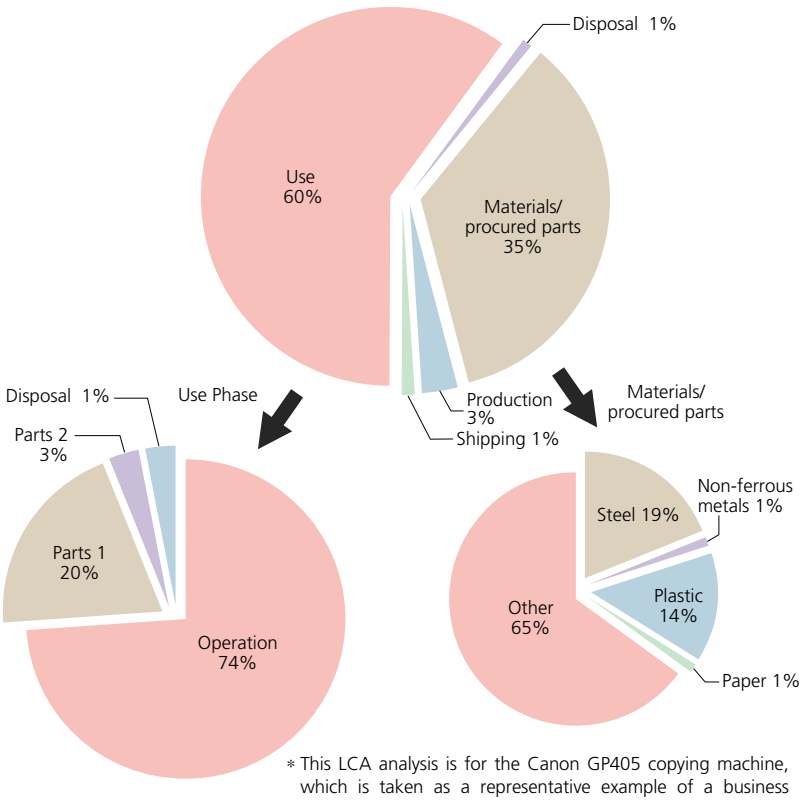
At Canon, we analyze the environmental impact of our main products at the materials/purchased parts, production, shipment, use, and disposal phases of their life cycles and reflect what we learn in our product development. An eco-design system is used in our development and design operations as part of our rigorous efforts to reduce the environmental burden of our products. This includes making the products more energy efficient and reducing the number of parts and amount of materials that go into making them.

Environmental Impact of Main Products

We use LCA (Life Cycle Assessment) analysis to determine how we should approach the development of our main products. This analysis has shown us that the environmental burden of our products comes principally in the form of energy consumed during use by customers. The next most significant forms of environmental burden are those related to materials and procured parts.

In light of these findings, we devote significant resources to developing and implementing technologies that help our products conserve energy. We are striving to reduce the environmental burden of materials and procured parts by adopting green procurement and by designing smaller and lighter products. We are also using recycled or reused parts and materials, and working to eliminate hazardous substances.

Copying Machine Life-Cycle Analysis (details of CO_2 emissions)



* This LCA analysis is for the Canon GP405 copying machine, which is taken as a representative example of a business machine. Distributions of environmental burden differ according to equipment type; the distribution for consumer equipment, for example, differs somewhat from that shown above.

Eco-Design System

Two types of standards constitute key elements of our Eco-Design System — design standards incorporating environmental information from parts and materials manufacturers, as well as market needs for recycling; and product assessment standards to measure environmental impact. We are working to improve ECP (Environmentally Conscious Products) quality by using our Environmentally Conscious Design Guidance, ECP Design Examples, and other internal publications and intranet pages to share knowledge gained in the development and design process within the Canon Group.

Additionally, we use the LCA method to quantify environmental burdens and feed results back to design areas to enhance the environmental compatibility of our products. Relevant information is disclosed through Type III Eco-Labels. (see P42)

Product Assessment Revision

In 2001, we revised our Product Environment Assessment Guidelines. The aim was to enhance the energy conservation of our products and show our commitment to the 3Rs (reduce, reuse, and recycle). Another reason was to determine whether individual business operations are complying with product specifications and values based on the Canon Group's Mid-Term Environmental Goals and their own Mid-Term Environmental Plans. To ensure these guidelines are followed, we also set up Product Environment Assessment Committees.

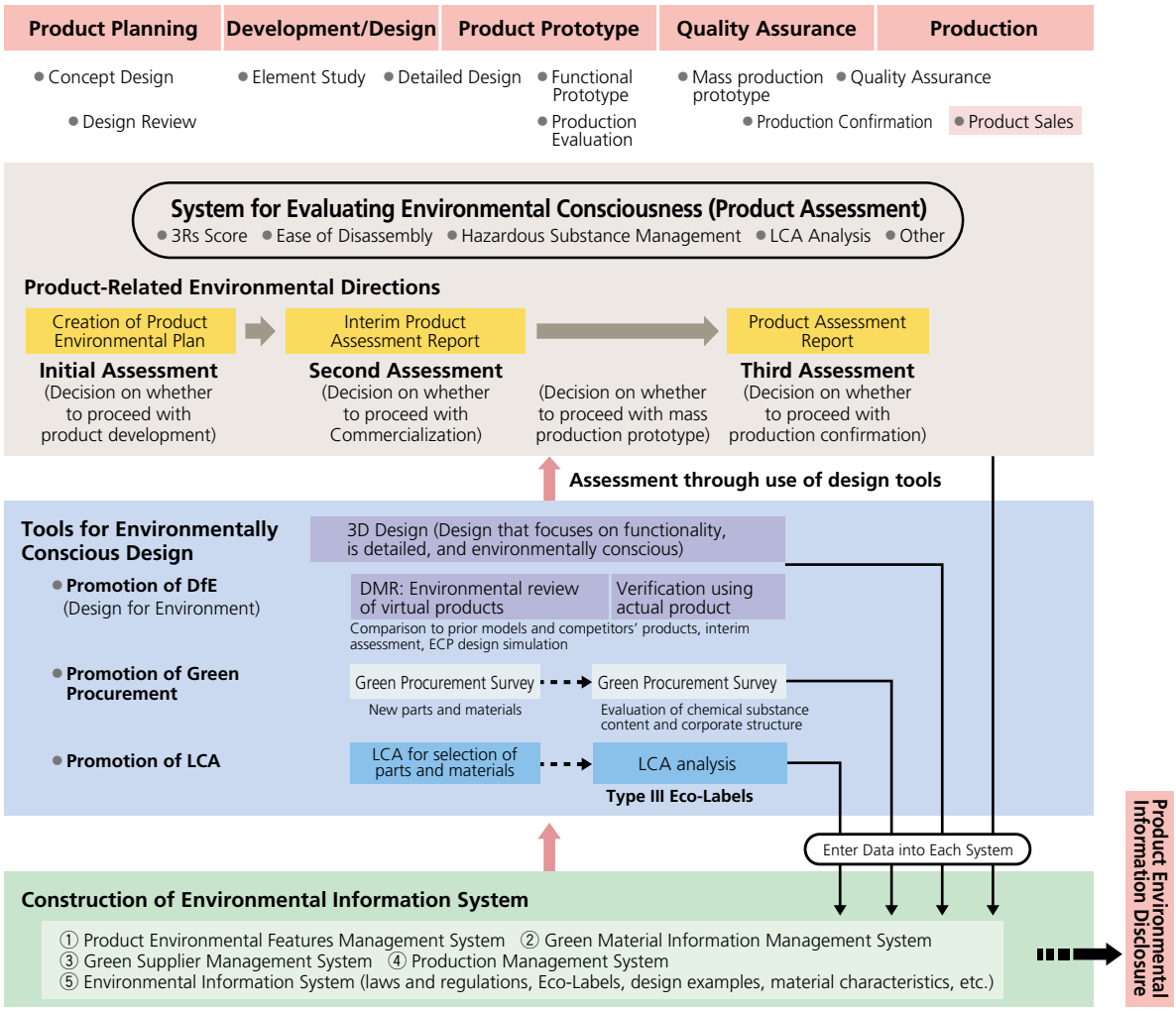
All of our product divisions have now implemented assessment programs in their drive to develop products that meet our environmental goals and achieve maximize resource efficiency.

Application of IT to Achieve Environmental Optimization in Product Development

We introduced 3D-CAD in all of our development and design divisions in 1999 and began applying DMR (Digital Mock-up Review) in 2001. DMR uses a sophisticated Canon proprietary program that allows all tasks, from the evaluation of designed parts to the confirmation of product and unit functions, to be performed on a personal computer. This saves resources and time, and helps to reduce costs.

The Eco-Design Function automatically compiles data such as reuse rates, recyclability rates, and hazardous substance content for design-standard assessments. By substituting data on parts, it can also be used to perform quantitative simulations. This allows planning, development and design departments to get feedback about the ease of disassembly and recycling, the appropriateness of Eco-Labels, LCA assessments, cost assessments and so forth. The end result is optimal product designs that minimize use of resources and lessen environmental impact.

Eco-Design System Flow



Setting the Standard for Eco-Products

At Canon, we believe the best way to achieve our Mid-Term Environmental Goals is to implement clear and specific objectives. To this end, we have organized our Product-Related Goals into three categories: Global Warming Prevention and Energy Conservation; Resource Conservation; and Elimination of Hazardous Substances.

Product-Related Mid-Term Environmental Goals and Achievements as of 2001

Within the Mid-Term Environmental Goals we introduced in November 2000, we established Product-Related Goals, organizing them into three categories — "Global Warming Prevention and Energy Conservation;" "Resource Conservation;" and "Elimination of Hazardous Substances." (see P5)

In pursuing the first, Global Warming Prevention and Energy Conservation, we have succeeded in lowering electric energy consumption during operation to levels below those of previous models, for all of our products. We have also brought 74 of 79 of our products into compliance with the International ENERGY STAR® Program (see P16).

Toward achieving our Resource Conservation goals, we have implemented measures to reuse parts and materials for our copying machines and PIXUS BJ printers. In 2001, we used 213 tons of recycled plastic for these products and reduced the number of plastic grades we use, from 105 to 66. In our efforts to recycle used products, we have succeeded in recycling 96% of collected copying machines and 100% of BJ toner cartridges (see P18).

Under the third category of our Product-Related Goals, we have pushed forward with efforts to rid our operations and products of designated hazardous substances (see P20).

●Environmentally Conscious Aspects of Business Machines

We at Canon devote considerable effort to reducing the amount of energy our copying machines, printers, facsimile machines, scanners, and other business machine products consume during operation. In recognition of our success in energy conservation, we were presented with the 2001 ENERGY STAR® Energy-Efficient Products Award.

In the early 1990s, we became the first in the industry to introduce on-demand fixing technology (see P16), ozone-free electrical charging technology (see P21), and other environmentally conscious technologies in business machines. We started by implementing them in our low-speed analog copying machines and have since begun using these technologies in our medium-speed digital copying machines as well.

At Canon, we are also developing designs that incorporate reused parts, using recycled parts and materials, and developing technologies for eliminating hazardous substances.

An environmentally conscious "top runner."
The imageRUNNER iR3300 Digital Multifunction Office System

The ENERGY STAR® Energy-Efficient Products Award

The United States EPA (Environmental Protection Agency) has chosen Canon U.S.A., Inc. as the winner of its ENERGY STAR® Energy-Efficient Products Award for two years running.

The EPA set up the International ENERGY STAR® Program in 1992 to promote the development and introduction of energy-efficient products as a way of combating global warming and other environmental problems. Each year, the EPA presents ENERGY STAR® Awards to recognize the efforts of individuals and organizations who have made outstanding contributions to the ENERGY STAR® Program in areas such as products, energy-consumption control, and consumer education.

Canon has 220 products certified as being in compliance with the ENERGY STAR® Program, more than any other business machine manufacturer. Canon U.S.A.'s most recent ENERGY STAR® Energy-Efficient Products Award recognizes its promotional work supporting the ENERGY STAR® Program, including the Green Earth Campaign (see P51), commercials, Internet homepage, pamphlets and videos.

2002 ENERGY STAR® Energy-Efficient Products Award presented to Canon U.S.A. for the second consecutive year.

ENERGY STAR is a U.S. registered mark.

●Environmentally Conscious Aspects of Bubble Jet Printers

Canon BJ printers were the first in the industry to use recycled plastic and, in keeping with the International ENERGY STAR® Program, are designed to conserve resources. By collecting used cartridges and other initiatives, we ensure each model meets Green Purchasing Standards*1.

One of our goals is to bring all of our printers into line with the Printer Eco-Mark*2 standards established in October 2001. All seven of the PIXUS F-Series and S-Series BJ printers we introduced in Japan in fall of 2001 were awarded Eco-Mark certification and, as of March 2002, were still the only inkjet printers to have won this distinction. The environmental flagship model of our Eco-Mark certified printers is the Canon BJF9000, which employs the full range of our environmental technology.

*1 The Law on Promoting Green Purchasing as it applies to printers
The Law on Promoting Green Purchasing took effect in April 2001. This law requires that governmental bodies, businesses, etc. adhere to certain standards when making purchases, including compliance with the International ENERGY STAR® Program, making use of recycled paper, and so forth. All of our inkjet printers conform to the Law on Promoting Green Purchasing.

*2 The Japan Environmental Association began issuing Eco-Labels in 1989. The purpose is to disseminate information on products recognized as contributing to the protection of the environment. At present, certification standards exist for 68 kinds of products. Certification standards for printers were established in October 2001. Numbering 38 in all, these standards include the application of 3Rs (Reduce, Reuse, Recycle) design, the use of recycled plastic, the collection of used cartridges, and the elimination of hazardous substances. These rigorous guidelines address every phase of the product life cycle from design and production, to use and disposal.

BJ F9000 environmental flagship BJ printer

●Environmentally Conscious Aspects of Cameras

Camera lenses require extremely high optical performance. In the past, lead was incorporated into glass to raise its optical performance (refraction index). In 1991, we teamed up with a glass manufacturer to try and develop glass of high optical quality without using lead, a hazardous substance. By 1993, we had succeeded, creating a new optical glass using titanium. Today we use approximately 100 different kinds of this lead-free glass in our lenses (see P21).

As for camera bodies, we are constantly working to conserve resources, facilitate recycling and consider the needs of the environment in other ways as well. Initiatives in this area include making camera bodies smaller and lighter, and using metal for external parts (see P17).

Cameras equipped with lead-free lenses

●Other Examples of Environmental Consciousness in Products

In recent years, the digitalization of medical equipment has proceeded at a rapid pace. Canon's X-ray digital camera displays images directly on monitors, eliminating the need for film development. This system benefits the environment by helping to reduce the use of film and developing chemicals required by conventional systems.

We have also taken various environmentally conscious measures with regard to OA paper and other supplies.

CXDI-11 X-ray digital camera

Environmentally conscious OA paper

Reduction of Energy Consumption During Standby Mode to Achieve Significant Energy Savings

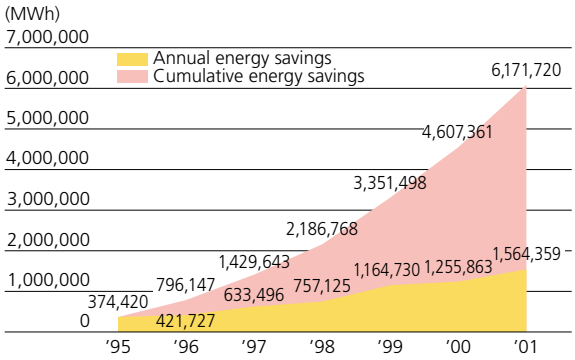
Copying machines, printers, facsimile machines, and other types of business machines normally spend more time in standby mode than in actual operation. In fact, standby mode accounts for approximately 90% of these products' total electric energy consumption. To tackle this wastage, we have equipped our models with on-demand-fixing and other technologies that reduce the amount of power they consume when not in use.

Energy-Efficient Business Machines

In the market for copying machines, demand for digital multifunction office systems equipped with network functions is expanding dramatically.

By employing our own on-demand fixing technology, we have been able to cut the amount of electricity our business machines consume during standby mode to 1/4 that of our earlier products (an average of 17W in the case of our LBP-840 laser beam printer). Our imageRUNNER iR3300, which is equipped with this technology, won the Commendation from the Chairman of the Energy Conservation Center at the 12th Energy Conservation Awards. Moving into the future, we will work to enhance our energy efficiency technologies.

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



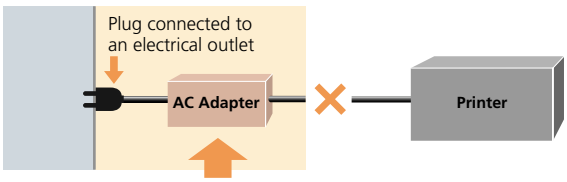
Energy-Efficient BJ Printers

All Canon BJ printers comply with the standards of America's International ENERGY STAR® Program (see P14). In fact, our BJ F9000 printer consumes only about 3W — less than 1/3 the 10W standard.

As part of our support for the Code of Conduct on Efficiency of External Power Supplies*, we are also striving to reduce the power consumption of our mobile inkjet printers.

*Since 1995, the European Commission has been pursuing initiatives aimed at reducing energy consumption by household electronic and electrical devices in member states. In 2000, it created the Code of Conduct on Efficiency of External Power Supplies, which covers devices such as AC adapters and chargers. The European Commission is urging that manufacturers reduce the electricity consumption of their products during no-load periods to levels below those specified in standards.

Electric Energy Consumption During No-Load Periods



Electric energy consumption when the AC adapter is connected to an electrical outlet, but not to the printer.

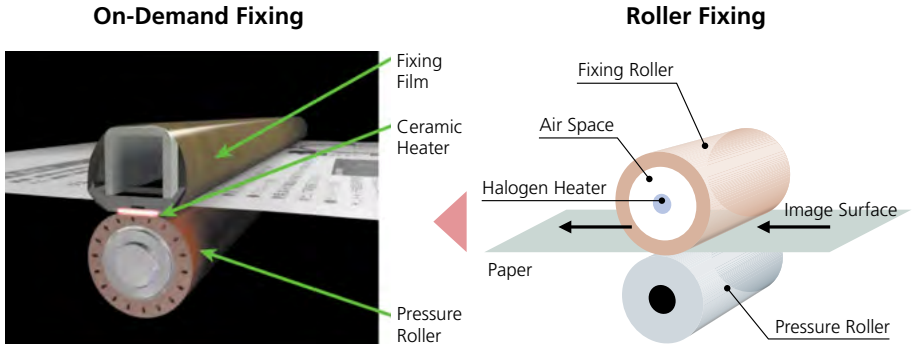
On-Demand Fixing Technology

Our on-demand fixing technology combines both energy-efficiency and quick-start technologies.

The conventional roller fixing method used in printers requires that the roller be kept warm with a halogen heater even when the printer is in standby mode. This is to avoid a one-minute warm-up period before the machine can be used. On-demand fixing, on the other hand, uses a ceramic heater for rapid heating and a thermally efficient fixing film to apply heat only where paper is contacted during fixing. As a result, equipment using on-demand fixing requires no warm-up time and consumes only 1/4 the electricity of other equipment during standby mode.

What's more, we have succeeded in raising the maximum printing speed possible with on-demand fixing technology to 33 pages per minute and are working to attain even greater speed in the future.

Comparison of Roller Fixing and On-Demand Fixing Mechanisms



Heat is transmitted through the fixing film to the paper.

Energy- and Resource-Efficient Scanners

With the development of our LIDE*1 technology, we have succeeded in making our scanning mechanisms more compact. This breakthrough has made it possible for us to make our CanoScan N Series and other flatbed scanners smaller, thinner, and lighter, which means they require fewer resources than earlier models. We have also made these products significantly more energy-efficient and convenient to use — so much so they can now get all the energy they need through a USB cable.

*1 LIDE stands for "LED Indirect Exposure." This is Canon's proprietary scanning method and uses a light guiding mechanism to ensure even exposure to light that is emitted by tiny LEDs and detected by a linear sensor.

CanoScan N1240U

Energy-Efficient Cameras

The increasing use of electric energy and rechargeable batteries brought on by the growing popularity of digital still and video cameras has given rise to serious issues. In response, we at Canon are working on new technologies that will help to conserve electricity and reduce waste. Our goals are to develop technologies that will reduce electricity consumption 20%–30% every two years, and come up with a way to extend the lives of batteries by increasing their capacity. And as an added measure, we are working with our market competitors in Japan to recycle small-size rechargeable batteries.

The PowerShot S40 digital camera, recharging unit, and rechargeable battery

Canon's imageRUNNER iR3300 Digital Multifunction Office System Recognized for its Energy Efficiency

In our drive to develop environmentally conscious products, the "imageRUNNER iR3300" leads the way. This digital multifunction office system, which we launched in June 2001, is the first of our products that is both equipped with our proprietary on-demand fixing technology and capable of producing at least 33 pages/minute. The imageRUNNER iR3300 consumes only 5W of electricity during its sleep mode, takes only 6 seconds to reach full operational mode, and, as a result of technological advances, has achieved energy efficiency of 31Wh/h — 1/4 the level called for by the Law on Promoting Green Purchasing, which took effect in April 2001.

In making the imageRUNNER iR3300, we use housing parts manufactured with our own sandwich molding technology, which "sandwiches" recycled plastic in between two layers of virgin plastic (see P19); printed circuit boards in which chips are mounted with lead-free solder; lead-free lenses; lead-free electrical wiring; and other examples of the latest environmentally conscious technology. The imageRUNNER iR3300 is a product that truly represents Canon's commitment to the environment.

Our flagship model has twice won public recognition for its excellence. In September 2000, the imageRUNNER iR3300 prototype received the Copier of the Future "IEA-DSM Award of Excellence," and in January 2002 it was named the winner of the Commendation from the Chairman of the Energy Conservation Center at the 12th Energy Conservation Awards sponsored by the Energy Conservation Center, Japan.

Our products have now been recognized at the Energy Conservation Awards three times. Previously, our Family Copier CLIP FC310/330, in 1994, and our Lasershot LBP-730, in 1996, were selected as winners of the Director General of the Agency of Natural Resources and Energy Award.

Promoting Resource Conservation by Using Recycled Materials

Most Canon products are comprised principally of metal and plastic.
Systems for recycling metal have been put in place and almost all the metal we use has been recycled. We are now focusing our attention on using less virgin plastic.

Application of Recycled Plastic

Metal makes up about 2/3 of the material used to make copying machines, and nearly all of the metal we use to make a copying machine has been recycled. The balance of materials that go into a copying machine are plastics. One strategy in reducing our use of plastic is to design smaller products. The other is to reuse or recycle parts and materials.

We began to concentrate on developing systems for recycling plastic materials in the 1980s — an effort that finally paid off in 1996 with a perfected technology. In 1992, we started labeling parts made of plastic to promote recovery and sorting for recycling. Since then, we have developed and implemented a sandwich molding technology and various other methods for using the recovered plastic, and presently use recycled plastic in our BJ printers.

●Plastics Recycling Overseas

As our production has shifted overseas, there has been an accompanying need at Canon to develop plastics recycling plants outside of Japan. We use paper cassettes from used copying machines we collect in Japan as a source of recycling material (HIPS). After washing, removing foreign matter, and carrying out related preprocessing in Japan, we ship this material to Thailand, where local plastics manufacturers pelletize and recycle it into material (m-PPE) for BJ printer power supply covers. The material that emerges from this process, which is based on our own technology, is equal in quality to virgin material and has won UL electrical safety certification.

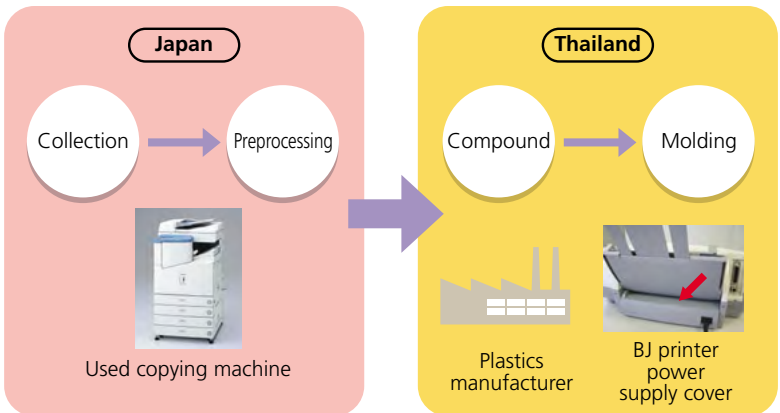
BJ printers equipped with the power supply covers mentioned above are scheduled for launch in fall of 2002.

●Utilizing Recycled PET

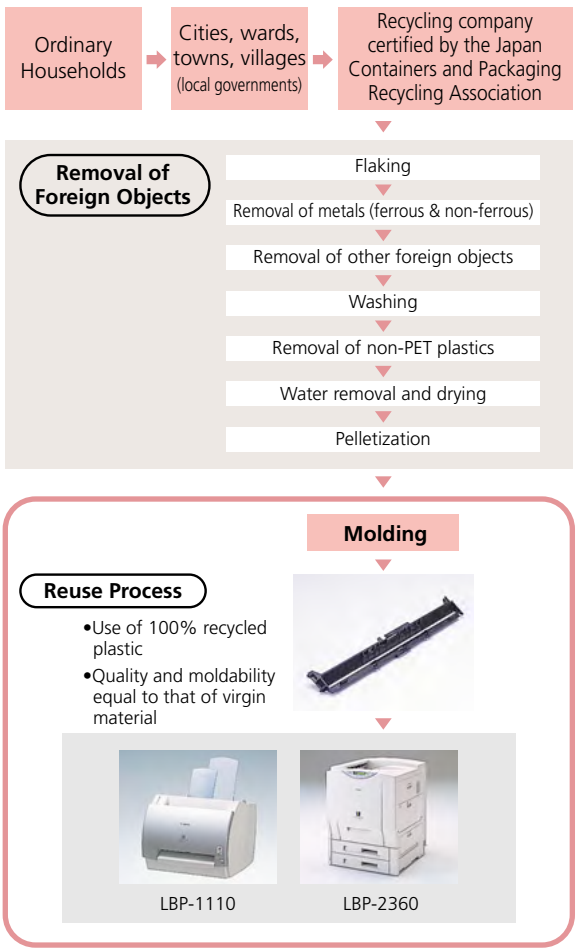
The full-scale implementation of the Container and Packaging Recycling Law has driven an increase in the recovery of beverage bottles and other products made of PET (polyethylene terephthalate). Recycled PET is used mainly in clothing and toys, but the demand in these sectors is not expected to be enough to absorb all the available material. In March 2001, Canon began using uniforms made of recycled PET and will use about 10 tons of this material every year for this purpose. However, we decided that as a consumer of recycled material and a supporter of the development of a recycling-oriented society, we should make more use of recycled materials on our production lines. We have now specified recycled PET as a standard material for our products.

Putting words into action, we began in 2001 to use 100% recycled PET in the key molded parts of our laser beam printers. In the coming years, we plan to use recycled PET wherever possible in our copying machines, facsimile machines, multifunction office systems, and other products. We estimate the total amount of recycled PET used throughout the Group in the first year of this recycling initiative came to 600 tons.

Plastics Recycling Overseas



PET Bottle Recycling Process



Resource-Efficient Design in the Form of Independent Ink Tanks

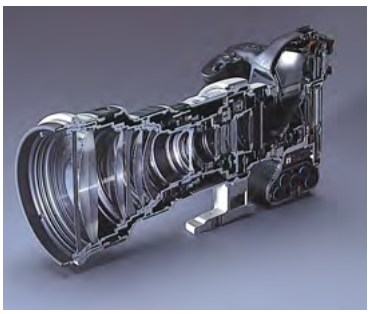
In our drive to make environmentally responsible products, ink is seen as a precious resource at Canon. We have been using an independent ink tank for each color of ink and a high-precision remaining ink detection system for our BJ printers, since 1998. Printers using the independent ink tank system generate only about 1/13 the quantity (by weight) of used ink tanks generated by printers using a single ink tank for all colors. And our high-precision remaining ink detection system combines optical and dot-counting systems to monitor the amount of ink remaining in a tank and reduce paper waste by preventing situations in which ink runs out during a printing session.

Independent ink tanks for each color of ink

Making Lenses and Cameras Smaller and Lighter

In 2000, we introduced to the market the pioneering EF 400mm F4 DO IS USM lens, the first lens to employ a multi-layer diffractive optical element. By taking advantage of the benefits of diffractive optical elements, we have made this lens (DO lens) significantly lighter and smaller than conventional lenses, so it is easier to use and requires less material to manufacture.

For camera bodies, we use aluminum and stainless steel for external parts. Doing so not only facilitates recycling, but also improves product appearance. Our efforts to make our camera bodies smaller and lighter reduce the amount of resources that go into them. Our main products in this endeavor are the APS compact cameras, digital cameras, and video cameras making up our IXY product line.



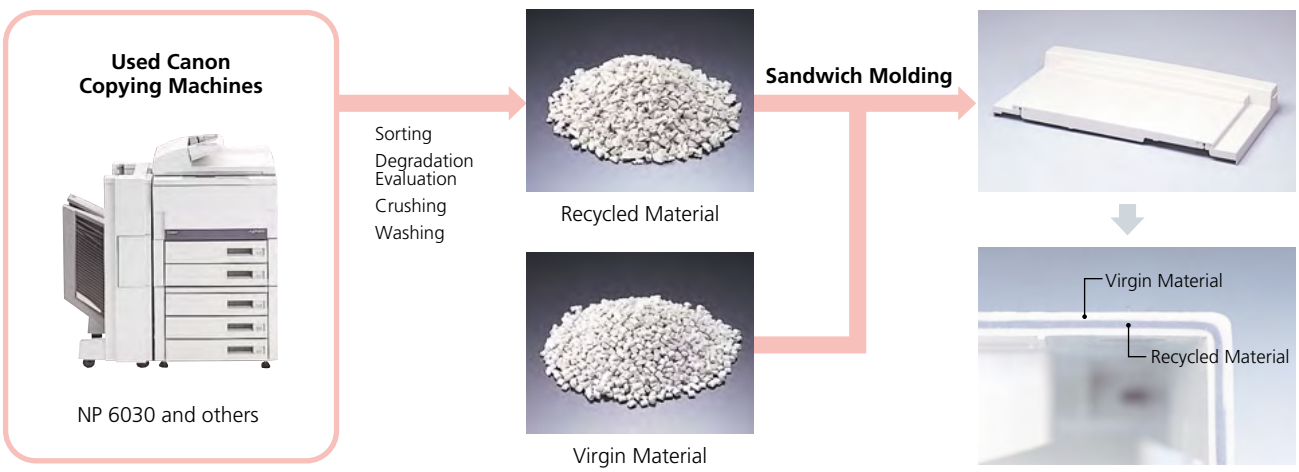
Super telephoto EF lens incorporating a multi-layer diffractive optical element

Sandwich Molding Technology

In 1999, we developed a sandwich molding technology, which uses recycled material as a core material inserted between outer layers of virgin plastic, and began using it in our copying machines. This method reduces detriment to external appearance caused by color irregularities and the presence of foreign materials.

And because it uses one less thermal treatment than the conventional recycling process, which kneads together recycled and virgin material, degradation in the quality of the material is also reduced. In January 2000, the quality of the plastic goods produced by Canon's sandwich molding technology was validated when it became the first such material to gain America's UL94-5VB electrical safety certification.

Recycled plastic accounts for 30% of the 3mm external parts we use, and we plan to increase this percentage, while also cutting costs.



Hazardous Substance Elimination Technology for Maintaining Product Quality and Safety

To achieve product performance and quality, we use various types of chemical substances. We exercise every care to ensure that they pose no safety concerns, and are developing — steadily implementing — technologies for eliminating hazardous substances from our products.

Hazardous Substance Elimination Initiatives

We have taken steps to eliminate hazardous substances from our products, going further than is legally required, so that our customers can use our products safely and securely. We have stopped using any specified brominated flame retardants (PBB, PBDE), and are adopting lead-free lenses, lead-free solder, lead-free wiring, steel plates free of hexavalent chromium, and other substitute parts and materials.

We have also established our Group-wide Hazardous Substance Elimination Sub-committee and are developing technologies aimed at eliminating lead, cadmium, hexavalent chromium, mercury, and other heavy metals from our products by the end of 2004.

●Lead-Free

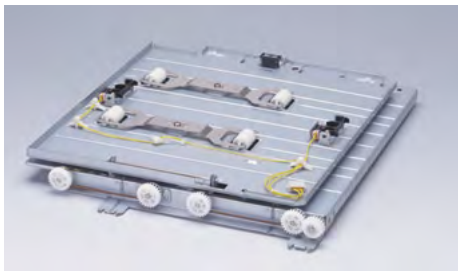
Lead is one of the most difficult hazardous substances to eliminate from products. It is used in lenses, solder for mounting chips on circuit boards, electrical cables, and many other parts.

Despite the problems, we have made progress. The sheathing in our electrical cables is now lead-free; the lead stabilizer used in making this sheathing has been replaced by calcium and magnesium. And instead of conventional solder, which is composed of lead and tin, we now use solder made from tin, silver, and copper. Our copying machines and BJ F9000 BJ printer use this lead-free solder on their circuit boards, including those in controllers.

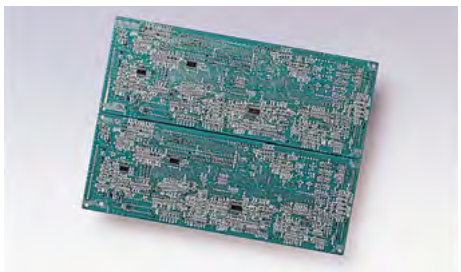
●Hexavalent Chromium-Free

Hexavalent chromium treatment is ordinarily used to prevent corrosion of zinc-plated steel used in business machines. Tiny amounts of hexavalent chromium are left in the film that is formed on parts during treatment. In 2001, we began using steel plates free of hexavalent chromium in our copying machines and BJ printers.

We have also succeeded in creating screws free of hexavalent chromium, which we began using in our BJ F9000, BJ S6300, and other products in 2001.



Steel plates free of hexavalent chromium



Printed circuit board using lead-free solder

Significant Progress in Eliminating Hazardous Substances

Elimination of Lead

Main Circuit Boards

CR Circuit Boards

Power Pack Units

Head Units

Power Accessories

Example of the BJ F9000

Approximately 70% less hazardous substance content than conventional products

Elimination of Hexavalent Chromium

Chassis Unit

Screw with traces of hexavalent chromium (red)

↓

Black Nickel Screw (black)

Screw with traces of hexavalent chromium (yellow)

↓

Nickel Screw (silver)

●Ozone-Free Electrical Charging Technology

Laser beam printers use electro-photographic technology in which a laser is applied to a photosensitive drum to draw characters and images. The conventional wire charging method used high voltages, in the range of 5–10kV, to apply an even electrical charge to the photosensitive drum. One of the by-products of this process is ozone.

In 1989, we became the first in the industry to develop ozone-free electrical charging technology. Generating less than 1/1000 the ozone produced by the conventional wire charging method, and consuming only 1/5 the amount of electric energy, our system results in healthier work environments.

Our ozone-free electrical charging technology won the Prize of the Commissioner of the Japanese Patent Office and the Invention Practice Service Prize at the Japan Institute of Invention and Innovation's 1999 National Invention Awards. We now use our ozone-free electrical charging technology in most of our business machine products, including copying machines, facsimile machines, and digital multifunction office systems.

Elimination of Hazardous Substances from Lenses

Having succeeded in developing lead-free glass in 1993, we now use 100 types of lead-free glass in our products. All of the photographic lenses for our lens-shutter, digital, and video cameras are lead-free and we have replaced the EF lenses for our EOS single-lens reflex cameras with lead-free lenses wherever possible. As an additional measure to eliminate lead from our products, we are also making viewfinders out of either lead-free glass or plastics. To reduce glass waste, we are using lenses with smaller diameters and have improved our glass-shaping process.

Lenses using lead-free glass

Bio-Polymers

Bio-polymer synthesis is a field of technology that is alive with potential. We are studying ways to apply this eco-friendly production process for making toners and inks, piezoelectric materials and other functional materials. Bio-polymers offer possibilities for new materials, lower production costs, and production processes with lower environmental burdens — none of which is feasible with chemical synthesis. In our bio-polymer research, we have so far discovered four promising microorganisms, which we have succeeded in isolating and culturing. All are capable of converting carbon-based organic materials into polyester. For the next stage, we are working to improve the performance and activity levels of these microorganisms and investigating possibilities for synthesizing bio-polymers for a wide variety of purposes. Our goal is to produce practical applications in the form of biodegradable toner and various types of materials, within five years.

VOC Decomposing Treatment Technology

Business machines emit VOCs (Volatile Organic Compounds) similar to those given off by new construction materials — though in very small amounts. At Canon, we are working to achieve a precise understanding of the mechanism by which VOCs are emitted and develop ink, toner, and an imaging process that reduce VOC emissions. As a part of this effort, we are using our technical expertise to develop a method of detecting extremely minute amounts of VOCs. We use the data we gather with this technology as feedback in our product development activities, so that we can lower VOC emissions of future products.

VOC Monitoring Equipment

Green Procurement* Reaching Beyond the Canon Group

Green procurement features highly in our environmental activities, and is another practice we are extending from Japan to Group companies and suppliers across the globe. Beyond the Canon Group, we are working with other major electrical equipment manufacturers to develop a standardized green procurement survey — an initiative with potential to significantly increase environmental activism by international companies.

*"Procurement" as used in this report means the acquisition of parts and materials that are used in the actual manufacture of products. "Purchasing," on the other hand, is used to mean the acquisition of goods that are used for purposes other than the manufacture of products.

Canon's Green Procurement

Reducing the environmental burden of products requires environmentally conscious approaches to the design and production of parts and materials we procure and use in our products. Ahead of the rest of the industry, we instituted green procurement in 1997 and have reached the fifth stage of this endeavor. Implementation of green procurement is a cooperative undertaking involving briefing sessions and joint study seminars.

Our green procurement activities are extensive and thorough, covering not only parts and materials for use in products, but also goods such as office supplies (see P41).

Overseas Development of Green Procurement

In overseas locations, such as Hong Kong, Singapore, Thailand, and America, we hold regular briefings with suppliers to ensure their understanding and support for our green procurement program.

In the past, we evaluated the activities of suppliers using standards that differed by location. In 2001, however, we began implementing standards, primarily in Asia, that are the same as those used in Japan. We have also visited our suppliers in the southern part of China, performed on-site inspections, and provided advice to help them supply us with environmentally conscious parts and materials. Focusing on business machines, we have begun building a database of overseas parts and materials based on our own surveys, adding to information we already collect in Japan.

Reflecting its importance, we plan to complete installation of our worldwide green procurement system by the end of 2002.

Initiatives Regarding Suppliers

We ask that our suppliers regularly check the status of their own environmental protection activities based on our "Green Procurement Corporate Structure Standards." We review their results, provide each supplier with our evaluation, and request improvements, whenever warranted. We also help suppliers build Environmental Management Systems and carry out activities to lower environmental burden.

As of December 2001, we had completed assessments of approximately 950 Japanese companies, which together account for 96% of the monetary value of our purchases, and found 75% of these companies to be in compliance with our standards.

Initiatives Regarding Parts and Materials

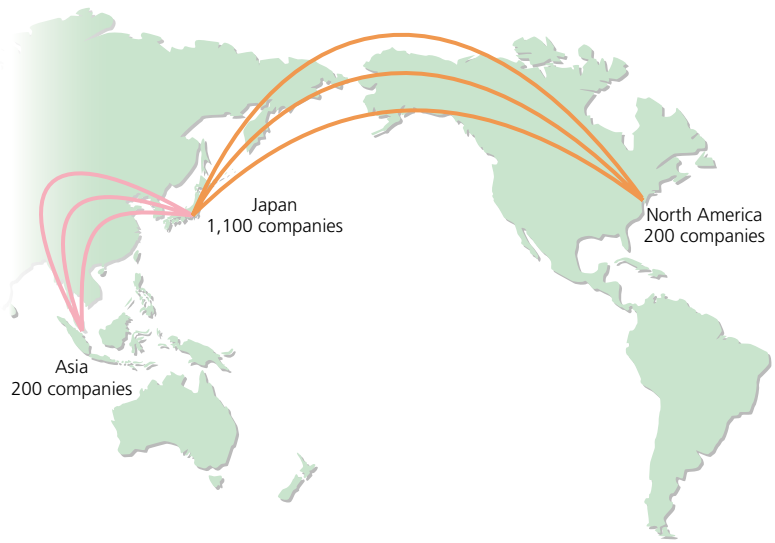
For parts and materials, we perform product surveys focusing on chemical content and record the results in our Green Material Information Management System (referred to internally as CLEAN MATERIAL). Our development and design divisions use the information in this system to select parts and materials with low environmental burdens.

We also cooperate with suppliers in lowering environmental burden by providing technical information on lead-free solder and other items.

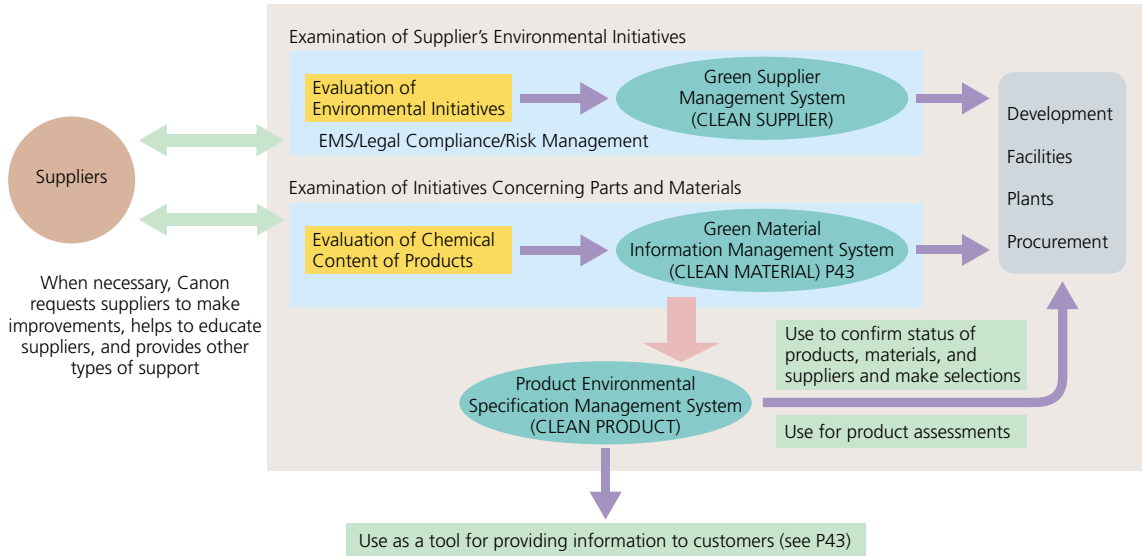
Revision of Procurement Standards

Our green procurement activities are based on the Global Canon Green Procurement Standards and Guidebook, which were introduced in 1997. The lessons we learned in implementing these policies were used in April 2002 to update the Green Procurement Standards. Using these new standards, we are committed to obtaining our parts and supplies in ways that do the least damage to the environment as we pursue green procurement on a global basis.

Green Procurement Network



Green Procurement Flow Chart



Standardization of Green Procurement Survey

In January 2001, we at Canon called for major electrical equipment manufacturers to agree on a common set of green procurement standards. After other companies answered that call, a council of the 18 participating companies, including Canon, was set up to develop these standards and come up with a common procurement survey. The aim is to format an evaluation checklist that will allow participating manufacturers to quickly and accurately monitor 28 chemical groups in the parts and materials they purchase. At Canon, trials were begun on April 1, 2002, and the results will be used to prepare for full-scale implementation of the new survey.

Session for explaining the concept of a common set of green procurement standards

Hazardous Substances Monitored for Presence in Products

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

*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.

Highly Efficient Production and Logistics Through Production Innovations

In the face of increasingly competitive international competition, we have adopted highly efficient and flexible production and logistics systems that meet our twin goals of improving customer satisfaction and dealing with changes in our business environment. "Cell production," "just-in-time management," and "joint logistics" are some of the innovative methods we are using in our production processes to lessen our environmental burden.

Lowering Environmental Burden Through Production Innovations

Since 1998, we have been engaged in a series of production innovation activities. To improve customer satisfaction and deal with changes in international competition and our business environment, we are pushing forward with the adoption of production systems that are both global and flexible. Our production innovation activities focus on reducing lead time by manufacturing in small lots and thoroughly eliminating waste.

In achieving a flexible production system, we have switched from mass production driven by belt conveyors, to cell production. With just-in-time management, materials are delivered to our plants in the quantities needed, at the times they are needed, and factory vanning allows us to load export containers right at our plants. As a result, we have eliminated wasteful product and part inventories caused by overproduction, while boosting productivity and lowering costs.

These production innovations have made it possible for us to trim the amount of space we use for production, cut the number of automatic warehousing facilities we operate, and reduce the number of belt conveyors we use. This has meant we use less electric power overall, particularly for air conditioning. The cumulative impact of these policies are significant: since 1998, we have reduced production space by approximately 549,000m^2, closed 25 automatic warehousing facilities, and cut emissions of polluting CO_2 by 42,800 tons — equivalent to approximately 7% of the total CO_2 emissions by the Canon Group in 2001.

Cell production at the Ami Plant

Cell Production

Line production is a manufacturing method centered on belt conveyors and many people performing particular tasks. Cell production, in contrast, uses small groups of people, or even individual people, to handle all production tasks.

In a production system where the pace of work is driven by belt conveyors, people perform a single task and spend very little time with a product. The common result is employees who feel overwhelmed by the endless stream of products in production. In cell production, the work changes as production proceeds, giving workers a sense of fulfillment that comes from participating in the complete manufacture of a product.

Additionally, because individual employees perform multiple production tasks, cell production has the potential to endow workers with comprehensive knowledge in areas such as assembly and parts processing. To encourage this, in 2000 we launched a system for training workers in all aspects of production. We call this our "Expert" System; workers who pass rigorous tests of their performance in all aspects of a production process are recognized as "Experts."

A further benefit of cell production is that it has allowed us to significantly reduce our work-in-process inventory.

An Expert single-handedly performing all of the assembly work for a Canon product

Combined and Streamlined Distribution Through Joint Logistics

Together with suppliers and shipping companies, we are endeavoring to develop a highly efficient logistics system. Our key innovation in this area is a joint logistics system, which was launched in 2000 after two years of preparations.

Under the old system, each supplier used a shipping company of their own choosing to individually deliver goods to Canon warehouses. Under our new joint logistics system, goods from suppliers are pooled and delivered together in large vehicles. This allows us to reduce the number of shipping routes and receiving points; use delivery vehicles more efficiently; and shorten shipping distances. In comparison to results for 2000, our introduction of joint logistics has resulted in a 4,805km reduction in shipping distance traveled per day, and lower environmental burden in the form of 3,770 tons less CO_2 and 12 tons less NOx.

Reuse of Logistics Packaging Materials

As a routine part of our operations, we procure massive quantities of parts from Japanese and overseas manufacturers and supply them to production facilities throughout the world. To protect the quality and functionality of these parts during shipping, we previously used various types of packaging materials, pallets, etc. Most of this material was thrown away after just one use. Every year, more than 2,000 tons of these packaging materials were discarded on the export side alone.

To reduce this tremendous waste of packaging materials, we began in 2000 to employ reusable materials, such as foldable plastic containers and trays, plastic pallets, and pallet bands. And by standardizing sizes and materials, we made it possible for Group companies and cooperating suppliers to use these packaging materials to send goods back to Japan. In 2001, we reduced by 752 tons the amount of packaging materials we discarded. Viewed in monetary terms, this comes to ¥470 million in logistics cost savings.

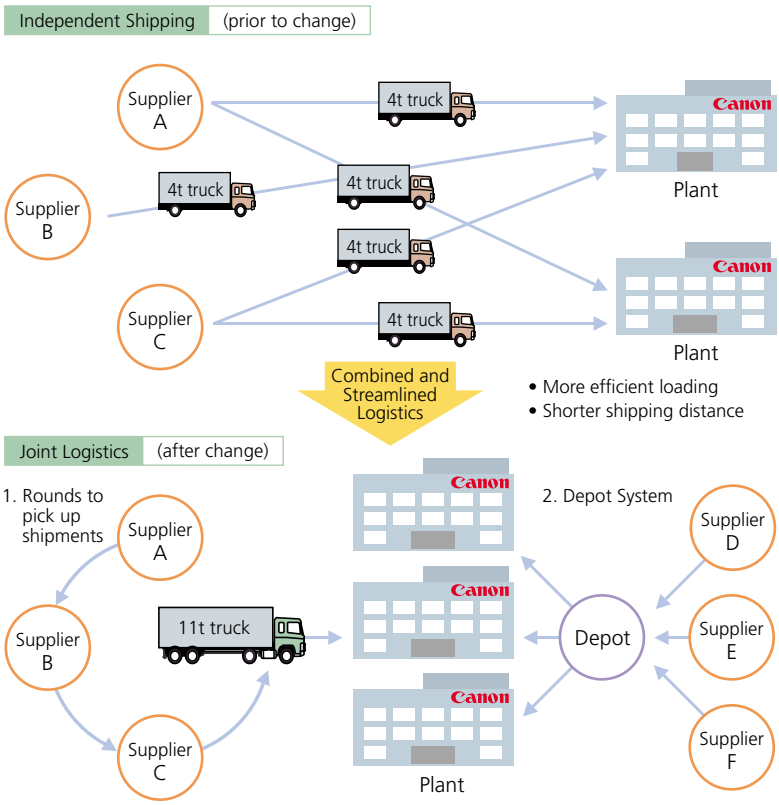
Reusable Export/Import Packaging Materials

Positive Impacts of Joint Logistics on the Environment

	2000	2001	Positive Impacts
Cooperating Suppliers and Shipping Companies (No. of logistics sites)	110	208	98
Volume of parts (PL/day)	1,834	1,399	435
Aggregate distance traveled (km/day)	30,730	25,925	4,805
Average load (pallets/day, trip)	17.8	14.4	3.4
CO_2 emissions (t-CO_2)	41,896	38,127	3,770
NOx emissions (t-NOx)	129	118	12
SOx emissions (t-SOx)	51	46	5

*Quantities reflecting environmental burden are based on annual deliveries and shipments of parts.

Combined and Streamlined Distribution Through Joint Logistics



Implementing Energy Conservation Activities and Cutting Greenhouse Gas Emissions

Saving energy is a constant focus of attention at our operational sites, something we carry out in order to conserve energy resources and prevent global warming. We have also developed technology for eliminating non-energy derived greenhouse gases and have presently eliminated these gases from our main production processes.

Energy Conservation at Operational Sites

For some time now, we at Canon have been practicing energy conservation at our plants, to both conserve energy resources and do our part to prevent global warming. In terms of unit value of production, our mid-term goal (to be achieved by 2003) is to reduce our CO_2 emissions to 85% of the 1999 level, while our long-term goal (to be achieved by 2010) is to reduce emissions to 75% of the 1990 level.

As of the end of 2001, we had cut back the CO_2 emissions of our plants to 97.5% of the 1999 level — a small, yet positive, step toward our stated goal. As for our goals in terms of 1990 levels, expansion of our business and strengthening of our R&D efforts has meant an increase in our energy usage and a rise in the absolute amount of our CO_2 emissions. Even so, when considering the entirety of our operations, including our sales and R&D facilities, the level of our CO_2 emissions in 2001 was 94% of the 1990 level in terms of unit value of sales. In Japan, our energy conservation activities resulted in a CO_2 emissions reduction of approximately 21,000 tons (about 4% of the previous year's total emissions by Group companies in Japan), an amount commensurate with a ¥700 million expense reduction.

We have put together comprehensive energy conservation measures that include efforts to reduce non-energy derived greenhouse gases, and have so far succeeded in reducing our CO_2 emissions in Japan to 109% of their 1990 level.

Energy Conservation in 2001

		($t\text{-}CO_2$)
Japan	Enhanced management (Instituted energy conservation patrols, began shutting down facilities when not in use) Improved production equipment and processes (Toner production, molding processes, etc.) Conversion to high-efficiency equipment (Heat source equipment, air conditioning equipment, etc.) Installed better lighting devices Introduced inverters to power facilities Began using natural energy sources (Introduced outdoor air cooling systems)	21,073
Americas	Improved the operation of Heat source equipment Introduced high-efficiency lighting equipment	1,785
Europe	Improved reflectors for lighting equipment Improved presses Production adjustments	132
Asia	(Installation of air/PVC curtains) Introduced systems for controlling multiple compressors Improved operation of air conditioning equipment Converted to energy-efficient molding equipment	4,313

Elimination of Non-Energy Derived Greenhouse Gases

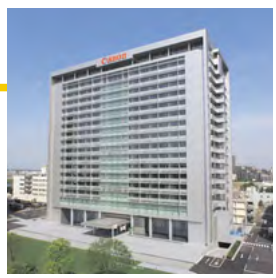
In 1998, we established our Countermeasure Sub-committee (PFCs) and began working to eliminate PFCs, HFCs, SF_6, and other non-energy derived greenhouse gases from our operations. The Sub-committee examined technologies for purging these substances from cleaning agents, solvents, and aerosol propellants, and by December 1999, we had eliminated nearly all non-energy derived greenhouse gases from all of our production processes.

We continue to use 1.8 tons of PFCs and SF_6 annually for the cleaning of deposition systems used in the manufacture of semiconductors and the dry etching of semiconductor materials, but plan to begin phasing out these gases as soon as the technology for doing so is available.

Heat Source Operation Support System at Canon Headquarters

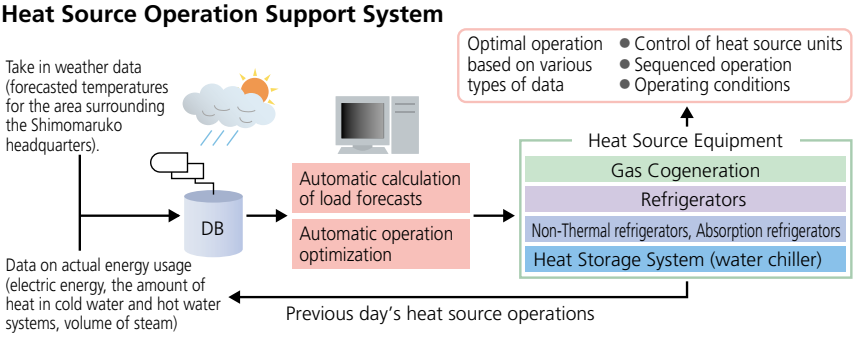
At our new headquarters building we are employing a heat source management support system to supply energy. This system will use constantly updated area temperature forecasts, data on the previous day's heat source operations (electric energy, the amount of heat in cold water and hot water systems, volume of steam) and other data on actual energy consumption to forecast loads on individual heat source equipment units and determine the optimal operation method for minimizing CO_2 generation. It also optimizes the operation of a gas cogeneration system, refrigerators, heat storage system, and other heat source equipment. As a result, energy consumption will be reduced by the equivalent of 1,223 tons of CO_2 annually, or 6% of the energy consumed by our Shimomaruko headquarters in 2001.

This system has been selected by the New Energy and Industrial Technology Development Organization (NEDO) for grant support.



Shimomaruko Headquarters Building

Heat Source Operation Support System



Using Recycling and Other Methods to Reduce Our Use of Outside Water Resources

To reduce the amount of water from outside sources (rivers, groundwater, etc.) that we use to manufacture lenses and semiconductors, we have implemented conservation and recycling measures and introduced the latest water recycling systems. At our Hiratsuka Plant and Ayase Office, we have introduced ultlra-pure water recycling systems for extremely efficient recovery and reuse of water.

Water Resource Usage

In 2001, we used a total of 6.51 million m^3 of water in our worldwide operations. In Japan, 28% of this water was used for people's daily needs (drinking, washing hands, flushing toilets, etc.), 36% for manufacturing purposes, and 36% for air conditioning. For manufacturing, the largest amounts of water were used in the production of lenses and semiconductors.

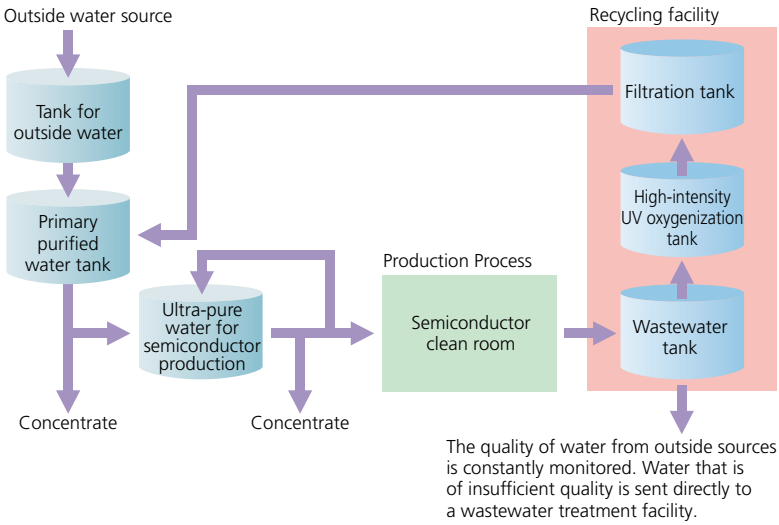
To reduce the amount of water we draw from rivers, groundwater, etc., we are striving to cut water usage and are expanding our use of recycling systems. In 1996, we began introducing the latest water recycling systems* and since then have cut our water consumption to 78% of the 1996 level.

*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 Inc., a Group company, we made its plant a zero wastewater facility by installing a completely closed recycling system that uses no outside water sources other than rain.

Ultra-Pure Water Recycling System

Canon's Hiratsuka Plant and Ayase Office, which both manufacture semiconductors, introduced Ultra-Pure Water Systems in 1993. These systems have been optimized to remove particular types of contaminants from wastewater and effluent produced by the semiconductor cleaning process. The end result is ultra-pure water that can be reused. These systems are highly efficient, producing approximately 210,000 m^3 of recycled, ultra-pure water at our facilities each year.

Ultra-Pure Water Recycling System Process Flow




Central Monitoring Office (Ayase Office)


Ultra-Pure Water Recycling System (Ayase Office)


Ultra-Pure Water Recycling System (Hiratsuka Plant)

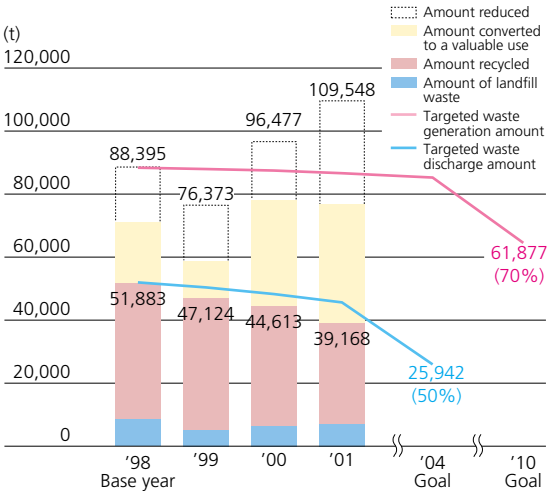
Waste Reduction Through Diligence and Introduction of New Systems

Reducing global waste is a key element of our Mid-Term Environmental Goals. To achieve these goals, we are working together with waste processors to reduce waste and make sure these materials are disposed of appropriately, as well as developing new management systems.

Waste Measures at Operational Sites

In 1991, we set up a Waste Countermeasures Committee and embarked on a concerted campaign to tackle waste-related issues. At that time, we set the goal of reducing our waste generation by at least 95% of the 1990 level, by the end of 2000. In the end, we bettered that goal, reducing our waste generation 96%, and then proceeded to raise the bar even higher in our efforts to reduce global waste. Among our Mid-Term Environmental Goals are commitments to cut our overall waste discharge by 50% of the 1998 level, by 2003; reduce generation of landfill waste by operational sites in Japan to zero by 2003; and reduce overall waste generation by 30% of the 1998 level, by 2010.

Waste Reduction Results and Goals



2001 Initiatives

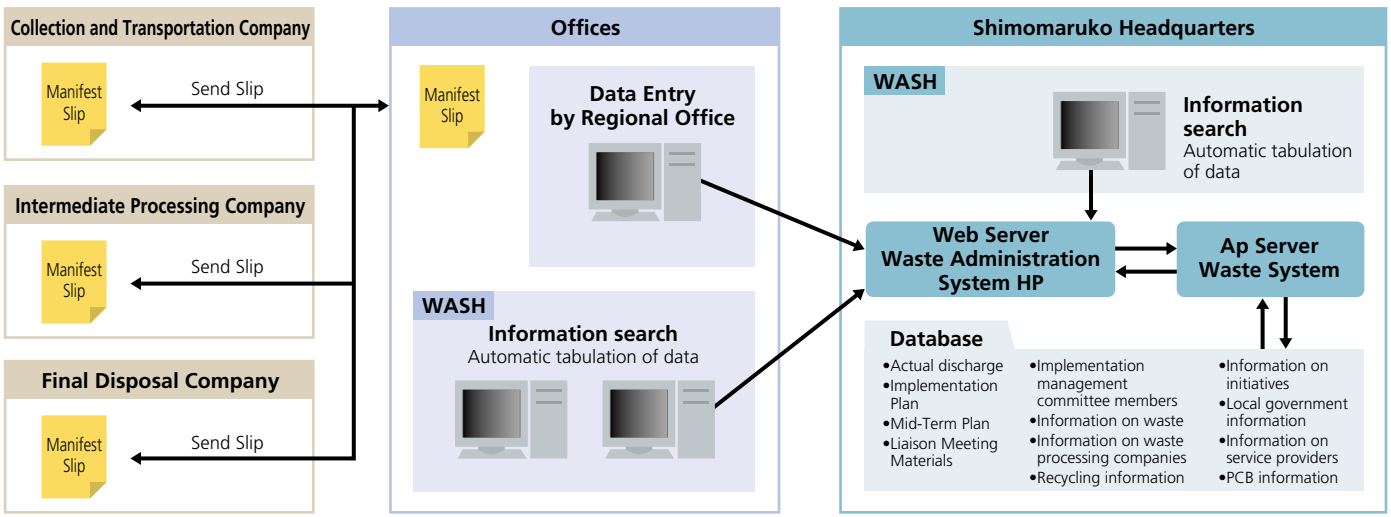
In striving to meet our Mid-Term Environmental Goals, we have reexamined the basic waste countermeasures of reduce, reuse, and recycle, and undertaken initiatives to convert waste to valuable uses and reduce volumes of waste generated.

Waste reduction and appropriate processing require the cooperation of waste processors, and at Canon, we have created standards to help us evaluate waste processors and ensure that the work they do for us is properly performed. We work only with waste processors who pass this evaluation.

Waste Administration System (WASH)

In the past, we devoted tremendous amounts of time and labor to the processing of information for waste management. Aiming to make this system more efficient and accelerate waste initiatives, we developed a waste management system and in July 1997, we introduced it at our operational sites in Japan. We later expanded this system, adding information on waste processors, statistical information on waste, recycling information, and other data. Beginning in November 2001, we made it possible for every Group company to share this information resource.

WASH — Waste Administration System Homepage



Eliminating Hazardous Substances Through Strict Management and Self-Regulation

At Canon, we are instituting new standards and management systems to ensure chemical substances are handled with the utmost care. In the longer term, we aim to eliminate hazardous substances from our production processes and products altogether, working to develop technologies that will allow us to use safe substitutes and decompose hazardous substances.

Chemical Substance Management Initiatives

Our efforts to eliminate hazardous substances from our production processes and products began long ago. We completed elimination of CFCs from our production processes in 1992, and did the same with regard to chlorinated organic solvents used in a cleaning agent in 1997. We ceased using other hazardous substances in 2001, complying with goals set out in our own internal standards. And we are strictly controlling materials that we have targeted for reduced usage and discharge.

Management and Reduction of Hazardous Substances

In controlling hazardous substances, we abide by standards that are stricter than those set by law. We have also switched to environmentally safe substances where possible and devoted significant effort to the development of technology for decomposing hazardous substances. Since 1996, we have kept a list of controlled substances (now numbering approximately 2,200) and assigned them ranks of A, B, or C, depending on the level of hazard they present. In 2001, we set reduction targets for each rank, which we aim to achieve by 2003.

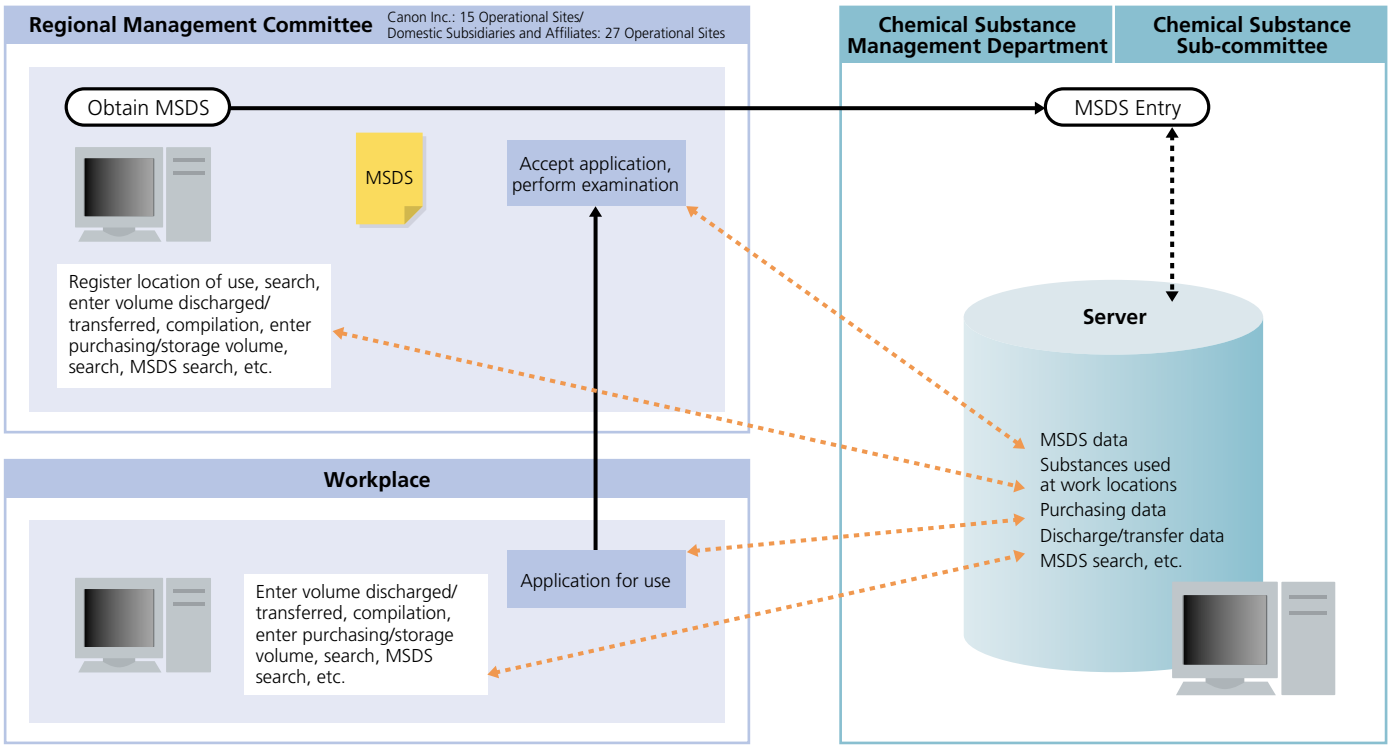
We are moving decisively on initiatives for achieving our Mid-Term Environmental Goal of reducing our emissions of substances covered by the PRTR Law to 50% of 1998 levels, by 2003.

System-Based Management of Chemical Substances

In our research and production activities, we use approximately 12,000 chemical substances. We have assigned a registration number to each of these substances and have been systematically gathering information on their environmental impacts since 1997. This online database includes the 354 Class I Designated Chemical Substances and 81 Class II Designated Chemical Substances specified in the Law Concerning Reporting, etc. of Release of Specific Chemical Substances to the Environment and Promotion of the Improvement of Their Management (the PRTR Law). Chemical substances not registered in the database are not approved for use — and may not be used.

All these rules, regulations and data are coordinated by our Chemical Integrated Management System (CIMS), which we developed in 2001. This system, which may be accessed through a browser, became fully operational in spring of 2002.

CIMS — Chemical Integrated Management System



Setting Specific Goals and Making Highly Efficient Logistics a Reality

To further minimize our environmental burden, we have set specific, quantitative goals for the reduction of logistics-related CO_2 emissions and are building a highly efficient logistics system. We are also converting to low-emissions vehicles and are taking the environment into account in our product packaging as well.

Environmental Consciousness in Product Logistics

Product logistics has significant environmental burdens, something we at Canon have been addressing for some time. In 2002, we plan to build on past efforts in this area by setting ourselves specific targets to reduce the burden our product logistics places on the environment.

The international campaign to cut emissions of greenhouse gases is gaining increasing momentum. Japan recently announced its formal ratification of the Kyoto Protocol at the 7th Conference of the Parties on Climate Change (COP7), held in 2001, and is now preparing the legal framework to support this decision. These laws will require businesses to do more to prevent global warming, as an increasing number of greenhouse gas sources — including those in offices and those related to logistics — are targeted for reduction.

In line with these developments, we have set a Group target of cutting our logistics-related CO_2 emissions per unit of net sales 20% (compared to the 2000 level) by the end of 2006, and set individual targets related to logistics efficiency, introduction of low-emissions vehicles, and use of packaging materials. This will be carried out at our overseas facilities, as well as those in Japan.

Container Round Use (Use of Containers on Return Trips)

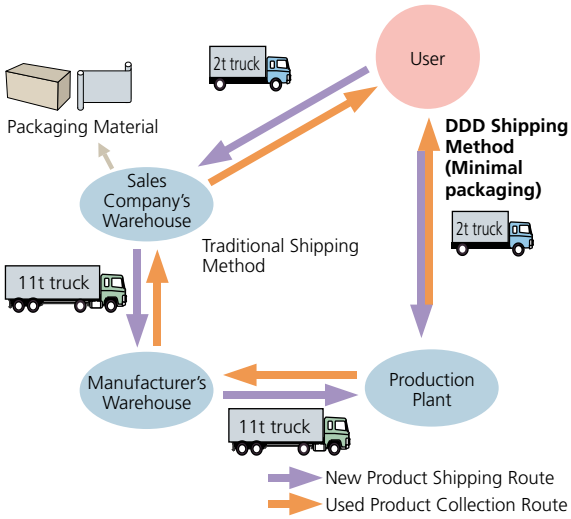
In 1992, we launched our "Container Round Use" program to make more efficient use of containers used to deliver goods between ports and our production plants. Ordinarily, after import containers are unloaded, they are sent back to the port, where they wait until they are brought back to be loaded for export and then sent to the port once again. Under our system, the import containers are kept at our plants after unloading, then reloaded with outgoing goods and delivered to the port. By eliminating the movement of empty containers, Container Round Use avoids the needless emission of CO_2 and results in lower shipping costs.

There is a limit to what can be accomplished within the Canon Group, so we are actively sharing information with other companies. In 2001, our round use system was the most extensive of its kind in Japan, involving approximately 2,700 40-foot containers. We will continue eliminating wasteful transport as a way of contributing to CO_2 reductions and energy conservation, and improving economic efficiency.

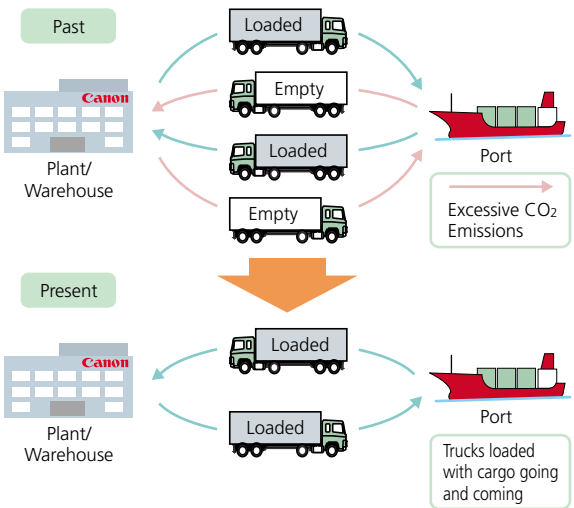
Direct Delivery of Products to Customers

In 2002, we will begin trials of a delivery system intended to get our products to our customers as quickly as possible. In this system, which we call Direct Delivery to Demand (DDD), products move directly from our plants to end users, bypassing warehouses and dealers and shortening logistics routes. This method will allow us to deliver goods and collect traded-in products without the need for separate shipping, and is expected to reduce CO_2, NOx, and SOx emissions to less than half that of conventional shipping practices. An added benefit of direct delivery is that it uses less packaging material.

Logistics Efficiency Engendered by DDD



Reduction of CO_2 Emissions Through Container Round Use (Use of Containers on Return Trips)



Environmentally Conscious Product Packaging Materials

Our primary strategy in responding to the environmental challenge posed by packaging materials is a straightforward one: we use materials for which there already exist widespread systems for recycling, making it easier for customers to dispose of them.

At the same time, our search for alternative materials continues. Polystyrene foam is widely used in packaging because of its excellent shock-absorbing properties and low processing cost. Unfortunately, it is difficult to recycle. At the end of 1990, we started looking at ways to reduce our use of this material, and in the following year we became the first company in the industry to use pulp molds made completely of recycled paper. Since then, we have been steadily replacing foam with cardboard as a shock-absorbing material.

Recycling of Polystyrene Foam

Even as we have worked to replace polystyrene foam as a shock-absorbing material, we have also been actively recycling it. We have been operating a full-scale closed recycling system for polystyrene foam since 1998. This system collects used polystyrene foam from Canon Group and cooperating companies in Japan, and recycles it as packaging material for Canon products. The production cost and shock-absorbing qualities of this recycled material compare favorably to those of new material.

In 2001, we began encouraging manufacturers of recycled materials, beads, and molds, to accept polystyrene foam from other companies. We now use recycled polystyrene foam as shock-absorbing material for all of our products and in 2001 used our closed recycling system to recycle 255 of the total of 961 tons of polystyrene foam we used in Japan.

Introduction of Low-Emission Vehicles

The adoption of low-emission vehicles is crucial if we are to lessen atmospheric pollution. Aiming to help improve the global environment, Canon Sales has made the use of low-emission vehicles one of its environmental goals. In 2002, fully half of its vehicle purchases will be either low-emission*1 or high-energy-efficient*2 vehicles, and it will continue to choose these kinds of vehicles in the future.

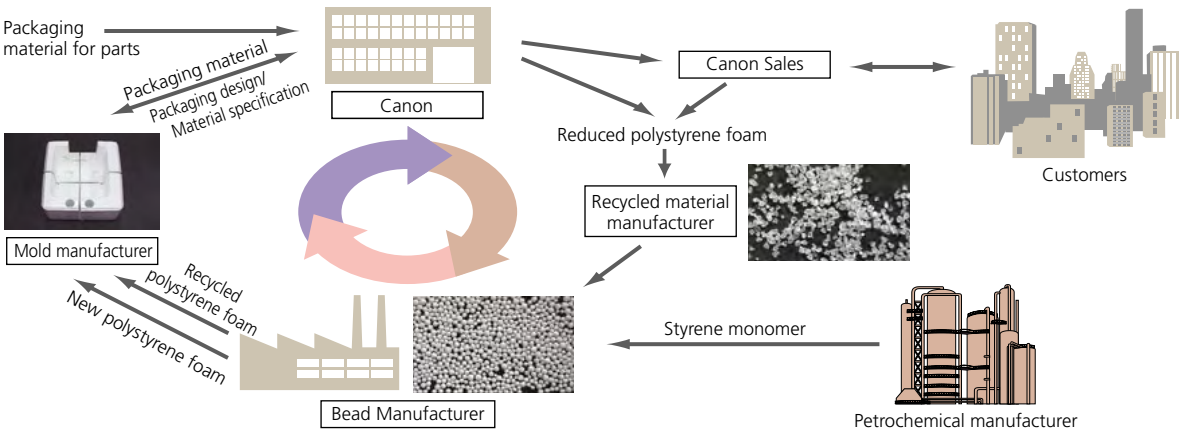
Canon Svenska AB (Sweden) has acquired five Toyota Prius automobiles, making it the first company in Sweden to use gas-electric hybrid cars.

Canon Svenska sales vehicle

*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.

Closed Recycling System for Polystyrene Foam



Global Activities to Help Bring About a Recycling-Oriented Society

We are aggressively pushing forward with resource recycling, which is a cornerstone of our reduce, reuse, recycle (3Rs) environmental program. Having begun with systems for recycling our own products and their parts, we are now actively working with other companies in our industry to create systems that will help to bring about a recycling-oriented society.

Thoughts on Resource Recycling

At Canon, we are pursuing inverse manufacturing (IM) activities to promote the 3Rs (reduce, reuse, recycle) in all stages of the product life cycle and throughout our global operations. We have established recycling centers in the Americas, Europe, and Asia, sharing information and resources among them, in an effort to minimize environmental burden on a global scale.

Having established 3Rs priorities for products (covering their entire life cycles) and supplies (discussed below) through environmental burden analysis, we are maximizing the resource value of the used products we collect. By conserving materials and implementing high value-added reuse and recycling, we have made it possible to both reduce environmental burden and increase economic efficiency.

In the future, Canon will treat products as forms of the earth's resources. One of our basic business strategies as a manufacturer will be to promote a recycling-oriented society, while also providing high-quality, safe products.

Outside of design initiatives, reusing products and parts to offer business machine functions to the market is the recycling approach with the least environmental burden. We collect used Canon copying machines from all over the world and remanufacture them to make products that can once again meet the needs of the market.

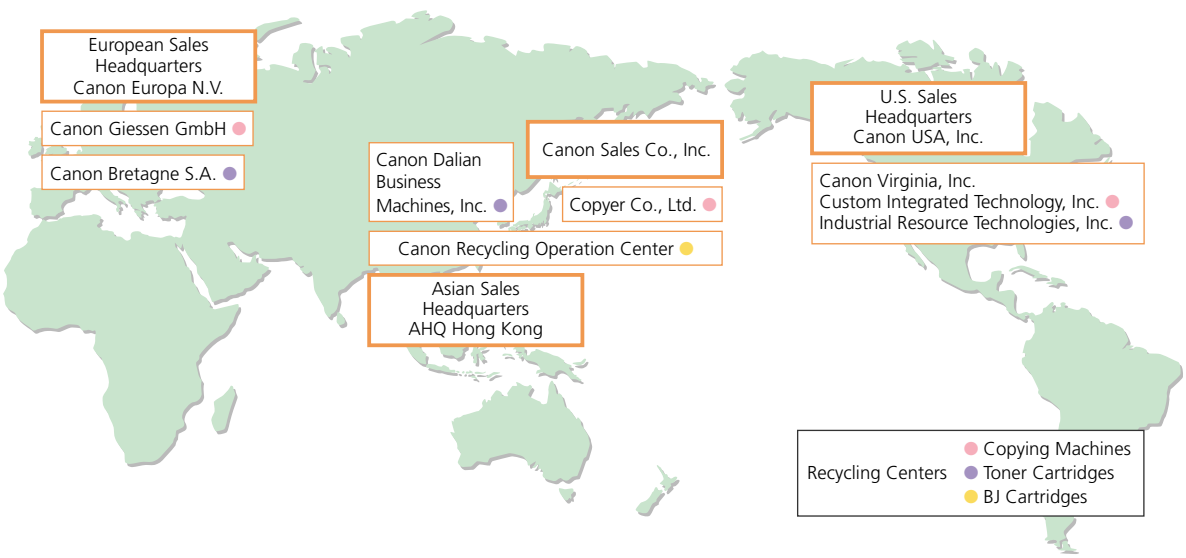
We also disassemble used Canon products, sending parts that pass inspection to production plants for reuse in new products. Our reuse and recycling activities extend not only to parts, but also to cartridges and other supplies.

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 lifetimes 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 Recycling System



Remanufacturing of Copying Machines

Our copying machine remanufacturing operations span the globe. The system began to take shape in 1992, when we started to remanufacture analog copying machines at Canon Virginia, Inc. The following year, we added a European plant specializing in the recycling of copying machines, and in 1998 launched remanufacturing operations at the Kofu Plant of Copyer Co., Ltd.

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 used for new parts. We guarantee that each refurbished part is as good as a new part.

In 2002, we have begun to remanufacture our GP405 digital copying machine in Japan, reusing 74% of parts in terms of mass, and 80% in terms of numbers of parts.

GP405 REM

Part Reuse TREE

To augment our efforts to use resources effectively, we embarked in 1999 on a program for reusing parts. There are two sides to this program, which we call TREE, or Technology of Reusing for Environment with Economy: rebuilding used products so they can once again be marketed as saleable merchandise; and taking parts from used products for reuse in new products. We launched this program at our Toride Plant, where we put together a project team consisting of members from development, sales, and every other division related to our copying machine business, and are now moving to implement it at our Ami Plant and other plants.

●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.

Recycling of Used Copying Machines

To facilitate recycling, we at Canon design copying machines to be easily disassembled and employ outside recycling companies to take apart the machines by hand.

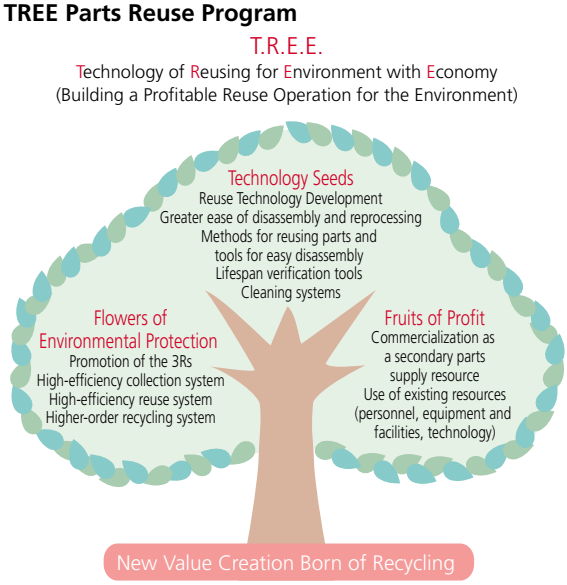
In the past, copying machines were mechanically shredded. The resulting bits and pieces were then sorted into metallic and non-metallic materials and everything that was not considered recyclable was discarded. Recognizing that copying machines could be recycled with greater efficiency, we began in 1998 to work with third-party recycling companies to thoroughly disassemble copying machines by hand. Parts are now sorted much more meticulously into categories, such as steel, stainless steel, aluminum, printed circuit boards, glass, and plastic before being recycled by companies specializing in particular materials. By switching to hand disassembly, we succeeded in boosting the material recycling percentage from about 60% to over 90%.

Copying Machine Collection and Exchange Centers Operated in Cooperation with Other Copier Manufacturers

Canon is an active participant in the Copying Machine Collection and Exchange Center, established jointly by copying machine manufacturers in Tokyo, in January 1999. Recognized as a model for consigned recycling operations by the former Ministry of International Trade and Industry, the Center returns used copying machines to participating manufacturers.

Following Tokyo's lead, collection centers opened in Osaka, Sapporo, and Nagoya in 2000; and Hiroshima, Fukuoka, and Sendai in 2001, to complete a nationwide network of Copying Machine Collection and Exchange Centers. In 2001, information on product reuse began to be published on the Web.

TREE Parts Reuse Program



Toner Cartridge Recycling

In 1990, we became the first in the industry to implement a toner cartridge collection and recycling program. This program collects and recycles used toner cartridges for laser beam printers, copying machines, and other business machines. Of 16,000 tons of cartridges collected from across the globe in 2001, nearly 100% were recycled.

Collected cartridges are disassembled by one of three companies — Canon Dalian Business Machines, Inc. in China, Canon Bretagne S.A. in France, or Industrial Resource Technologies, Inc. a subsidiary of Canon Virginia — and parts are categorized as suitable for either reuse or recycling.

Reusable parts are cleaned and subjected to stringent quality inspections. Those that pass inspection are then used in new cartridges. Recyclable parts are recycled as materials, or in other ways, after considering the environmental burden for each option.

Toner cartridge recycling (Canon Bretagne)

BJ Cartridge Recycling

We sell many BJ printers, so their impact on the environment requires deeper consideration. Seizing the initiative in 1996, we became the first company in the industry to collect used BJ cartridges in Japan. As of May 2002, we were collecting cartridges at over 2,000 locations — primarily major retailers and service centers — throughout Japan. Cartridge collections are rising year by year and reached approximately 26 tons in 2001.

Collected BJ cartridges are sent to the Canon Recycling Operation Center (CROC), where they are sorted and 100% recycled, either as plastic or metal materials, or as heat energy. Additionally, Canon proprietary technology is used to recycle a portion of the plastic collected from BJ cartridges into raw material for BJ printer parts (see P18).

The Canon Recycling Operation Center for BJ cartridges

Awards for Cartridge Recycling

For its many years of achievements in recycling toner cartridges Canon U.S.A. won the EIA (Electronic Industries Alliance) 2002 Environment Progress Award.

Meanwhile, in another part of the Canon Group, Canon Inc. received the President's Award at the Clean Japan Center's Resource Recycling Technology System Awards for 2000, for its plastic preprocessing technology, which includes systems for pulverization, washing, drying, and removal of foreign material.

2002 Environment Progress Award from America's EIA

President's Award at the Clean Japan Center's Resource Recycling Technology System Awards for 2000

Breaking New Ground With Canon Technology

In the process of our environmental work, we have accumulated a large base of advanced technology and expertise. So that others can benefit from what we have learned, we plan to fully develop the commercial potential of this technology. We will also expand our range of businesses to include services such as measurement for compliance with ISO standards, and construction of systems to decontaminate soil and groundwater.

ISO/IEC Guide 25 Accreditation

In August 2001, we became the first Japanese manufacturer to gain accreditation* as an environmental analysis and testing laboratory by the Japan Chemical Laboratory Accreditation. Based on the ISO/IEC17025 (Guide 25) criteria, this system for awarding accreditation is based on standards as technically demanding as those for ISO9000 series and is internationally recognized as the standard of excellence for environmental analysis and testing laboratories.

With this accreditation behind us, we are now advancing into the commercial field of environmental analysis, using our in-house technologies for the benefit of society in general. Our Environment New Business Center is already at work at our Global Environment Promotion Headquarters, which coordinates the Group's environmental management, and laboratories are being prepared to perform analysis work. The first of these laboratories, the Environmental Analysis and Testing Laboratory at our Toride Plant, began operations in October 2001.

*Japan Chemical Laboratory Accreditation (JCLA) was established by the Japan Chemical Industry Association in October 1999. JCLA is a testing lab accreditation organization that mainly conducts accreditation of chemical testing labs dealing with environmental testing, rubber and plastics, paint and pigments, chemical industry products, and petroleum and petroleum products.

■ Environmental Services Canon Plans to Provide

I Environmental Measurement Certification
- I-1 Water quality analysis
- I-2 Soil analysis
- I-3 Air quality measurement
- I-4 Noise and vibration measurement

II Industrial Waste Analysis
III Environmental Studies
IV Working Environment Analysis
V Measurement of drinking water and air quality in accord with the provisions of the Building Management Law

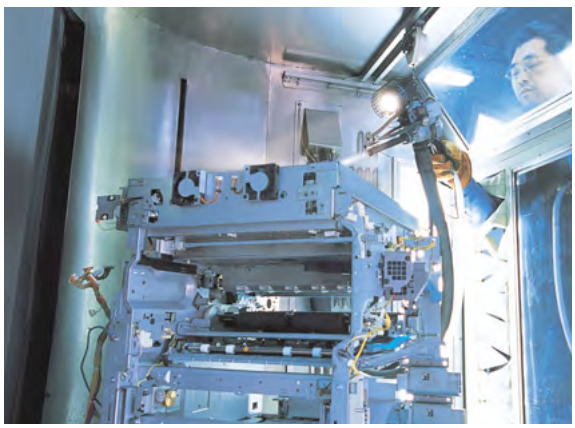
Laboratory

Accreditation Certificate

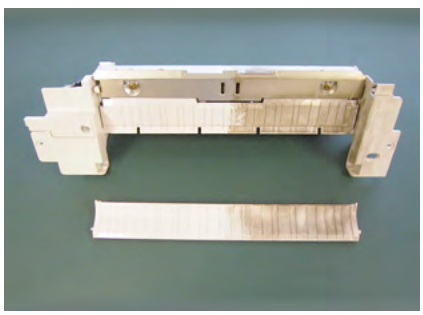
Dry Ice Cleaning Equipment

Another of our environmental technologies at Canon is CO_2 dry cleaning equipment, which uses dry ice to very effectively clean molds and recycled products and parts. We originally developed this equipment for internal use, but soon recognized that it would be useful to others and decided to sell it as a product. After successfully reducing its size and weight, we put this product on the market in July 2001.

This equipment uses very fine dry ice pellets and a spray gun to blast foreign material from the surface of molds and recycled products and parts. Solving problems that had plagued other models of dry ice cleaning equipment — problems in providing a steady supply of dry ice and in controlling dust — our equipment also allows the simultaneous application of a supplementary detergent, depending on the amount of foreign material present. Using this equipment reduces man-hours for cleaning molds and recycled products and parts by 40%, and cleaning costs by up to 20% (actual results achieved in the remanufacturing of copying machines).



Cleaning a used product with Canon's dry ice cleaning equipment



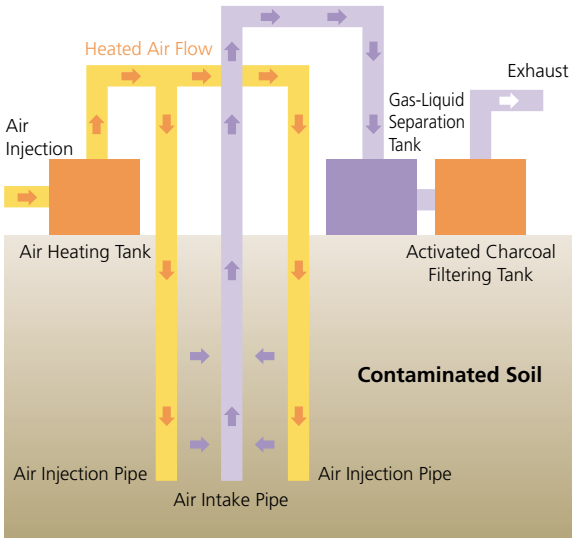
After cleaning and before cleaning comparison

Soil Decontamination System

Working together with Obayashi Corporation, we have developed a thermal absorption system that can clean contaminated soil in a short amount of time and without the need for excavation.

In this system, two types of pipes are inserted into contaminated soil — one is used to inject heated air into the soil to rapidly vaporize oil and volatile organic compounds (VOCs), while the other pipe sucks in and removes the vaporized contaminants to clean the soil. Because excavation is unnecessary, disruptions to normal operations at the clean-up site can be kept to a minimum. This cleaning work can be completed in only 1/3 or 1/4 the time required for conventional absorption methods that do not use heat. Costs for the thermal absorption system are expected to be about ¥20,000 per cubic meter of soil.

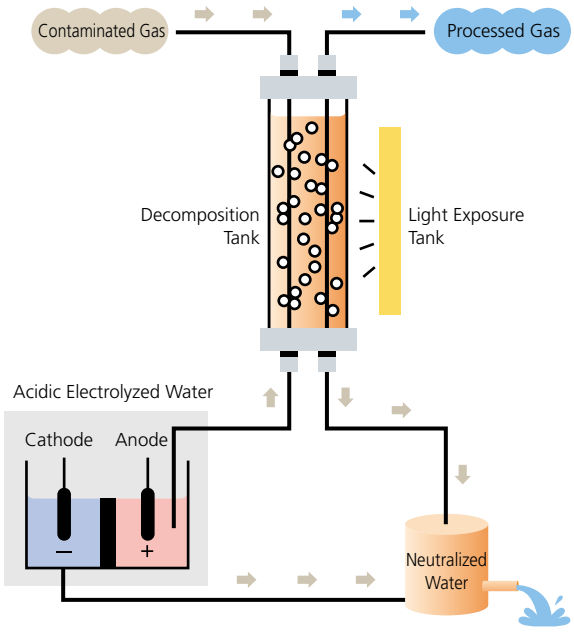
Air Flow Within Canon's Soil Decontamination System



Soil and Groundwater Decontamination Using Photo-Functional Water

We developed the world's first system for decontaminating soil and groundwater through the use of a certain wavelength of light and acid electrolyzed water. It has been successfully used to clean up wastewater laden with trichloroethylene and other organic chlorinated solvents used to clean metal parts and semiconductors. The system works by adding acidic water to the wastewater and then exposing this mixture to light. The byproduct is then cleaned with an activated bacteria-containing sludge and contamination is reduced to 1/3 of environmental standards. Moreover, processing expense, including depreciation, comes to only ¥10,000 per ton of wastewater — approximately 1/4 the cost of outsourcing this service.

Decontamination Mechanism Using Photo-Functional Water



Lens Cleaning Solvent

In manufacturing glass lenses for cameras and copying machines, we use an organic cleaning solvent to remove dirt and fingerprints. In the past, this solvent contained ethers, which are highly flammable, as its main ingredients. To eliminate this use of flammable substances, we developed a cleaning solvent called "KG-1," which is not only non-toxic but also very inexpensive and effective.

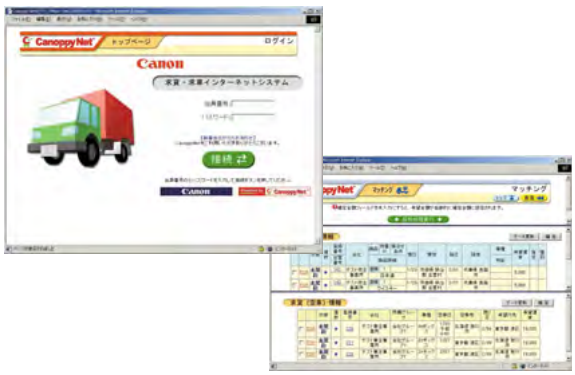
KG-1 lens cleaning solvent

Canoppy Net

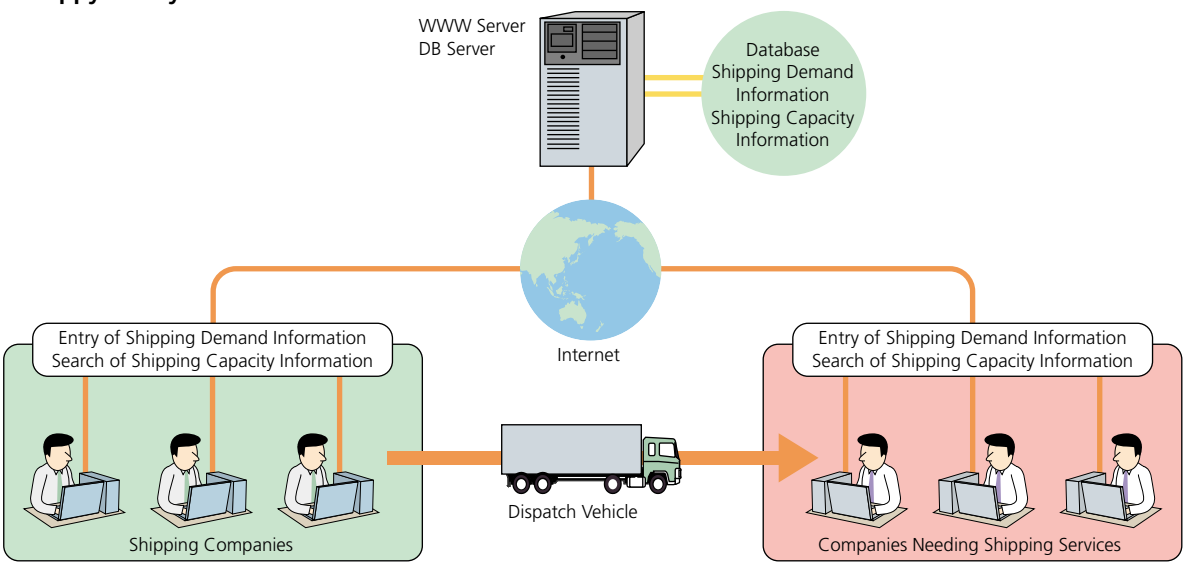
The innovations we are introducing at Canon to improve the efficiency of our logistics system are leading to benefits outside of our corporate group. Canoppy Net, an Internet-based shipping supply and demand matching system inaugurated by Canon Sales in 2001, is helping to promote improved logistics methods in all the societies we operate.

This system makes more effective use of trucking assets by economically and efficiently connecting shipping needs with available shipping capacity. At its center is a searchable database, where shipping companies and businesses that use their services can register and search for information about shipping services and requests. So far, 10 users and 250 shipping companies are connected to Canoppy Net.

As an initial step in developing a new logistics business, we plan to link Canoppy Net with the e-Transit shipping vehicle information service offered by NTT Communications Corporation, beginning in 2002.



Canoppy Net System



Environmental Audits and Other Forms of Scrupulous Risk Management

At Canon, we leave no stone unturned in our efforts to prepare for emergency situations. This means building effective systems and implementing comprehensive preventative management. As part of our risk management, we carry out environmental assessments when setting up new operational sites, whether in Japan or overseas, and perform environmental audits for existing operational sites.

Environment Assurance Standards for Operational Sites

In order to give our environment assurance activities clear direction and to clarify standards for carrying out this work, we drafted our own environment assurance standards. These standards are based on the environmental laws and regulations of Japan and other countries that have jurisdiction over our operations. Indeed, our own standards for discharges into the water and air are more stringent than those of the laws we are subject to. Complying with environment assurance standards and minimizing risk to the environment is a top priority for our operational sites and we disclose the success of each site in meeting these goals on our homepage (see P44, 57).

Emergency Response

As part of our environmental management, each of our operational sites determines ways for handling unforeseen circumstances, creates systems for making decisions and rapidly taking appropriate action, and ensures that these measures function as intended. In the case of an oil spill, for example, trained personnel would immediately deploy oil fences, as appropriate 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.

In 2001, we experienced no accidents that had a serious impact on the environment.

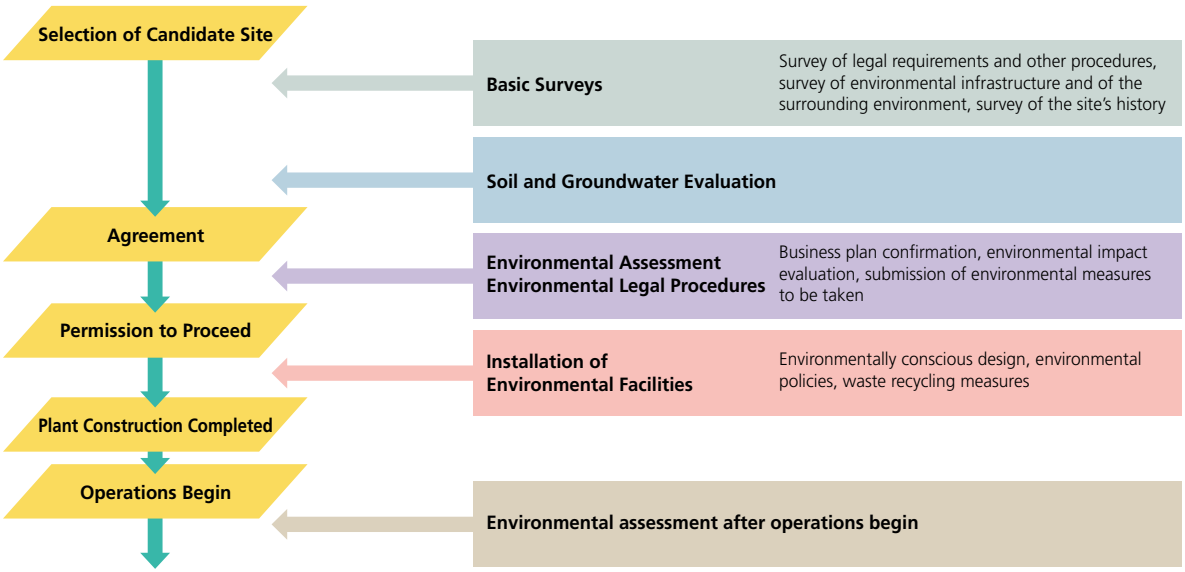
Monitoring and Measurement

In accord with Article 107 of Japan's Measurement Law, we have established a Measurement Certification Division. This division uses qualified 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 2000, the Measurement Certification Division turned its attention to the ISO/IEC 17025 (Guide 25) certification for testing laboratories, and in August 2001 succeeded in obtaining this certification (see P35).

Environmental Assessments

Since 1990, we have applied the same standards of environmentally conscious management whenever we set up a new operational site, regardless of its location. We have established our Environmental Assurance Conscious Design Standards for Construction, and verify measures to prevent environmental burden every time we install or establish, update, or renovate a production process, production equipment, building or other structure.

Environmental Assessment Process



Environmental Audits

We set up our environmental audit organization in 1993 and began performing environmental audits of our production and research and development sites in 1994. These environmental assessments include outside audits by an ISO14001 certification body, environmental audits by our headquarters, and audits by each operational site (environmental management system audits). We place a high value on the information provided by these reviews and strive to make the environmental audits as efficient and effective as possible.

Environmental audits by our headquarters and by each operational site are performed in accord with our Environmental Audit Standards, which comprise principles, procedures, and requirements applying to environmental auditors. These Standards are in compliance with ISO14010, 14011, and 14012. Environmental audits by our headquarters also examine the status and functioning of environmental assessment systems at our development divisions.

This system of inspections and checks is used to continuously improve our environmental management systems and environmental performance.

Environmental Audits by Canon Headquarters	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.
Environmental Audits by Each Operational Site	These audits are performed by a management-level auditor who has undergone specialist training, at the direction of the highest management authority at the operational site. Any shortcomings noted in the audit results are reported to the highest management authority at the operational site and are remedied within one month.

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 development divisions

●2001 Results of Environmental Audits by Canon Headquarters

In 2001, environmental audits by Canon headquarters revealed 133 failures to follow established procedures. These results were reported to Canon management, while requests for correction of these shortcomings were issued to the relevant operational sites. Operational sites, for their part, used the results of audit reports to remedy the noted failures. Within three months, all necessary remedies were implemented and follow-up reports submitted to headquarters. As a result, all of the shortcomings identified by the 2001 headquarters environmental audits have been remedied.

Primary Types of Failures Noted
•Inadequate waste management
•Inadequate signage for waste and hazardous substance storage locations
•Measurement of plant wastewater, noise, vibration, etc. less frequently than required
•Failure to install floor liners or oil pans to prevent ground penetration

2001 Results of Environmental Audits by Canon Headquarters

Month Performed	Operational Site Audited	Remarks (Number of audit, date of previous audit)
February	Kosugi Office	1st
	Canon Electronics Inc. Yamada Plant	1st
March	Ecology Research & Development Center	1st
April	Fuji-Susono Research Park	1st
May	Canon Giessen GmbH	1st
	Shimomaruko Office	1st
June	Canon Chemicals, Inc., Headquarters, Tsukuba Site	3rd/May 1998
July	Canon N.T.C., Iwai Plant	3rd/March 1999
September	Hanawa Seiki, Inc.	3rd/June 1996
	Canon Chemicals Inc. Ishige Site	3rd/June 1998
October	Utsunomiya Optical Products Operation	3rd/December 1998
November	Miyazaki Daishin Canon Co., Ltd.	3rd/July 1998
December	Canon Chemicals, Inc., Iwama Site	3rd/November 1998

Environmental Education for All Canon Employees

Our environmental education programs work on two levels; one designed to engender a genuine awareness of environmental issues among all ranks of employees; and the other designed to train a core staff of specialists who can carry out our green policies. Training of environmental auditors is a particular goal of the latter.

Environmental Education

Since 1989, we have used an in-house magazine to communicate to all employees the importance of environmental protection, and encourage them to take the initiative to protect the environment in their daily activities.

In our formal environmental education programs, we aim to impart general and practical knowledge of environmental issues tailored to employee rank. Through classes we customize for new hires, experienced employees, and managers, we seek to develop and reinforce understanding of the ideas and initiatives that comprise Canon's environmentally conscious management.

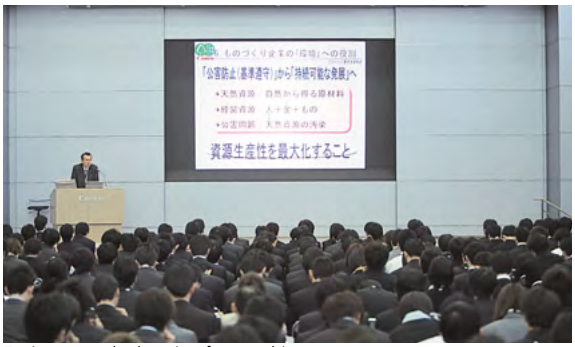
To develop environmental specialists, we provide four types of education. The first two address the needs of environmental staff and environmental auditors, who play a central role in promoting environmental activities at operational sites and work areas. The second two areas of education, environmentally conscious design standards and environmental and chemical safety technology, are used to train our development and design specialists.

In 2001, approximately 10,000 employees throughout the Canon Group received environmental training of one type or another. We will continue our environmental education efforts, enhancing the content of what we teach, as we go.

Primary Training Programs and Results for 2001

(People)

	Japan	Overseas	Total
Training programs for different ranks			
Training for newly hired employees	705	5,894	6,599
Training for general employees	2,285	450	2,735
Training for newly appointed Assistant Managers and Foremen	8	0	8
Specialist Training			
Training for environmental staff	372	23	395
Environmental Auditor Training	244	35	279
Standard seminar on Design for Environment	19	0	19
Seminars on environmental technology and technology on safety technology for chemicals	15	0	15
External training programs, seminars, and lectures, etc.	22	0	22
Total	3,670	6,462	10,072



Environmental education for new hires

Training for Environmental Auditors

We have been training environmental auditors since 1997. This specialist training is aimed at ensuring thorough and effective environmental audits are performed at each of our operational sites. The courses are intended to develop environmental auditors who can meet ISO14012* standards.

Training is divided into Basic and Advanced. Basic training is concerned with auditing general workplaces based on office procedures, while Advanced training prepares auditors to handle Environmental Management Divisions, focusing on legal and other standards. Both types of training are led by certified environmental auditors and are customized to the needs of individual operational sites.

*Certification standards for environmental auditors.

Environmental Auditor Training Statistics

	Number of Sessions Held	Number of Participants
2001	20	244
Cumulative	98	1,539

Curriculum

Basic	① ISO14001 requirements and basic understanding of issues related to the environmental management systems of operational sites ② Basic knowledge of environmental audits ③ Understanding of concepts related to environmental objectives and goals ④ Individual and group exercises related to ①, ②, and ③
Advanced	Emphasizes audits of Environmental Management Divisions and consideration of ways to improve systems ① Audits of Environmental Management Divisions ② Audits of compliance with legal and regulatory requirements ③ Consideration of ways to improve systems ④ Individual and group exercises related to ①, ②, and ③

Promoting Green Purchasing and Fostering Employee Environmental Consciousness

Our office eco-activities include everything from setting environmental standards and promoting green purchasing to using an Intranet to redistribute unneeded office supplies and establishing ECO UP Shimomaruko. The common purpose of all these activities is to raise the environmental consciousness of employees and encourage them to put these ideas into practice.

Green Purchasing

At Canon, we practice green purchasing. In support of this effort, we have established detailed standards based on a system for certifying products as "green" (environmentally friendly), and evaluate products according to these standards. When purchasing supplies, priority is given to products we have certified as "green." Employee uniforms are one example. We looked for options that were free of harmful substances, used recycled materials, and offered the possibility of being recycled. This evaluation led us to adopt in March 2001 uniforms that use polyethylene teraphthalate (PET) in place of polyester.

Our list of green-certified goods now comprises approximately 4,600 items, including everything from office supplies, printed materials, and envelopes, to personal computers, desks, and chairs, and even toilet paper.

Examples of various green-certified goods

Green purchasing list

Other Eco Activities

●Efficient Use of Office Supplies

To make more effective use of office supplies and fixtures that are no longer needed in particular areas of the company, we created a place on our Intranet where employees can post information on what they need or, alternatively, no longer need. This system, which we created in 1997, not only helps to cut costs, it also reduces waste.

●ECO UP Shimomaruko

ECO UP Shimomaruko, set up in March 2001, is our effort to promote environmental initiative among the staff of the Shimomaruko headquarters of Canon Inc. and give them a feeling of common purpose on this important issue. This program uses workplace-based organizations to get all of our employees to participate in energy conservation, emissions control, environmental volunteer work, and educational activities.

●Composting

At each operational site, organic waste from dining facilities is processed with composting equipment and then used as fertilizer for the site's landscaping.

Equipment for composting organic waste at Oita Canon Inc.

Flowerbed on the grounds of Nagahama Canon Inc.

Disclosing Environmental Information to Customers and Helping to Build a Recycling-Oriented Society

For recycling to be effective, customers need to be informed. Beginning with Type III Eco-Labels, we have adopted product environmental data formats that comply with international standards. We are also keeping a database of this information and have built a product information system for packaging material. Through these and other initiatives, we disclose environmental information on our products and cooperate with customers in building a recycling-oriented society.

Type III Eco-Labels

In 1999, we became the first Japanese company to adopt the Type III international Eco-Label format to disclose environmental information on products. And since May 2001, we have employed the JEMAI Program product labeling standards established by the Japan Environmental Management Association for Industry*.

Our Eco-Labels are in compliance with ISO14020 series standards, which call for the disclosure of quantitative information on a product's entire lifetime environmental burden; everything from production of the materials, production processes, logistics, and use/consumption, to the disposal/recycling of the product itself. Type III labels differ markedly from Type I and Type II labels in that they present information that consumers can use to make their own judgments about a product (refer to the table at right).

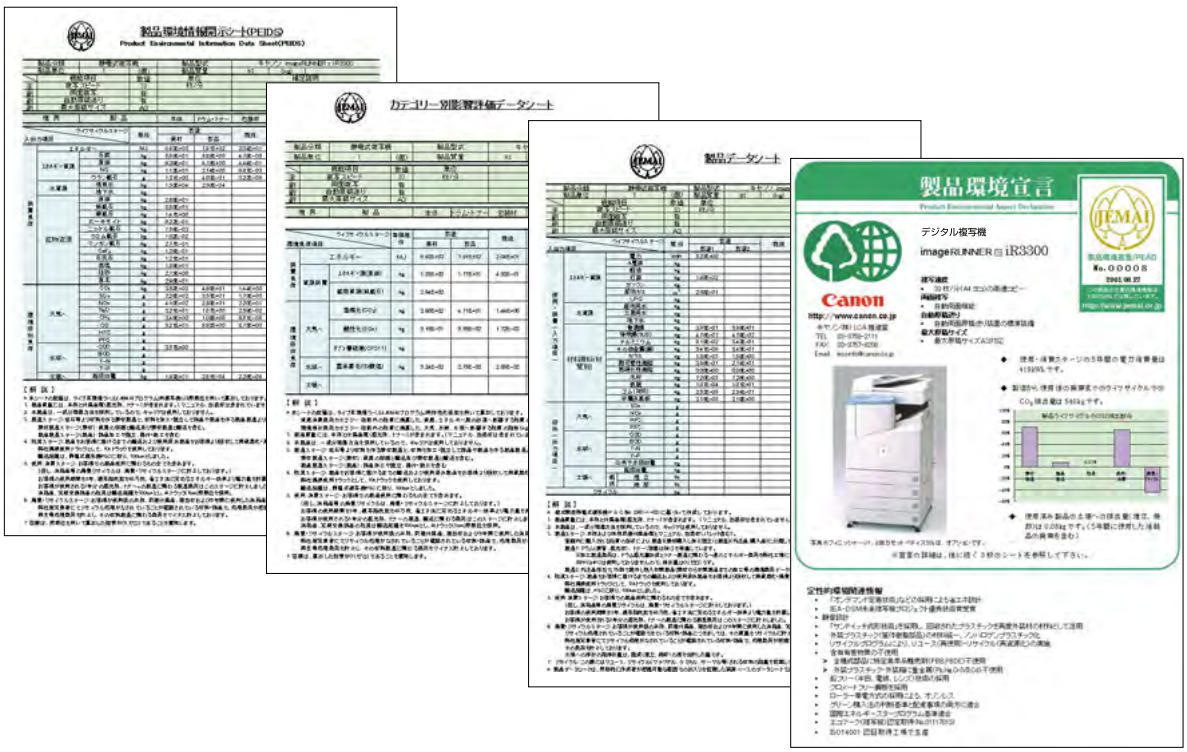
The building of a recycling-oriented society requires that consumers clearly understand environmental information on products before they buy them. The growing use of Type III Eco-Labels is a trend that will greatly assist in this effort by promoting public awareness and the use of environmentally conscious products and services.

Three Types of ISO14020 Series Eco-Labels

Type I	As in the International ENERGY STAR® Program and Germany's Blue Angel program, a third party determines whether or not a product meets certain standards and approves the use of an environmental mark for those that do.
Type II	Companies and groups make environmental claims for products and services, based on their own standards. Labels of this type are referred to as self-declared labels, as claims are left to the discretion of companies and groups making them.
Type III	This label provides quantitative environmental information on a product's life cycle, beginning with the production of its materials, and carrying through to production, logistics, use/consumption, and disposal/recycling of the product itself. The provision of quantitative data on environmental burden, which consumers can use in making decisions, is a major trait distinguishing Type III from Type I and II labels.

* Canon will fully comply with Eco-Leaf, which the JEMAI Program has scheduled to be implemented in full, beginning in April 2002.

Type III Eco-Labels



Product Environmental Specification Management System

After the Law on Promoting Green Purchasing took effect in 2001, we experienced a rise in customer demand for environmental data on our products. To more efficiently provide the information customers want, we have built a "Product Environmental Specification Management System." This Intranet-based system makes it possible to search for, and gather, chemical and other environmental data on Canon's copying machines and other business machines.

This database allows product-by-product searches on parts, chemical content and use of recycled materials, making it useful not only for providing information to customers, but also for our own efforts to design environmentally conscious products. All assessment information on Canon's products has been unified in this one system.

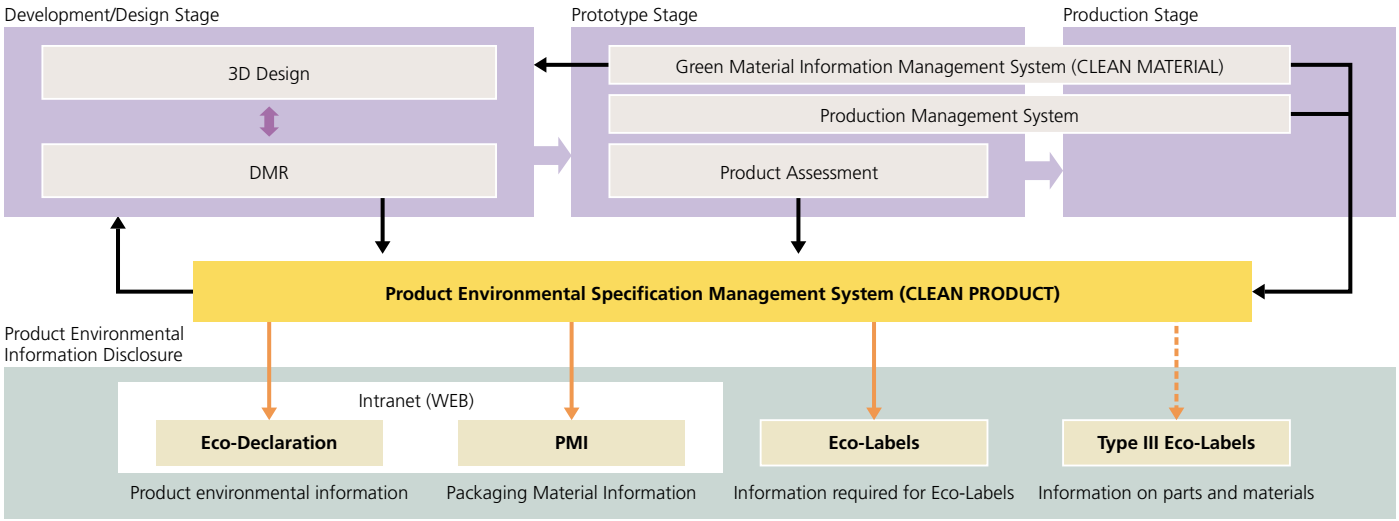
Product Environmental Information Disclosure System

Since September 2001, we have been using our Intranet to operate our Eco-Declaration information disclosure system to share information on our copying machines, printers, facsimile machines, and scanners. This information, necessary for practicing green purchasing, is presented in the Product Environmental Information format, which was created in Northern Europe and is widely used by EU member states and other countries as well. It includes environmental policies and management, environmentally conscious design, presence of hazardous chemical substances, various types of environmental characteristics, and packaging materials.

PMI (Packaging Material Information)

Collection and recycling of product packaging materials is required in European countries and Japan, which added paper and plastic containers to the list of items that must be recycled, in April 2000. We will bring our PMI system online by June 2002 to help meet these requirements. This system, which will be accessible on our Intranet, will allow packaging design departments to create PMI sheets over the Web and make it possible for sales companies and other parties to download detailed lists of on packaging materials.

Product Environmental Information System



Using Various Types of Media to Inform the Public of Our Environmental Initiatives

We keep the world informed of our environmental activities through media such as this Environmental Report and our homepage. The disclosure provided by our IR materials gives us another opportunity to emphasize the importance we place on the environment in the management of our operations.

Public Relations Activities

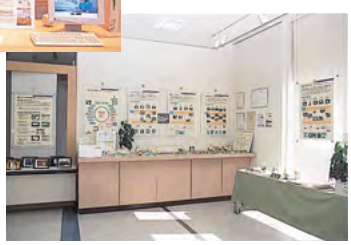
At Canon, we make use of a range of digital and conventional media to spread the word on our environmental initiatives to a broad array of interested parties.

For the benefit of all those outside the group, we issue an Environmental Report. We put out our first in 1994 and began annual reporting in 1999. In 2001, Copyer a Japanese production subsidiary, and Canon (Schweiz) issued their own environmental reports, with the latter recognized by the Swiss Association for Environmentally Conscious Management as the year's best environmental report.

We use *C-MAGAZINE* to provide dealers with environment-focused articles and information, and the Global Canon Intranet Plaza to do the same for employees.

Supplementing our media publications are permanent environmental exhibit rooms at our Shimomaruko headquarters, as well as our Ami, Fukushima, and Toride Plants. Video materials, such as "Canon Ecology," and exhibits are used to explain Canon's environmental initiatives to primary school students, local residents, and others who come to tour these facilities.

Environmental Reports and other publications on the environment



Environmental Exhibit Room

Environmental Information Via the Internet

Through our homepage, we provide the latest information on our environmental initiatives and access to our Environmental Report. Canon Sales, meanwhile, uses its homepage to make available Material Safety Data Sheets (MSDSs) to help customers use our chemical products safely and appropriately.

URL: http://canon.jp/ecology/

URL: http://www.canon-sales.co.jp/ecology/msds/index-j.html

Investor Relations

The environment is a key issue in our information updates to institutional investors. In his speech at our annual Corporate Strategy Conference, our President and CEO (President and CEO of Canon Inc.) made a point of discussing our environmental management. We also outlined our environmental initiatives in the performance summaries that we distributed when we announced our results, and we distributed copies of our Environmental Report to approximately 180 attendees at the 2001 interim results briefing held for institutional investors at the Tokyo Stock Exchange.

In another initiative aimed at meeting the information needs of institutional investors, we have established a system for promptly responding to their surveys. Efforts such as these helped us to meet the stringent requirements of the Dow Jones Sustainability World Index (DJSI World), for which we were selected in 2000, and again in 2001.

Environmental Advertising

To publicize our environmental initiatives as widely as possible, we run serial environmental ads, mainly in newspapers and magazines. In 2001, our efforts were recognized with several awards. These included, for our imageRUNNER iR3300 newspaper ads, the Multi-Advertising Category Gold Medal at the 40th Japan Industrial Journal Industrial Advertising Awards, sponsored by the Japan Industrial Journal, and the Monochrome Honorable Mention Award at the 2001 Nihon Industrial Advertising Awards, sponsored by the Nikkan Kogyo Shimbun; and for our serial newspaper ads, the Special Award in the Newspaper Category at the 11th Contest of Environmental Advertisement, co-sponsored by The Regional Exchange Center and Nihon Keizai Shimbun in Japan.

Canon serial newspaper ads selected as the winner of the Special Award in the Newspaper Category at the 11th Contest of Environmental Advertisement

Selected Among the Top 10% of the World's Leading Sustainability Companies for Two Consecutive Years

The DJSI World is composed of the top 10% of the approximate 2,500 world-leading companies included in the Dow Jones Global Index. The companies selected to the DJSI World are judged to be excellent in terms of economic rationality, as well as environmental and social compatibility, and we have been selected for this index for two consecutive years.

As of October 5, 2001, the DJSI World included 312 companies (31 Japanese) representing 62 industries and 26 countries. Of these 312 companies, 30 were technology companies, and 4 of these were Japanese. Including Canon, only 2 business machine companies were selected for the DJSI World.

imageRUNNER iR3300 newspaper ads, which won the 40th Japan Industrial Journal Industrial Advertising Award's Multi-Advertising Category Gold Medal and the Monochrome Honorable Mention Award at the 2001 Nihon Industrial Advertising Awards

Making Our Existence Meaningful to Society

The tenets of our corporate philosophy of *kyosei* have been at the root of our business activities since the company's founding, defining the type of truly excellent global corporation that we are always endeavoring to be and guiding our efforts to contribute to local communities and international society.

The Philosophy of *Kyosei*

Kyosei has been our corporate philosophy since 1988. *Kyosei*, a concept which embodies the idealism of Canon's founders, means "all people, regardless of race, religion or culture, harmoniously living and working together into the future."

We make positive efforts to abide by this ideal and in doing so treat returns to shareholders, a stable livelihood for employees, contributions to society, and investments for the future as necessary conditions for us to continue developing our business. We believe that fulfilling these conditions makes our business a worthwhile endeavor.

Constantly Striving to be a Truly Excellent Global Corporation

At the beginning of the new century, we embarked on our Excellent Global Corporation Plan Phase II. In realizing this plan, we will fulfill the four conditions for being a truly excellent global corporation (shown below) and, with *kyosei* providing fundamental guidance, strive to continue using technology to contribute to society and become a company worthy of respect throughout the world.

We believe that business should be carried out in a way that is beneficial for shareholders, employees, customers, and the rest of society. The goals and conditions we have set for ourselves are not new to us — they are nothing less than a clear statement of the traditions that Canon has been building upon since its founding in 1937.

Four Qualities of a Truly Excellent Global Corporation

1. Aiming for number one in all businesses
2. Creation of new business
3. Realization of debt-free management
4. Unyielding pursuit of reformation and the creation of a corporate culture worthy of respect

Contributing to Local Communities and an International Society

Being a truly excellent global corporation requires the fulfillment of social responsibilities outside of those related to business activities. It goes without saying that we strive to satisfy our customers by always offering them the best products possible. Based on our philosophy of *kyosei*, we also work to improve our relationships with local communities and the environment, and contribute to the prosperity of the world and the happiness of humankind.

There are many obstacles to achieving *kyosei*. Imbalances in trade, income, and the global environment are all 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.

Returns to Shareholders and a Stable Livelihood for Employees

The pursuit of profits and stakeholder returns is the core reason for a company's existence. At Canon, we have always sought the fairest ways to divide returns and, in 1996 launched our Excellent Global Corporation Plan in an effort to improve the way in which we do business. This means more than simply striving to report better performance in terms such as sales and growth; it means adopting management practices focused on cash flow and performance indices such as ROE* to measure the efficiency with which we use our capital, and working to improve our value as a corporation. In focusing our attention on the quality of our profits, we are meeting our obligations to provide returns to shareholders and a stable livelihood for employees.

*ROE (Return on Equity), a measure of financial performance, is calculated by dividing net income by shareholders' equity.

Compliance with Laws and Regulations

On August 10, 2001, Canon Inc. unveiled a new set of rules to ensure that work practices across the Canon Group are in strict compliance with the law, and consistent with social norms. The Canon Group Code of Conduct applies to executives and employees throughout the Group and is a developed version of previous Canon's code of conduct that was created in 1992 for Canon Inc. and Canon Sales Co., Inc. The new code of conduct arouse from the realization that, as rapidly expanding Group companies and requiring to promote group management, we needed a way to ensure our work standards and ethics were being upheld in offices and plants across the globe, and it will help to reinforce Canon's compliance management.

The Canon Group Code of Conduct is to be adopted by each member of the Canon Group, upon approval by its board of directors, and clearly states the Canon Group's management stances, such as, "Provision of Excellent Products," "Protection of Consumers," "Preservation of the Global Environment," "Practice of Fair Competition," and "Observance of Corporate Ethics." It then spells out how executives and employees are to conduct themselves in sections with titles such as "Fairness and Sincerity," "Legal Compliance in Performance of Duties," "Strict Management of Assets and Property," "Protection of the Company's Intellectual Property Rights," "Avoidance of Conflicts of Interests," "Prohibition Against Seeking, Accepting or Offering Improper Gifts, Entertainment, or Other Benefits," and "Respect for Individual and Prohibition Against Discrimination." As a clear statement of these stances and standards, the Canon Group Code of Conduct will help to ensure that the Canon Group contributes to society and pursues its business activities with fairness and integrity.

Canon Inc. has established a specialized division for the promotion of the Canon Group Code of Conduct. This division cooperates with its counterparts in other Group companies to ensure that both staff and management are fully aware of the standards of conduct expected of them.

Commentary on Canon's Activities for the Benefit Society

Assessing product environmental impact, improving environmental reporting and preparing to publish a sustainability report are all highly encouraging developments at Canon. These measures help SRI analysts and fund managers to assess Canon more thoroughly from an environmental perspective. Social responsibility should also evolve as part of Canon's sustainability agenda even if social performance is difficult to measure, monitor and verify. Critical issues to address in Canon's countries of operation in Asia include implementation, monitoring and enforcement of codes of conduct, adherence to labour standards such as the ILO conventions and provision of basic employee benefits such as adequate pension funding, health cover, continuous learning and reasonable redundancy terms. Issues connected to cultural differences, especially where Japanese nationals are dominant in the management of overseas operations, must also be addressed. The potential returns in good public reputation and labour productivity, alongside the benefits accruing from environmental programmes, should not be underestimated, especially for global companies such as Canon. Transparency on these issues, a clear indication of the guidelines adopted and third party verification will all be necessary for credibility and communication to the financial community.

Louisa Mitchell
Executive Director
Association for Sustainable & Responsible Investment in Asia (ASrIA)
Hong Kong
www.asria.org

Responding to Customer Needs with a Comprehensive Support System

At Canon, customer satisfaction is the highest priority of product development. With this in mind, we have set up systems that allow us to comprehensively respond to customer inquiries and apply what we learn from them in product development. We are also actively implementing universal design as we strive to meet the needs of customers.

Toward Greater Customer Satisfaction

We treat complaints and other contacts from customers as valuable communication for the entire Canon Group. This feedback from customers is incorporated in the development of products that will meet with greater customer satisfaction.

In responding to customer needs rapidly and effectively, Canon Sales Co., Inc. provides support services 24 hours a day, 365 days a year. This support takes the form of IT-based e-Maintenance services for commercial customers and QR Centers for consumers. And going well beyond the mere provision of information, we provide comprehensive support that includes product demonstrations and educational activities. Canon Sales strives to constantly increase customer satisfaction through the totality of capabilities embodied in its Camera Support Centers, Response Centers for business machines and system equipment, homepage, product showrooms, Digital House 01 shops, Canon Salons, School Networks, and EOS Photo Schools.

Comprehensive service is also the goal at Customer Support Centers, which offer information not only over the phone, but also over the Web and via a FAX service. Customer Support Centers enter the details of responses to customer needs into a database from which they are accessed to improve Canon product manuals and services.

The Canon Information Technology Service (C.I.T.S.) responds to the needs of customers from throughout America, while sales companies perform the same kind of service for customers in Europe, using the language for each of the countries served.

●e-Maintenance

On the front line of Canon Sales' efforts to support commercial customers is its e-Maintenance service. This state-of-the-art approach to problem solving uses the Internet to connect copying machines, printers, computers, and other Canon products in customers' offices to a central monitoring center. The monitoring center then automatically gathers information on breakdowns, diagnoses their causes, and dispatches technicians or service personnel as needed. This system helps to lighten the workload of customer network managers, reduce management and maintenance costs for office machines, and shorten downtime.

●QR Center

Canon Sales has established QR Centers in Tokyo 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.

Digital House 01 and Service Center

Serving Customers throughout America

Canon Information Technology Services (C.I.T.S.) responds to telephone, fax, and e-mail inquiries from customers across the United States. C.I.T.S. has been making key initiatives to drive a newly established Customer Support Improvement Committee that will address overall customer satisfaction improvement efforts throughout North America. C.I.T.S. is dedicated to providing service of the highest possible quality that rapidly satisfies the needs of Canon customers.

C.I.T.S.

Universal Design Initiatives

Universal Design means creating products and environments that people of any 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 ease of using our products.

●Working With Other Corporations

Together with three other corporations, we are working to standardize user interfaces and usability, which each manufacturer previously determined independently. This endeavor, called the CRX Project, seeks to make copying machines, printers, and other products easy to comprehend and use by making certain characteristics, such as button colors, signs, pictorial symbols, and the layout of operating panels, common among the participating manufacturers. At the CRX Forum 2001, held at Canon's headquarters in September 2001, attendees took part in presentations on CRX activities and engaged in lively exchanges on universal design and other aspects of the future direction of the CRX Project.

CRX Forum 2001

●Universal Design Clinic by Expert Organizations

In our push to incorporate universal design concepts in our products, we seek out expertise wherever we can find it, including outside organizations. In December 2001, Canon had its cameras, copying machines, and other products evaluated by UDIT Inc.*, a company of universal design experts working to make information equipment easier to use.

*UDIT Inc. was established as a universal design research center in October 1998. Its goal is to support the adoption of universal design, which it pursues by holding seminars and events where the focus is to have physically challenged and elderly people evaluate products.

Consideration of Elderly and Physically challenged Users

Simply abiding by standards and guidelines does not necessarily result in better product usability (ease-of-use, ease-of-understanding) or accessibility (the potential for a product to be used by an elderly or physically challenged person). For that reason, we have created an internal monitoring test lab, where elderly people from outside the company join our staff monitors in putting our products to the test. These outside recruits evaluate product aspects, such as the size and contrast of display characters on cameras and printers, and ease of understanding how to operate and use these products. We are also experimenting with devices that simulate some of the conditions experienced by the elderly* and physically challenged. Using the new perspectives provided by wearing this equipment, employees from our product planning, development, and evaluation sections set about designing environments and products that anyone could benefit from. Our employees gain further insights from forums and workshops, where we invite experts to talk about the problems faced by elderly or physically challenged people.

*Canon's program for helping its employees to understand problems faced by elderly people is called Instant Senior. In this program, participants use items such as earplugs, special goggles, and weights worn on hands or feet to gain an understanding of the conditions that affect elderly people in both a physical and emotional sense.

Evaluation by an employee monitor

Overseas Monitoring

Not all products that are acceptable to Japanese users are acceptable to overseas users. At the Canon Group, overseas monitors in various locations test our products to help ensure that they are convenient and comfortable to use. After monitors in Japan, America, and Europe have used our products, we analyze differences stemming from cultural norms, as well as the nationalities and customs of users, and then use what we learn to good effect in product development.

Using the Unique Characteristics of Our Operations to Contribute to Society

At Canon, where our corporate philosophy, *kyosei*, means living and working together for the common good, we have always devoted significant effort to contributing to local communities. Our intention is to contribute to society broadly and we participate in and sponsor environmental activities aimed at benefiting communities throughout the world.

Cooperation With Local Communities

Stressing the importance of living and working together for the common good, we organize and take part in social events that benefit people in local areas.

Ecofesta Wonderland, which was held in March 2002 with Canon Inc.'s participation, is a typical example of this kind of social contribution. This environmental event, held at Yaguchi Elementary School in Tokyo's Ota Ward, allowed children to learn through play and hands-on activities. Canon Inc. used the event to explain the benefits of its BJ Printers, using a model that had been broken down to show where special measures had been taken in consideration of the environment. The display enjoyed an enthusiastic response, as did the invitation for children to bring in used cartridges. Canon Inc. also recruits from among its own ranks to participate in local beautification projects.

Similar events at the local level are initiated worldwide as an expression of the Canon Group's strong interest in social and environmental problems. Canon Australia Pty. Ltd. is working to protect the environment for future generations by sponsoring "Clean Up Australia" and Canon Hi-Tech (Thailand) Ltd. puts on a "Green Week Program." As part of its local environmental beautification activities, Canon Zhuhai, Inc. employees volunteer to plant trees in the city of Zhuhai, an activity now being undertaken by other local companies that have followed their example.

Ecofesta Wonderland

Local beautification activities (Oita Canon Inc.)

Participation in Environmental Events

Canon Inc. participated in Eco-Products 2001, ENEX 2002, and Enviro Shiga 2001 (International Environmental Business Exhibition held at Lake Biwa). At Eco-Products 2001 and ENEX 2002, environmentally conscious Canon products were on display. At Enviro Shiga 2001, Canon Inc. and its local subsidiary, Nagahama Canon Inc., introduced their environmental initiatives, under the theme "Canon — Using Technology to Meet Challenges Facing the Global Environment."

Eco-Products 2001

Enviro Shiga 2001

Tree planting activity held by Canon Zhuhai, Inc.

Environmental Social Contribution Programs

Canon Inc. is a co-sponsor of the UNEP (United Nations Environment Programme) International Photographic Competition on the Environment, which seeks to arouse the general public's interest in the environment through the use of photos. Since 1981, we have also been running a series of ads in *National Geographic Magazine*. Titled "WILDLIFE AS CANON SEES IT," these ads communicate the plight of the world's endangered species and the importance of protecting them.

In North America, Canon U.S.A. has been running its "Clean Earth Campaign" since 1990. One of the campaign activities is the "Canon National Parks Science Scholars Program," which began in 1997. Under this program, students seeking doctoral degrees in areas related to the environment are awarded scholarship grants of $25,000 a year for up to three years, as support for environmental research undertaken in national parks.

On other fronts, Canon Europa N.V. participates in the "WWF (World Wide Fund for Nature) Conservation Partnership Program," supporting the planning of events and the digitization of photo libraries; and Canon Hi-Tech (Thailand) has begun its Teak Forestation Program.

UNEP International Photographic Competition on the Environment

Canon National Parks Science Scholars Program

Support for the WWF

Teak forestation

Promoting Organizational Dynamism by Encouraging the Growth of Individual Employees.

Our human resources system is effective and fair, and based on policies that reflect a fundamental respect for individuals and promote our "Three Selfs" concept. We also look after the well-being of our employees through initiatives that promote health, seek to prevent labor accidents, and benefit employees in other ways as well.

Basic Ideas Regarding Human Resources Management

We, at the Canon Group, believe that to be a truly excellent global corporation, our employees need to approach their work with the vitality that comes from chasing their individual dreams and aspirations. Our human resources policies are based on the principle of respecting individuals, and encourage the qualities most sought after in Canon employees. These are expressed in three keywords, referred to as the "Three Selfs" 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

We believe that these qualities are critical for fostering a corporate culture in which individual employees approach their work with a sense of responsibility and face challenges with a proactive attitude.

Canon Inc., the Group's headquarters (located in Japan), revised its human resources system in April 2001 to ensure the treatment of its workforce is consistent throughout the Group. The revisions were designed to implant a fair, competitive working environment that further entrenches our use of performance-based compensation. The goal is to foster the development of a corporate culture in which outstanding results and achievements are correctly evaluated and mutually appreciated.

Compensation System

The core of Canon Inc.'s human resources system, its compensation system, is founded on roles and results. And in the case of general employees, ability is also factored in when carrying out evaluations. This system contributes to the support and development of a performance-based human resources system, which we will apply not only in Asia, but also in the Americas and Europe*.

Evaluation System

To create an evaluation system that promotes fair, performance-based compensation, and energizes our organization and employees, Canon Inc. introduced a Goal Management System. Under this system, employees meet with their supervisors at the beginning of each year to review their achievements for the prior year, and lay out goals for the current year. Interim reviews are held to check each employee's progress, and at the end of the year, achievements are reflected in salaries and compensation. This system allows each employee to be cognizant of his or her individual role in the corporation. And because greater achievement is rewarded with higher salaries and compensation, the vitality of individuals and, indeed, the entire organization is enhanced.

Various Human Resources Systems

●Internal Recruiting

Canon Inc. employs its internal recruiting system whenever positions have to be filled. This system has two purposes; one, to make the most of each employee's aspirations and abilities for the most effective use of human resources; and, two, to quickly meet critical human resources needs of departments and businesses. Canon Inc. introduced internal recruiting in 1996 and as of April 2002 had successfully filled 504 positions from a total of 2,273 internal applicants.

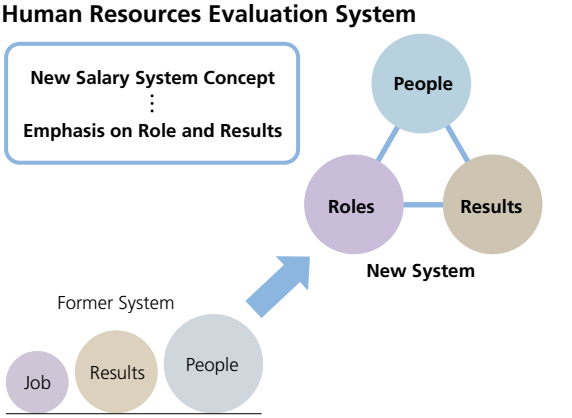
●Internal Management Recruiting

In order to gain full acceptance of the propriety and reasonableness of its performance-based compensation system, Canon Inc. introduced an internal management recruiting system in October 2001. This system has allowed Canon Inc. to achieve even greater success in placing the right people in the right positions and has encouraged the rise of eager young employees. As of March 2002, four employees have successfully taken advantage of the internal management recruiting system.

●Equal Employment Opportunities

Standing firmly on the principle of performance, Canon Inc.'s human resources system makes no distinctions based on gender, educational background, or age. To prevent sexual harassment, Canon Inc. has created management training programs and booklets on this subject, and holds training activities.

Human Resources Evaluation System



*Development and production capabilities at Canon U.S.A. and Canon Europa will be strengthened and the status of these companies upgraded. These new regional headquarters will use their human resources systems, geared to their local cultures and environments, to attract outstanding personnel, and develop, produce, and sell technologies and products that are uniquely shaped by local influences. These products will then be traded among Canon Group companies to achieve a trade balance within the Canon Group.

Safety and Health

Canon Inc. has established safety and health management systems that are appropriate for its business activities and, in strengthening its already effective labor accident prevention measures, strives to prevent even the smallest mishaps. Canon Inc. promotes safety and health in the belief that creating a safe work environment that is also healthy for minds and bodies is one of its fundamental corporate responsibilities.

Elimination of Labor Accidents/Creation of Comfortable Workplace Environments

Canon Inc. works from many angles to eliminate labor accidents: educating to raise safety and health awareness; analyzing the causes of accidents to prevent their recurrence; creating safety inspection standards prior to the introduction of new facilities or equipment; holding regular safety inspections of automatic production facilities; and implementing health management programs designed to protect workers from the effects of chemicals.

Canon Inc.'s Regional Safety and Health Committees are quick to respond to problems in the workplace, constantly seeking ways to make employees more comfortable, and striving to improve the environments of operational sites. Our strategy for eliminating labor accidents is to focus on 5S Activities (the 5 Ss stand for the Japanese words *seiri* (streamlining), *seiton* (organizing), *seiketsu* (hygiene), *seiso* (cleaning), and *shitsuke* (discipline)). For production facilities, Canon Inc. has created guidelines for maintaining suitable working environments and abolishing tasks that are wasteful or impossible to perform.

Labor Accident Statistics for 2001

	Accidents Requiring Time Off	Accidents Not Requiring Time Off	Total
Japan	11	83	94
Americas	42	145	187
EU	35	26	61
Asia (excluding Japan)	11	83	94

Implementation of a Health and Safety Management System

In February 2000, Canon Inc. began implementing a safety and health management system based on a "Plan-Do-Check-Action" process. With the aim of instituting this system throughout its operations, Canon Inc. subjected its Fukushima Plant to an external evaluation in 2001. This involved a written survey and on-site interviews, and addressed 1,000 individual items across 20 different areas. Based on the results of this evaluation, the Fukushima Plant embarked on a thorough overhaul of its standards and systems. It has also sent health and safety staff for external training as part of efforts to create internal audit procedures.

The Fukushima Plant will undergo another external evaluation to validate its systems in the latter half of 2002. The goal is to begin full-scale implementation of safety and health management systems in all Canon operational sites, and Group companies, in 2003.

Health Maintenance and Promotion Initiatives (Canon Health-Care System 21)

Individual health management is essential for individual employees to have fulfilling work lives, and the source of organizational dynamism. Canon Inc.'s Health Insurance Union urges employees and their families to use the services of the Canon Health-Care System (CHS21), which will help them to enjoy healthy, happy lives. Various types of physical examinations and health education are provided through CHS21.

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 to be used after physical examinations aimed at promoting self-managed healthcare.
- Development of healthcare measures that also cover employees on foreign assignments, retired employees, and families.
- Health management staff education and reinforcement of programs for promoting health through the new health management system.

Pursuing Various Activities in Support of Culture, Education, and Sports

At Canon, our aim is to use technology to make contributions at all levels, from local communities to society at large. Toward that end, we actively pursue activities in a wide variety of areas, such as culture and sports, youth education, independence for the physically challenged, and disaster relief.

Image Art

Since our founding, we have made contributions to society a priority and are now using imaging technology to support both the development of artistic expression through technology and the discovery of new talent.

In searching for this next generation of talent, we organize various competitions, including the "Canon Digital Creators Contest" in the field of digital image expression, and the "New Cosmos of Photography" in the field of photography. For our "Canon Digital Creators Contest" we have begun to accept entries from creative people throughout the world. The World Press Photo Contest attracts submissions from photographers in nearly every country and we exhibit the winning photos in cities across the globe. We are also supporting the use of Canon technology in the creation of digital art through our "ARTLAB" and providing backing for the CG-ARTS SOCIETY.

For Italy in Japan 2001, we provided large-size panels for the *Exhibit Titled 100 Words of Children*, which featured dialogs among Italian children.

Canon Digital Creators Contest

World Press Photo Contest — photo by Balazs Gardi

Culture and Academia

We support academic research and activities that promote local culture.

Canon Italia S.p.A. has installed a Canon live camera on the terrace of Rome's Palazzo Senatorio, so that Internet users can enjoy views of the Roman Forum, the Imperial Forums, St. Peter's Cathedral, and the Colisseum.

In Germany, Canon Giessen GmbH cooperates in the preservation of the cultural treasures of the city of Giessen. It has supported the restoration of sites including the Liebig Museum (Liebig is regarded as the father of modern science), the inner garden of the Giessen City Hall, and the Giessen City Theater.

And in America, Canon U.S.A. has provided digital imaging equipment to the Harbor Branch Oceanographic Institution, which is examining the earth's environment through ecological studies of porpoises.

Giessen City Theater

Harbor Branch Oceanographic Institution

Sporting Events

We sponsor Canon Cup Junior Soccer, which lets boys and girls experience the exhilaration of participating in one of the world's major sports and promotes international exchanges and goodwill.

In addition, we provide backing for Formula 1 motor sports, the J1 Soccer League, and other sporting events that bring excitement to millions of fans.

Canon Cup Junior Soccer

Education of Children and Youths

We are engaged in various types of charitable activities aimed at providing educational support and cultural exchange for children and youths, who will be the builders of societies in the future.

Our "Charity Book Fair" is one avenue through which we provide educational support for the children of Laos, Thailand, and Vietnam. In this company bazaar, picture books and CDs donated by employees are sold and the sales proceeds, together with a matching gift from Canon Inc., are then donated to Non-Profit Organizations. The funds are used to establish school libraries, publish picture books and books of folktales, and provide scholarships.

In America, Canon U.S.A. supports the "March of Dimes," a volunteer organization that works to prevent birth defects. And in China, Canon Dalian Business Machines sponsors the "Canon Cup," an annual Japanese speech contest that functions as both a form of cultural exchange between Japan and China, and a contribution to the local community. Canon Dalian Business Machines has also established three Canon Hope Elementary Schools and received the Hope Contribution Award from the Dalian city government in recognition of its efforts.

Laotian primary school students reading in a library

Picture books published in Laos

March of Dimes

Canon Cup Japanese speech contest in Dalian

The Physically Challenged

Programs to help the physically challenged apply their abilities and lead independent lives is another area of our community activity.

We use our BJ printers to print t-shirts and picture books featuring the works of physically challenged artists. We then sell these items through our "Physically Challenged Artists' Support Program" and donate the proceeds to social welfare organizations working for the benefit of the physically challenged. On another front, Canon Europa supports a judo tournament for the physically challenged every November in Amsterdam, Holland.

Support for physically challenged artists

People in Need

Whenever a major disaster occurs, regardless of the location, Canon Group companies in Japan undertake Donation Campaigns to gather financial contributions from employees and provide assistance to stricken areas via the Japanese Red Cross Society. After the tragic events of September 11, 2001 in America, Canon Inc. contributed money on behalf of the entire Canon Group to the American Red Cross via the Japanese Red Cross Society. These funds, together with employee contributions, Canon Inc.'s matching gifts, and a contribution by Canon U.S.A. totaled approximately ¥374 million.

Canon Inc. also collects from employees in Japan unused foreign currency and coins brought back from international business trips and personal travel, and contributes this money to Japan Committee for UNICEF. At a personal level, individual employees throughout the Canon Group voluntarily participate in blood drives and other humanitarian activities.

$3 million donation to the Japanese Red Cross Society

Social and cultural support activities that Canon pursues in places throughout the world are discussed in Japanese and English at the homepage addresses given below.

Japanese
http//www.canon.co.jp/Heartware/search_a.html

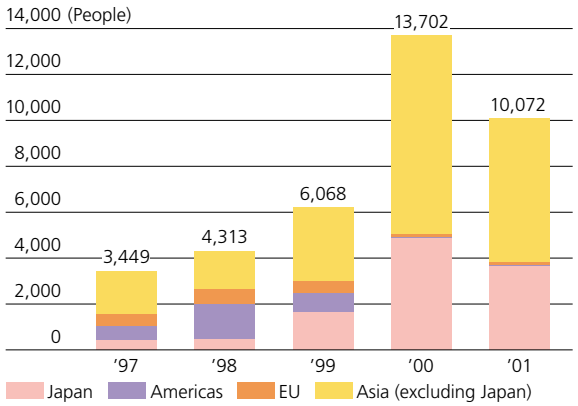
English
http//www.canon.co.jp/Heartware/english/e_search_a.html

Data on Environmentally Conscious Management Initiatives

ISO14001 Certified Sites and Subsidiaries

	Site/Subsidiary	Certification Date
Japan	Ami Plant	February 1995
	Ueno Canon Materials Inc.	February 1995
	Toride Plant	May 1995
	Fukushima Plant	September 1995
	Hirosaki Seiki, Inc. Headquarters, Kitawatoku/ Ishiwatari Plants	September 1995
	Canon Electronics Inc. Misato Plant	October 1995
	Canon Aptex Inc.	November 1995
	Nagahama Canon Inc.	December 1995
	Utsunomiya Plant	January 1996
	Oita Canon Inc.	January 1996
	Canon N.T.C. Iwai Plant	July 1996
	Canon Chemicals Inc. Headquarters, Tsukuba Site	July 1996
	Copyer Co., Ltd. Kofu Plant	November 1996
	Copyer Co., Ltd. Fukui Plant	November 1996
	Copyer Co., Ltd. Tachikawa Plant	November 1996
	Canon Components, Inc.	February 1997
	Hanawa Seiki, Inc.	February 1997
	Miyazaki Daishin Canon Co., Ltd.	March 1997
	Canon Chemicals, Inc. Iwama Site	April 1997
	Utsunomiya Optical Products Operation	December 1997
	Canon Chemicals Inc. Ishige Site	January 1998
	Tamagawa Plant	November 1998
	Hiratsuka Plant	December 1998
	Canon Electronics Inc. Akagi Plant	June 1999
	Canon Electronics Inc. Headquarters Chichibu Plant	July 1999
	Canon Sales Co., Inc.	December 2000
	Ayase Office	June 2001
Americas	Canon Virginia, Inc.	December 1997
	South Tech, Inc.	December 1997
	Canon Business Machines, Inc.	December 1996
	Canon Business Machines de Mexico, S.A. de C.V.	December 1998
	Custom Intergrated Technology, Inc.	December 1999
Europe	Canon Bretagne S.A.	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
Asia (excluding Japan)	Canon Inc., Taiwan	April 1996
	Canon Hi-Tech (Thailand) Ltd.	November 1996
	Canon Opto (Malaysia) Sdn. Bhd.	December 1996
	Canon Zhuhai, Inc.	March 1997
	Canon Dalian Business Machine, Inc.	July 1997

Employees Receiving Environmental Training



Environmental Protection Relationships

Partners in Government, Business, and Academia	Commissions and Study Groups
Japanese Ministry of Economy, Trade and Industry	Environment Committee, Industrial Structure Council
Japanese Ministry of the Environment	Environmental Accounting Application Study Group, Project for the development of environmental performance indices
Japanese Environmental Management Association for Industry	Eco-Products Organizing Committee
Japan Electronics and Information Technology Industries Association	IT Products Environmental Project Committee, International Energy Center Committee, etc.
Japan Business Machine and Information System Industries Association	Policy Committee, Environmental Committee, Copying Machine/ Page Printer Subcommittee, etc.
Japan Machinery Center for Trade and Investment	Committee on Trade and Environment
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	Joint research on global environmental problems, survey information dissemination, awards

Support for Environmental Organizations and Programs	Geographic Area
Harbor Branch Oceanographic Institution	America
Envirothon	America
Canadian Conservation Association	Canada
World Wildlife Fund Canada	Canada
World Wide Fund for Nature	America, Europe, Africa, Middle East, Asia, etc. (over 100 countries in all)
Nationalpark DonauAuen	Austria
Clean Up Australia	Australia

Canon Environmental Protection Programs	Geographic Area
Clean Earth Campaign	America
Toner Cartridge Collection Program	All
Fish stocking/Teak forestation programs	Thailand
Environmental protection programs for rivers (Kano River, Sagami River, Tama River, Tone River, and others)	Japan

Results of Environmentally Conscious Management at Operational Sites

Water Quality

	Item		Regulatory standards*1	Operational site standards*2	Highest measured values*3
Health	Cadmium	(mg/l)	0.1	0.08	<0.005
	Cyanide	(mg/l)	1	0.8	<0.05
	Organic Phosphorous	(mg/l)	1	0.8	<0.05
	Lead	(mg/l)	0.1	0.08	0.006
	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
	Dichloromethane	(mg/l)	0.2	0.16	0.01
	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	0.0012
	Thiobencarb	(mg/l)	0.2	0.16	<0.002
	Benzene	(mg/l)	0.1	0.08	<0.001
	Selenium	(mg/l)	0.1	0.08	<0.005
	Boron	(mg/l)	230	184	0.1
	Fluorine	(mg/l)	15	12	2.6
	Ammonium nitrogen, nitrite nitrogen, nitrate nitrogen	(mg/l)	380	304	43
Living Environment	Potential of hydrogen (pH)		5.0–9.0	5.9–8.5	6.6–7.8
	Biochemical oxygen demand (BOD)	(mg/l)	600	480	41
	Suspended solids (SS)	(mg/l)	600	480	36
	n-hexane extracts (mineral oil)	(mg/l)	5	5	<5
	n-hexane extracts (animal and vegetable oils)	(mg/l)	30	24	—
	Phenol	(mg/l)	5	4	0.15
	Copper	(mg/l)	3	2.4	<0.2
	Zinc	(mg/l)	5	4	1.1
	Soluble iron	(mg/l)	10	8	1.7
	Soluble manganese	(mg/l)	10	8	<0.1
	Chromium	(mg/l)	2	1.6	<0.05
	Phosphates	(mg/l)	32	26	9.6
	Nitrogen	(mg/l)	240	192	14
	Iodine consumption	(mg/l)	220	176	48

*1 Regulatory standards — the strictest legal and regulatory standards (Sewage Law, Tokyo Municipal 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.

Air Quality

	Item		Operational site standards	Highest measured values
Boiler	NOx	(ppm)	76	69
	Soot and dust	(g/Nm^3)	0.05	0.01

*Standards stipulated by the Air Pollution Control Law are used as the operational site standards.
*Boilers emit no SOx, because they use LNG.

2001 data for the Canon Inc. Headquarters

- Location: 3-30-2, Shimomaruko, Ohta-ku, Tokyo
- Activities: Headquarters management, Products Operations, research and development
- Area: 96,169 m^2
- Established: 1951
- Number of employees: 6,326
- Designation of land use: Industrial and Mixed Residential/Industrial

Noise (Unit: dB)

Category	Operational site standards	Highest measured values
Morning	60	54
Day	70	57
Evening	60	50
Night	55	46

*Standards for operational sites: Tokyo Metropolitan Environmental Pollution Control Ordinance

Vibration (Unit: dB)

Category	Operational site standards	Highest measured values
Day	65	31
Night	60	30

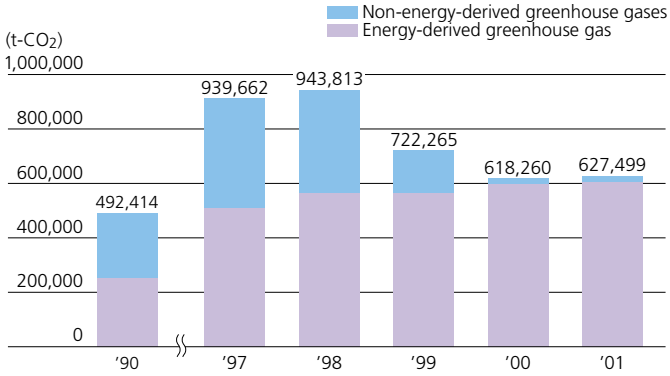
*Standards for operational sites: Tokyo Metropolitan Environmental Pollution Control Ordinance

Odor

No measurements were taken during 2001, because there was no risk of emission of odors. Measurements will be taken in the future if there arises a possible effect on the neighborhood in cases such as building a facility that may give out odor.

Energy and Other Inputs/Atmospheric Discharges

Overall Greenhouse Gas Emissions

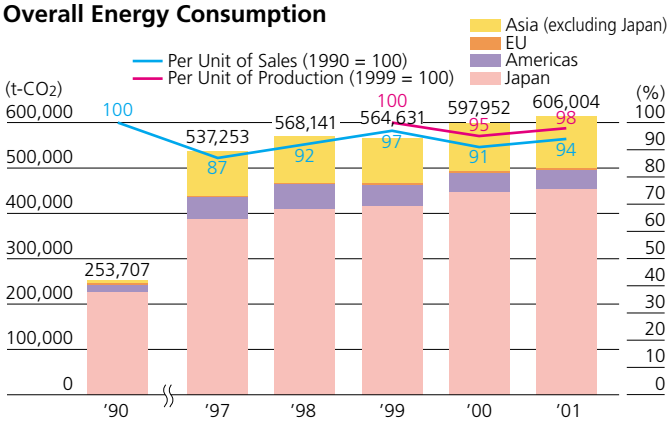


Energy-derived greenhouse gas ····· CO_2
Non-energy-derived greenhouse gases ··· PFCs, HFCs, SF_6

Energy Usage in 2001

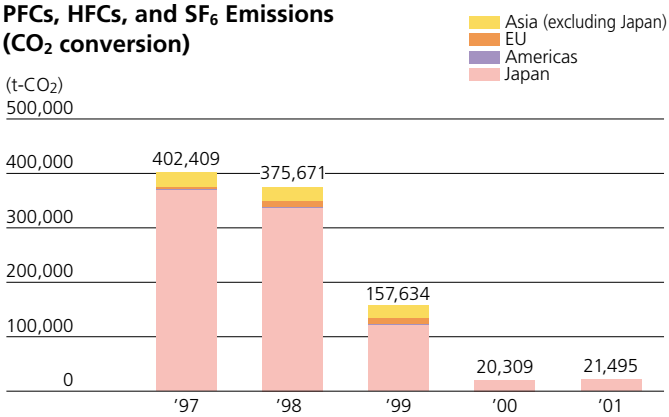
	Electricity	Gas	Petroleum
	MWh	km³	kL
Japan	916,684	15,256	31,454
Americas	61,812	2,069	0
Europe	17,720	269	46
Asia (excluding Japan)	154,925	164	635

Overall Energy Consumption



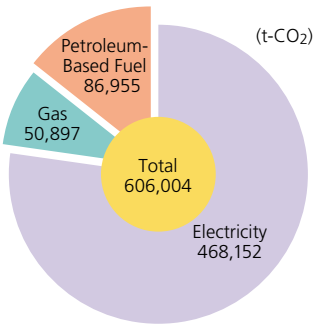
*Per Unit of Production data covers only production sites (all)
*Greenhouse gas conversion coefficients
Conversion coefficients used in calculations for Japan are those announced by the Japanese Ministry of the Environment in 2000.
Conversion coefficients used in calculations for overseas locations are those announced by the Greenhouse Gas Protocol (http://www.ghgprotocol.org) in 2001.

PFCs, HFCs, and SF_6 Emissions (CO_2 conversion)

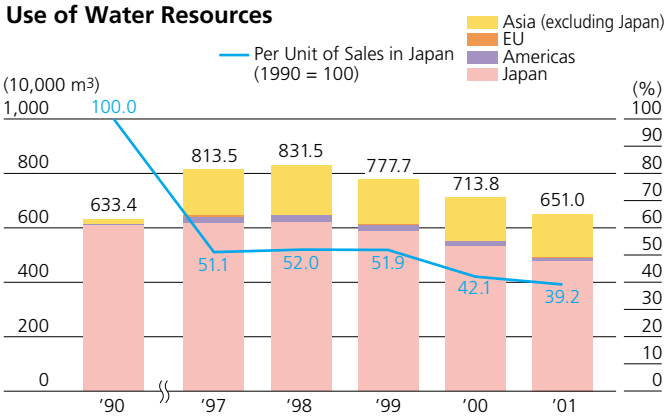


*Calculated using conversion coefficients announced by the IPCC (Intergovernmental Panel on Climate Change) in 1996
*As of the end of 1999, all sources of greenhouse gases were eliminated from all production processes, except those used for semiconductors.

2001 Consumption of Electricity, Gas, and Petroleum-Based Fuel (CO_2 conversion)

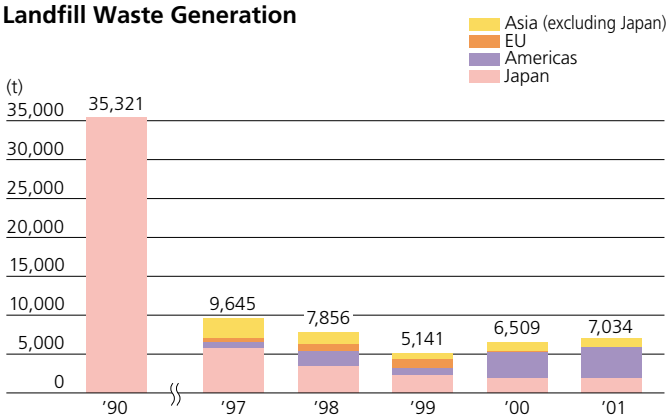


Use of Water Resources



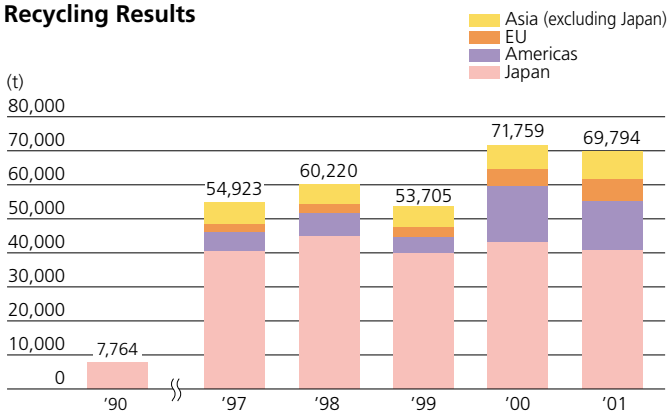
Waste and Recycling

Landfill Waste Generation



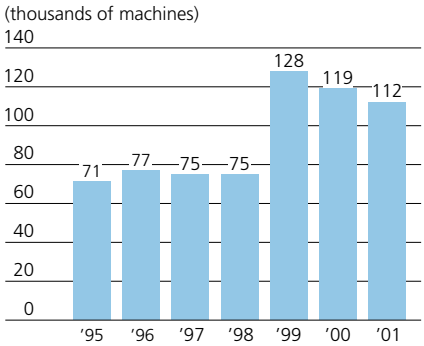
*Management of landfill waste began at overseas operational sites in 1993.

Recycling Results

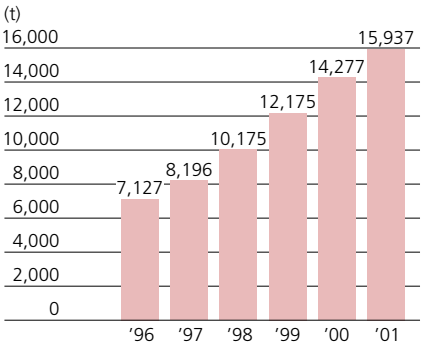


*Management of recycling began at overseas operational sites in 1993.

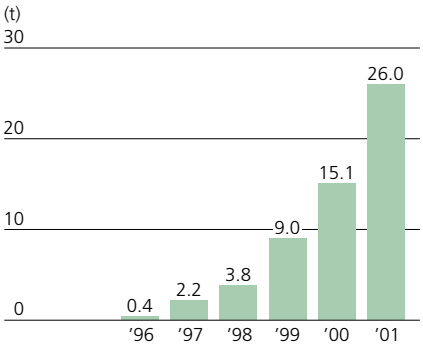
Used Copying Machine Collections (worldwide)



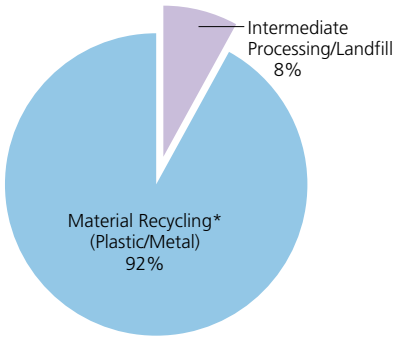
Used Toner Cartridge Collections by Weight (worldwide)



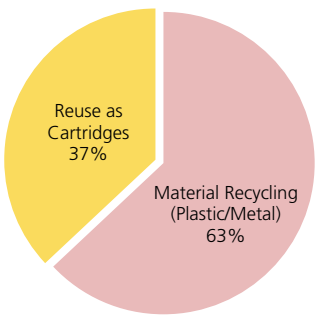
Used BJ Cartridge Collections by Weight (Japan)



2001 Recycling Rate: 92% (worldwide)



2001 Recycling Rate: 100% (Canon Dalian Business Machine, Inc.)

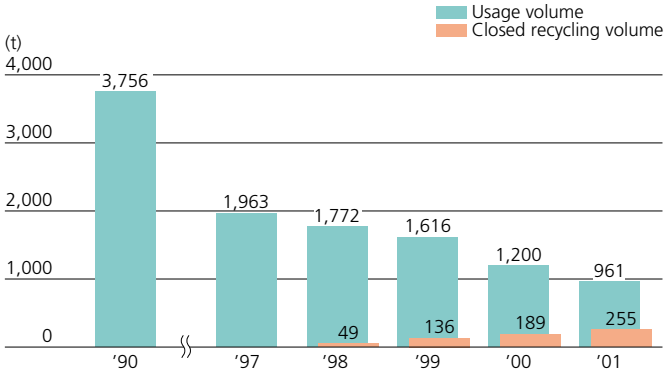


2001 Recycling Rate: 100% (Japan)

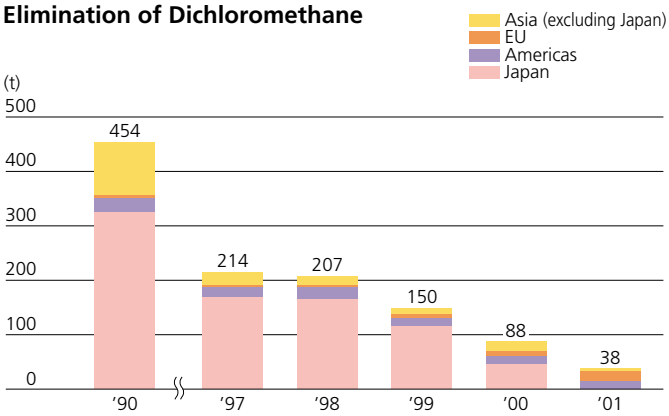
*Includes reuse of parts and remanufacturing of used copying machines

Chemical Substance Usage, Recycling, Discharge and Elimination

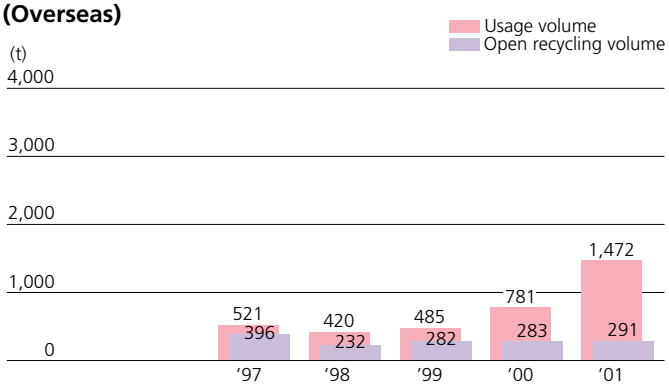
Volumes of Polystyrene Foam Used and Recycled (Japan)



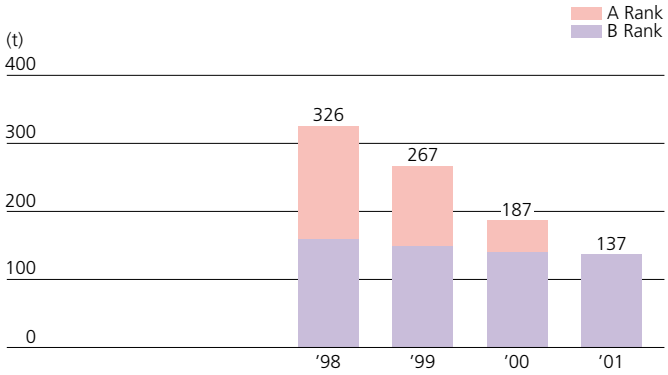
Elimination of Dichloromethane



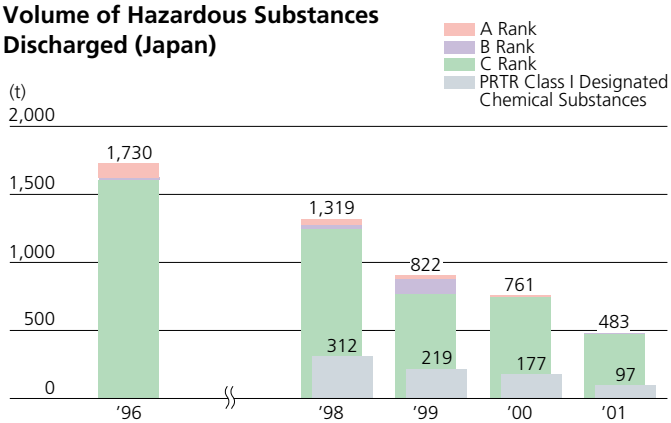
Volumes of Polystyrene Foam Used and Recycled (Overseas)



Volume of Hazardous Substances Used (Japan)



Volume of Hazardous Substances Discharged (Japan)



PRTR Control Balance Sheet for 2001 (Data for Japan and overseas locations)

(t)

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	0.91
2	16	Monoethanolamine	0.00	0.00	0.00	0.20	10.73
3	43	Ethylene glycol	10.01	0.00	0.56	0.24	1.81
4	63	Xylene	5.85	0.00	0.00	2.99	34.44
5	68	Trivalent chromium (Cr portion)	0.00	0.00	0.00	0.00	0.04
6	93	Monochlorobenzen	45.21	0.00	41.99	64.86	414.71
7	96	Chloromethane (methyl chloride)	0.01	0.00	0.00	0.00	1.96
8	139	o-dichlorobenzene	0.21	0.00	0.00	0.00	10.69
9	145	Dichloromethane	7.18	0.00	14.48	16.01	0.00
10	172	N, N-dimethylformamide	4.06	0.00	0.26	0.00	99.68
11	177	Styrene (monomer)	0.94	0.00	0.00	0.00	70.48
12	181	Thiourea	0.00	0.00	0.00	0.00	0.72
13	224	Trimethylbenzen	58.65	0.00	0.00	18.71	0.00
14	227	Toluene	55.13	0.00	0.00	0.75	20.79
15	230	Lead and lead compounds (Pb portion)	0.13	0.18	1.27	1.66	12.20
16	232	Nickel compounds (Ni portion)	0.00	0.00	0.12	0.00	7.75
17	266	Phenol	0.00	0.00	0.00	0.00	0.19
18	311	Manganese and its compounds	0.00	0.00	0.00	0.00	0.43
19	283	Water-soluble hydrogen fluoride salts (F portion)	0.10	0.00	1.51	0.00	0.05
			187.49	0.18	60.19	105.41	687.57

*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. Recycling data, however, is also presented for those substances of which usage was less than five tons.
*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.

2001 Hazardous Substance Usage and Discharge Volumes for Overseas Locations

(t)

	Results for 2001						
	A Rank Substance Usage	B Rank Substance Usage	A Rank Substance Discharges	B Rank Substance Discharges	C Rank Substance Discharges	Overall Discharges	PRTR*1 Substance Discharges
Americas	16.04	4.80	0.03	0.01	39.54	39.58	10.52
Europe	4.55	2.52	4.55	1.26	85.05	90.86	33.93
Asia (excluding Japan)	17.08	1.72	17.08	0.15	388.31	405.53	120.89
Total	37.67	9.03	21.66	1.41	512.90	535.97	165.34

*Controls the same as those used in Japan were implemented in 2001 for 2,289 controlled substances.
*Totals and overall discharge figures 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

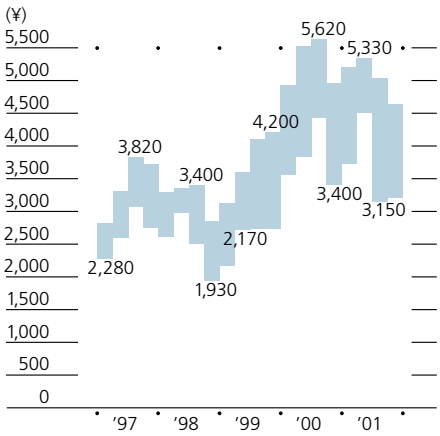
Hazardous Substances Canon Has Eliminated

Hazardous Substances		Date 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	●Trichloro ethylene	December 1996
	●Tetrachloro ethylene	December 1996
	●Dichloro methane (for cleaning)	December 1997
	●Dichloro methane (for thin film coating)*3	December 2001 (in Japan)

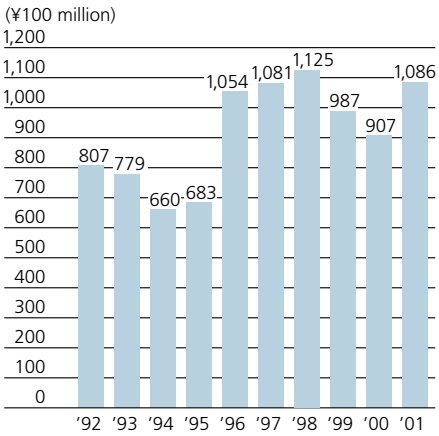
*2 Excluding those used in manufacturing semiconductors.
*3 Elimination from overseas operations scheduled for 2003.

Stock Price, Capital Expenditures and Patents

Stock Price



Capital Expenditures



Top 10 Corporations Receiving U.S. Patents in 2001

Rank Overall	Rank Among Japanese Corporations	Patent holder	Number of patents
1	–	IBM	3,411
2	1	NEC	1,953
3	**2**	**Canon Inc.**	**1,877**
4	–	MICRON TECHNOLOGY	1,643
5	–	SAMSUNG ELECTRONICS	1,450
6	3	Matsushita Electric Industrial	1,440
7	4	Sony	1,363
8	5	Hitachi	1,271
9	6	Mitsubishi Electric	1,184
10	7	Fujitsu	1,166

(Source: U.S. Department of Commerce)

Plants and Offices covered in Environmental Report 2002

Name	Location
Canon Inc.	
Shimomaruko Headquarters	Tokyo
Meguro Office	Tokyo
Tamagawa Plant	Kanagawa
Kosugi Office	Kanagawa
Hiratsuka Plant	Kanagawa
Ayase Office	Kanagawa
Fuji-Susono Research Park	Shizuoka
Canon Research Center	Kanagawa
Ecology Research & Development Center	Kyoto
Utsunomiya Plant	Tochigi
Toride Plant	Ibaraki
Ami Plant	Ibaraki
Fukushima Plant	Fukushima
Utsunomiya Optical Products Operations	Tochigi

Name	Location
Domestic Sales Subsidiaries	
Canon Sales Co., Inc. Makuhari Headquarters	Chiba
Domestic Production Subsidiaries and Affiliates	
Canon Electronics Inc. Headquarters, Chichibu Plant	Saitama
Canon Electronics Inc. Misato Plant	Saitama
Canon Electronics Inc. Kagemori Plant, Yokose Branch	Saitama
Canon Electronics Inc. Akagi Plant	Gunma
Copyer Co., Ltd. Headquarters	Tokyo
Copyer Co., Ltd. Tachikawa Plant	Tokyo
Copyer Co., Ltd. Kofu Office	Yamanashi
Copyer Co., Ltd. Fukui Office	Fukui
Canon Precision Inc.	Tokyo
Hanawa Seiki, Inc.	Fukushima
Hirosaki Seiki, Inc. Headquarters, Kitawatoku Plant	Aomori

Name	Location
Hirosaki Seiki, Inc. Ishiwatari Plant	Aomori
Canon Chemicals Inc. Headquarters, Tsukuba Site	Ibaraki
Canon Chemicals Inc. Iwama Site	Ibaraki
Canon Chemicals Inc. Ishige Site	Ibaraki
Oita Canon Inc.	Oita
Canon Aptex Inc. Headquarters, Ibaraki Plant	Ibaraki
Canon Aptex Inc. Shimomaruko Office	Tokyo
Miyazaki Daishin Canon Co., Ltd.	Miyazaki
Optron, Inc.	Ibaraki
Canon Components, Inc.	Saitama
Nagahama Canon Inc.	Shiga
Oita Canon Materials Inc.	Oita
Canon N.T.C. Iwai Plant	Ibaraki
Canon N.T.C. Saitama Plant	Saitama
Ueno Canon Materials Inc.	Mie

Name	Country/Region
Overseas Production Subsidiaries and Affiliates	
Canon Business Machines, Inc.	U.S.A.
Canon Business Machines de Mexico, S.A. de C.V.	Mexico
Canon Virginia, Inc.	U.S.A.
South Tech, Inc.	U.S.A.
Custom Integrated Technology, Inc.	U.S.A.
Industrial Resource Technologies, Inc.	U.S.A.
C.S. Polymer, Inc.	U.S.A.
Canon Giessen GmbH	Germany
Canon Bretagne S.A.	France
Canon Inc., Taiwan	Taiwan
Canon Opto (Malaysia) Sdn. Bhd.	Malaysia
Canon Hi-Tech (Thailand) Ltd.	Thailand
Canon Engineering (Thailand) Ltd.	Thailand
Canon Dalian Business Machines, Inc.	China
Canon Zhuhai, Inc.	China

Name	Country/Region
Overseas Marketing Subsidiaries	
Canon U.S.A., Inc.	U.S.A.
Canon Canada, Inc.	Canada
Canon Business Solutions, West, Inc.	U.S.A.
Canon Business Solutions, Central, Inc.	U.S.A.
Canon Business Solutions, Southeast, Inc.	U.S.A.
Canon Latin America, Inc.	U.S.A.
Canon Panama, S.A.	Panama
Canon do Brasil Indústrial e Comércio Ltda.	Brasil
Canon Chile, S.A.	Chile
Canon Mexicana S. de R.L. de C.V.	Mexico
Canon Europa N.V.	Netherlands
Canon UK Ltd.	United Kingdom
Canon Deutschland GmbH	Germany
Canon France S.A.	France
Canon Italia S.p.A.	Italy

Name	Country/Region
Canon (Schweiz) AG	Switzerland
Canon España, S.A.	Spain
Canon Svenska AB	Sweden
Canon Norge A.S.	Norway
Canon Singapore Pte. Ltd.	Singapore
Canon Hong Kong Co., Ltd.	China

History and Recognition of Environmental Activities

Developments	Organization/Activity	Principle Awards
2002	• Started environmental analysis enterprise • Established Global Environment Promotion Headquarters	• imageRUNNER iR3300 receives Commendation from the Chairman of the Energy Conservation Center (ECCJ) • Canon U.S.A. receives the Environmental Progress Award (EIA) • Canon U.S.A. receives the ENERGY STAR® "Partner of the Year" Award (U.S. EPA)
2001 • 7th Conference of the Parties to the UN Framework Convention on Climate Change held in Marrakesh • Printer Eco-Mark established (type: 122) • Special Measures Law on PCBs takes effect • Law on Promoting Green Purchasing takes effect • Revised Waste Management Law takes effect • PRTR Law takes effect • Home Appliance Recycling Law takes effect • Law for Promoting Effective Use of Resources takes effect • Directive on the Impact on the Environment of Electrical and Electronic Equipment (EEE) issued	• Established Environment New Business Center • Canon Sales Group expands ISO14001 certification to 21 sites in Japan • PIXUS F/S Series BJ printers become the world's first BJ printers to gain Eco-Marks • Gained accreditation as a Guide 25 environmental calibration and testing laboratory and entered the commercial field of environmental measurement • Began using recycled PET in product parts • Succeed in making dry ice cleaning equipment more compact • Completed nationwide (in Japan) development of system for returning used copying machines • Canon Group Environmental Charter revised • Eco-Label Type III Ver. 2 announced • Moved forward with development of a standardized green procurement survey • Completed development of a cleaning technology using photo-functional water • Succeeded in making internal circuits for copying machines lead-free	• Canon Inc. receives the 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) • ENERGY STAR® "Partner of the Year" Award (U.S. EPA) • Canon (Schweiz) wins first prize for the best environmental report published by a large-scale enterprise in Switzerland (Swiss Association for Environmentally Conscious Management) • Canon Inc. receives Award for Excellent Companies at the 10th Global Environment Awards (Japan Industrial Journal and the WWF Japan) • Canon Group receives the Environmental Stewardship Award (Council on Economic Priorities) • Canon Italia receives Ecohitech Award 2001 (WWF Italia, Ecoqual'It) • Canon Inc. receives 40th Japan Industrial Journal Industrial Advertising Award's Multi-Advertising Category Gold Medal
2000 • Enactment of the Law on Promoting Green Purchasing • Enactment of the Basic Law for Establishing the Recycle-based Society • Revision of the Waste Disposal and Public Cleaning Law • Revision of the Law for Promotion of Effective Use of Resources • Enactment of the Container and Packaging Recycling Law • Promulgation of recycling-related laws • 6th Conference of the Parties to the UN Framework Convention on Climatic Change (COP6) held	• Established the new Environment Assurance system • Following the restructuring of the organization, redefined responsibilities and started incorporating them into the performance evaluation system • Started the recycling of toner bottles • Expanded application of Type III Eco-Label to the products manufactured overseas • Dry ice cleaning equipment developed • Revised the Canon Green Mark and issued the new guidelines • Announced the environmental accounting • Started the introduction of lead-free wires to business machines and BJ printers • Introduced the plastic sandwich molding technology • Announced the VOC decomposition technology by plasma • Makuhari headquarters of Canon Sales gains ISO14001 certification	• Canon Svenska named Environmental Supplier of the Year (Oscar Dellert CO.) • Canon Inc. receives "Excellence Award" at the Environmental Report Awards (Toyo Keizai Green Reporting Forum) • Canon Inc. receives the Copier of the Future IEA-DSM "Award of Excellence" (International Energy Agency) • Canon Opto Malaysia receives Selangor State Environmental Award (State of Selangor, Malaysia) • Canon Australia receives Sustainable Energy Development Authority Silver Award (Government Body-SEDA)
1980–1999 • Law for the Promotion of Effective Use of Resources (the Recycling Law) enacted • Agenda 21, Rio Declaration on Environment and Development, Earth Summit • BS7750 takes effect • ISO/TC207 international standardization of environmental management begins • International ISO14001 standards established • 3rd Conference of the Parties to the UN Framework Convention on Climatic Change (COP3) held • Pollutant Release and Transfer Register (PRTR) established	• Established systems to promote environment assurance • Completed Ecology Research & Development Center • Established Environment Engineering Center • Established Global Environmental Promotion System • Initiated toner cartridge recycling • Established Canon Environmental Charter • Created Environment Assurance Promotion Plan • Initiated cartridge recycling at Canon Dalian • Eliminated use of CFCs • Jointly sponsored UNEP World Environment Photo Contest • Formulated Voluntary Environmental Plan • Introduced product environmental assessments • Acquired BS7750 certification (Ami, Ueno and other plants) • Acquired ISO14001 (DIS) certification • Started the recycling of BJ cartridges in Japan • Established Canon Group mid-term environmental policies and goals • Launched Japan's first Type III Eco-Label • Disclosed environment information on Web site	• Canon Inc. receives Science and Technology Ministry Award at the 8th Global Environment Awards, (Fuji Sankei Group, Japan Industrial Journal) • Canon Inc. receives Award for Excellence of the Eco-Life Lake Biwa Awards (Shiga Pref., Nihon Keizai Shimbun Inc.) • Canon France receives Return Mark (French Environment and Energy Management Agency) • Canon Italia receives Eco Hitech Award 1999 (Ecoqual'It) • Canon Inc. receives "Outstanding Performance Award" at the 3rd Environment Report Awards (Japanese Environment Agency, Mainichi Shimbun, Nihon Keizai Shimbun Inc.) • Canon Inc. receives Grand Prize at the 1st Global Environment Award held by the Japan Committee of the World Wide Fund for Nature • Canon Group receives ENERGY STAR® Award for Technical Innovation (U.S. EPA) • Canon Inc. receives Outstanding Company Award at the 1st Green Procurement Awards

SustainAbility

SustainAbility has been asked to put Canon's corporate reporting into a wider perspective, comparing it with evolving international best practice as identified in our biannual international benchmark surveys of sustainability reporting in the 'Engaging Stakeholders Program'* — and in other recent reports prepared for the United Nations Environment Programme (UNEP).

The definitions of what it means for a company to be a good global citizen are evolving. For example, the environmental issues that led to the 1992 Earth Summit have only increased in importance over the following decade. Climate change, in particular, has become a major political issue, with striking national differences of opinion on the urgency of the challenge. But the 2002 World Summit on Sustainable Development will open out the political and corporate accountability agendas still further, resulting in even greater hurdles for those wanting to achieve best practice in corporate sustainability reporting.

The Global Reporting Initiative (GRI) is helping define the international requirements for corporate accountability and reporting. And SustainAbility's work in the area is about to go into a new phase, with the 2002 'Global Reporters' benchmarking survey of current best practice in reporting. As we screen reports from around the world, it becomes increasingly clear that most reporting companies are opening out the coverage of their reports to embrace multiple dimensions of performance. Whatever labels may be used, the focus increasingly is on the 'triple bottom line' of sustainable development, covering economic, social and environmental impacts, value creation and accountability.

It is clear that Canon aims to provide a high level of environmental assurance. That said, this report's coverage of the economic, social and ethical aspects of the emerging agenda is less strong. In order to effectively respond to stakeholder requirements, we recommend that Canon evolve its practices and reporting in four key areas:

Leadership
Canon could be more explicit in identifying how its top management sees the wider agenda — and defines its responsibilities. We recommend that Canon consider presenting a 'road map', incorporating highlights of the company's journey to date and milestones for future action.

Measuring social and economic performance
Best international practice suggests that more coverage is needed of social and economic aspects of the company's thinking, targets and performance, together with management strategies designed to bring the different dimensions together. On the economic side, overseas investment is a key issue. In addition, investors and analysts — among them the Dow Jones Sustainability Group Index — are encouraging companies to provide evidence for risk management, good governance and the exploration of new business models.

Diversity
This is a key concept of sustainable development and global citizenship. Canon, ideally, would report on its performance not only in relation to biodiversity but also to gender, age and ethnic diversity.

Business case
The report acknowledges the financial and environmental benefits of eco-efficiency, but the wider business case for sustainable development — and its links to Canon's overall business strategy — could be spelled out in more detail. We look forward to seeing Canon build on its strong existing position in future years.

June 2002

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Tomoo Machiba and
Tell Münzing
SustainAbility
www.sustainability.com



Disclaimer:
SustainAbility is an independent think-tank and consultancy. SustainAbility's views on Canon's Environmental Report 2002 are offered as a stakeholder and should not be considered either as a verification or as an endorsement of the report.

*For more information on the Engaging Stakeholders Program: www.sustainability.com/engaging

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.

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_2, methane, nitrous oxide, HFCs, PFCs, and SF_6 — 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.

Inverse Manufacturing
Conventional manufacturing focuses on the design, manufacturing, and use processes, paying 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 after-use processes. Inverse manufacturing requires that an industry of individual companies establish recycling routes and install inverse manufacturing lines at recycling plants, etc.

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 in Japan 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 asses 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
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 21st century. This plan is based on Japan's Environment Basic Law.

Tell Us Your Opinions

Thank you for taking the time to read the Canon Environmental Report 2002. Now, we would very much appreciate your using the survey below to let us know your opinions about the content of this report and the Canon Group's environment assurance activities. The opinions we receive through this survey will be very valuable to us in shaping our future environment assurance activities and improving our reporting of them. Once you complete the survey, please fax it to the following number:

+81-3-3757-8208

Global Environment Promotion Headquarters,
Canon Inc.

■**How would you rate this report in terms of its clarity?**
☐Good ☐Fair ☐Poor
Please write any comments you would like to make.

■**How would you rate this report in terms of its detail?**
☐Good ☐Fair ☐Poor

■**Which parts of the report did you find most interesting? (Indicate as many as you would like.)**

☐Business Activities and Environment Assurance
☐Reducing the Environmental Burden of Operational Sites
☐Product Reuse and Recycling
☐Environmentally Conscious Management
☐Activities that Benefit Society
☐Environmental Consciousness in Products
☐Reducing the Environmental Burden of Logistics
☐Development and Commercialization of Environmental Technology
☐Environmental Communication

■**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 the Canon Group's environmental activities, please write them in the space below.**

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

☐Canon's homepage
☐Newspaper, magazine
☐Seminar, lecture, etc.
☐Product exhibition
☐Canon sales representative
☐Other ( )

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

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

■**Please fill in the following, omitting any information you prefer not to provide.**

Name: ☐Male ☐Female Age:

Address (including postal code):

E-mail:

Tel: Fax:

Name of Company or School:

Department/Position:

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