Sustainability Report 2003

THE DOCUMENT COMPANY
FUJI XEROX

Notes on Sustainability Report 2003

■Reporting Principle

We released our first environmental report under the title of “Environmental Progress Report 1998” in 1999. For the years 2000 to 2002, the title was further changed to “Environmental Report”. This edition is named “Sustainability Report 2003”. In earlier reports as well, we mentioned ethics, personnel systems, and our community involvement under the banner of “harmony among society, employee, and company”. In recent years, however, increased interest in corporate social responsibilities has been observed. We have this time featured greater scope of information in this regard.

■Scope of Coverage

The environmental impact data presented in this report covers all the domestic sites and overseas production sites, which is the same as the environmental accounting. In FY 2003, overseas sales companies plan to introduce ISO 14001 management systems. In sustainability report for FY 2004, the scope of coverage will be expanded to include all the overseas affiliates so as to match the scope of our consolidated financial accounting.
The report covers data from April 1, 2002 to March 31, 2003. Certain parts of the report provide data for a period from April 2003.

■Reference Guidelines

Following guidelines are referred:
The Environmental Reporting Guidelines by the Ministry of the Environment, the Sustainability Reporting Guidelines by the GRI,* the 15th Corporate White Paper by the Japan Association of Corporate Executives
* GRI: Abbreviation for Global Reporting Initiative, an international organization established in 1997 for the purpose of developing globally applicable Sustainability Reporting Guidelines

■Independent Assurance Report

In 2001 and 2002, we included the Comment of our auditors concerning the content of those reports.
This year, the third-party verification by Chuo Aoyama Sustainability Certification Organization Co., Ltd. is introduced.

■Release of the Next Report

Release of this report was delayed by one month. The follower will be published in July 2004.

■Remarks

· Meanings of icons used throughout the text
Web : URL of the website containing related information
· Universal design is considered for the graphs, charts, etc., which accommodates the color weak.
· A survey sheet is included at the end of the book. Your views, suggestions, or questions would be appreciated.

Enquiries

If you have any questions regarding this report, please get in touch with the following department:

Corporate Environment Management (renamed in October 1, 2003)
TEL: +81-3-5573-2882 FAX: +81-3-5573-2883
E-mail: ecology@fujixerox.co.jp

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Overview of Fuji Xerox and Its Affiliates

Fuji Xerox Co., Ltd.

Headquarters	Akasaka Twin Tower East 17-22 Akasaka 2-Chome, Minato-ku, Tokyo, Japan 107-0052
Telephone	+81-3-3585-3211
Established	February 20, 1962
President	Toshio Arima
Paid-in capital	¥20.0 billion (As of March 31, 2003)
Shareholders	Fuji Photo Film Co., Ltd., 75% Xerox Ltd., 25% (As of March 31, 2003)

■ Main Domestic Operations

Headquarters

Manufacturing, R&D Sites

- Ebina : Ebina city, Kanagawa pref. (Machine development & production)
- Takematsu : Minami-ashigara city, Kanagawa pref. (Consumables development & production)
- Iwatsuki : Iwatsuki city, Saitama pref. (Machine development)

Research Laboratory

Central Research Center: Ashigara-kami gun, Kanagawa pref.

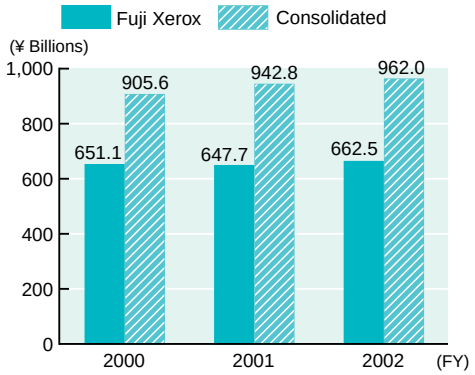
Sales & Service Offices Located in all major cities throughout Japan

Corporate Domain

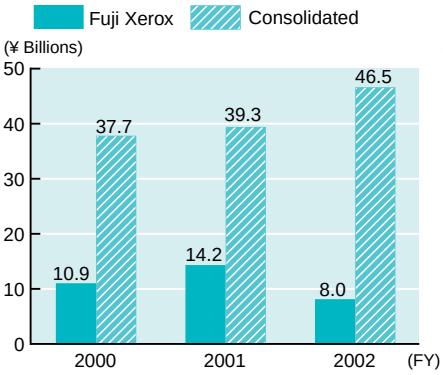
Fuji Xerox defines a “document” not only as information marked on paper but also as knowledge formed on multimedia including electronic data, images, and audio, etc. We have sought ways to effectively share and use such document which, we consider, is one of the most crucial business resources. By delivering the document utilization service to our customers, we focus to drastically enhance productivity of document generation, storage, and handling. To rapidly enhance office productivity, this awareness has set us on a path of revolutionizing the process of providing document services to customers.

Offerings	Key products
Document services	Office copiers Work stations Personal computers Facsimiles CAD systems Plotters Printers Copy paper Electronic parts, others
Others	Educational services

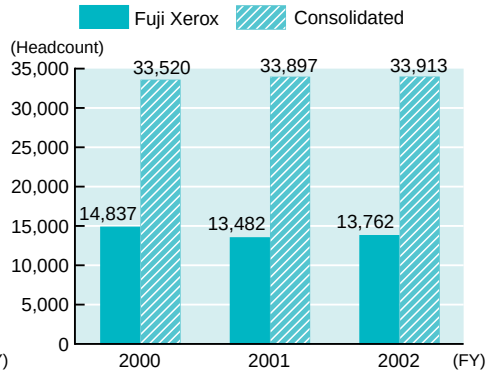
Performance in FY 2002 (April 1, 2002 to March 31, 2003) (Source: Securities Report)



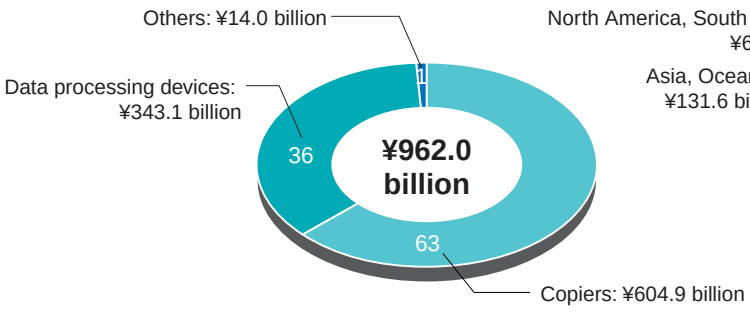
Revenue



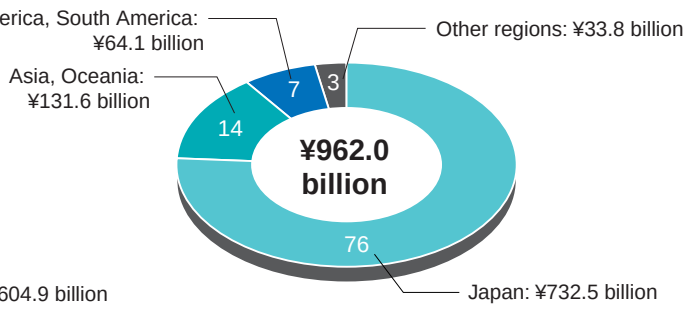
Recurring Profit



Number of Employees



Revenue by Product (Consolidated)



Revenue by Region (Consolidated)

Customers

Fuji Xerox family companies
Subsidiaries 75 companies
(Including 73 that are counted as consolidated)
Affiliates 19 companies
(As of March 31, 2003)

<Overseas sales companies>
Subsidiaries
· Fuji Xerox Australia Pty. Ltd. · Fuji Xerox Singapore Pte Ltd.
· Fuji Xerox New Zealand Ltd.· Fuji Xerox Philippine Inc.
· Thai Fuji Xerox Co., Ltd. · Fuji Xerox (Hong Kong) Limited
· Fuji Xerox Industry Development (Shanghai) Co., Ltd., 10 others
Non-consolidated companies Wuhan Xerox Business Co., Ltd.
Affiliates Xerox International Partners, 3 others

<Domestic sales companies>
Subsidiaries Tokyo Xerox Co., Ltd.
Osaka Xerox Co., Ltd., 31 others
Affiliates Oita Xerox Corp., 7 others

<Companies managing Asia Pacific Region>
Fuji Xerox Asia Pacific Pte Ltd.

<Parent company> Fuji Photo Film Co., Ltd.

<Overseas manufacturing and sales companies>
Subsidiaries Fuji Xerox Korea Co., Ltd., 2 others
Affiliates Taiwan Fuji Xerox Corp., 1 other

Fuji Xerox Co., Ltd.

<Domestic sales and service companies>
Subsidiaries
Fuji Xerox Office Supply Co., Ltd. Fuji Xerox Distribution Co., Ltd.
Fuji Xerox Information Systems Co., Ltd. Fuji Xerox Engineering Co., Ltd.
Fuji Xerox Carrier Net Co., Ltd. Fuji Xerox Systems Service Co., Ltd.
Fuji Xerox Learning Institute Inc. Fuji Xerox General Business Co., Ltd.
Fuji Xerox Printing Systems Co., Ltd., 1 other
Non-consolidated subsidiaries Protex Co., Ltd.
Affiliates Contents Works Inc., 3 others

<Overseas manufacturing companies>
Subsidiaries
Fuji Xerox of Shenzhen Ltd.
Affiliates
Zikom Documents Communication Systems Limited

<Other companies>
Subsidiaries
FX Global Inc.
Fuji Xerox (China) Limited
AccessTicket Systems Inc., 2 others

<Domestic manufacturing companies>
Subsidiaries
Suzuka Fuji Xerox Co., Ltd.
Fuji Xerox Imaging Materials Co., Ltd.
Niigata Fuji Xerox Manufacturing Co., Ltd.

Fuji Xerox Group's Sales and Service Areas

As shown in the map on the right, our sales and service territory covers Japan, People's Republic of China, and other countries and regions in the Asia Pacific. Other areas are covered by Xerox Corp. and Xerox Ltd.

Message from the President

Continuing to Be the Company of Choice in the 21st Century

Our Goal: To Be an "Excellent Company" That Is Strong, Kind, and Interesting

Toshio Arima
President
Fuji Xerox Co., Ltd.

Our first *Environmental Report*, which outlined the measures we have taken to address environmental issues, was published in 1999. In this FY 2003 edition, our fifth report, we have changed the title to *Sustainability Report*. Our previous reports also included information on the social and philanthropic activities pursued by Fuji Xerox and its affiliated companies, including the policies and systems we have developed as a global and corporate citizen with the aim of maintaining our corporate transparency vis-à-vis society. This year, we have adopted a higher perspective of corporate social responsibility (CSR) to address the closely interrelated issues of social role, environment, and ethics. In this way, we have entirely revised the structure of the report so that readers can gain an integrated and systematic understanding of our efforts.

The "Excellent Company" Concept: Strong, Kind, and Interesting

"Strong" refers to economic values; "Kind" pertains to social values; and "Interesting" relates to human values. These are the three cornerstones of Fuji Xerox's approach to our business operations. Using our technical, managerial, and financial resources, we will continue to provide our customers with unique, high-quality products. At the same time, we aspire to be a company that is intimately connected with society and shows genuine concern for such issues as ethics and the environment. To support a company that is strong and kind, we seek inspiration as a corporation by making all the work we undertake interesting. As our employees become involved in exciting and interesting work that is unique to our company, they will experience personal growth, enjoy a sense of progress, and achieve self-realization. Our customers and vendors will also sense that there is something different about Fuji Xerox employees in their vitality and inspired engagement. In short, the goal of Fuji Xerox and its affiliated companies is to become an "excellent company" that effectively balances the attributes of strong, kind, and interesting.

Our Corporate Culture

In 1962, we began our rental business featuring revolutionary new copiers that used plain paper instead of the usual photosensitive paper. By renting instead of selling equipment, our aim was to constantly improve our customers' office productivity by engaging in steady technical innovation and quality control, thus enabling us to provide the optimal products to meet the changing needs of our customers. At the same time, the environmental concepts of recycling and reuse were built into our rental business from the very beginning.

In 1970, when ecological concepts had begun to attract the attention of society and industry in Japan (as reflected by Expo 70 held in Osaka under the theme, "Human Progress and Harmony"), Fuji Xerox launched a one-year advertising campaign called "From a Workaholic to Beautiful". This campaign resonated with many people who sought to extricate themselves from a "work-only" mentality by seeking to restore their basic humanity. In this case, the concept of "beautiful" was an ecological one that valued process over results and that heralded the arrival of a new age.

Since the 1990s, we have forged ahead in various ways in response to social changes. We were the first in the nation to introduce a leave-of-absence system for our employees expressly designed so that they could engage in social service. The social impact of this innovation has been widely recognized and applauded. Similarly, we introduced childcare and nursing-care leaves-of-absence systems before they became legally mandated in an effort to meet the needs of Japan's low birthrate and aging population.

With regard to corporate ethics, we formulated our Corporate Behavior Guidelines in 1988. These were revised as our Employee Code of Conduct in 1997, after which we implemented educational programs in all affiliated companies in an effort to raise employee awareness. In the field of environmental conservation, we have continued to expand our original rental business while developing advanced product recycling systems and new, energy-efficient products that are considered benchmark models in the industry. In 2002, our entire organization, including overseas affiliates, began implementing an environmental action program aimed at reducing the burden placed on the environment by all of our products in all phases of their life cycle, with a focus on such concerns as preventing global warming and reducing resource use. Going beyond the mere provision of products and services, we proclaim our awareness and preparedness for the coming age and base part of our identity on the development of new values that are of benefit to society.

In October 2002, we introduced our new business vision, Open Office Frontier, which combines the concepts of Open Office and Office Frontier. Open Office is a business environment that transcends the limitations of time, space, company, and organization to allow wider human interconnection and knowledge sharing. Our business vision proclaims our commitment to exploring this unknown world with a frontier spirit.

Japan's prolonged recession has intensified the bleak business environment surrounding domestic companies. To solve this dilemma, there is a growing demand for new values that will boldly break down conventional frameworks and open up today's closed conditions. As a first step, we need to broaden our concept of the workplace, which until now has been rigidly bound within the corporate framework. We must also spark a "chain reaction of creative knowledge" through the dynamic collaboration of various stakeholders, including companies, governmental authorities, and the general public.

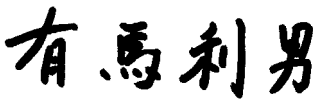
In 1991, Fuji Xerox adopted the principle of "The Document Company" and defined "document" as "knowledge that has been given form". Through the hardware, software, and solutions we create using the "documents" we have acquired over the course of many years, we support the Open Office environment that gives rise to the "chain reaction of creative knowledge".

Endeavoring to Be an "Excellent Company" and the Company of Choice in the 21st Century

We at Fuji Xerox are committed to creating beneficial values unique to our company through the ongoing development of innovative technologies and managerial improvements. This is both the basic reason for our existence and our corporate responsibility. To fulfill this responsibility, we will maintain a high level of discipline and transparency and show a genuine concern for the environment, while incorporating these values in the very foundation of our operations. Furthermore, we will not simply react to external changes in society, the environment, or regulations, but rather act proactively and create changes from within based upon how we think our company should properly operate.

Social and environmental problems are too vast to be solved by Fuji Xerox and its affiliates alone. Still, we believe that we can make steady progress by listening earnestly to those who work side-by-side with us, including other companies, the general public, and most importantly, our customers. With that in mind, we would appreciate your frank comments.

Toshio Arima
President
Fuji Xerox Co., Ltd.



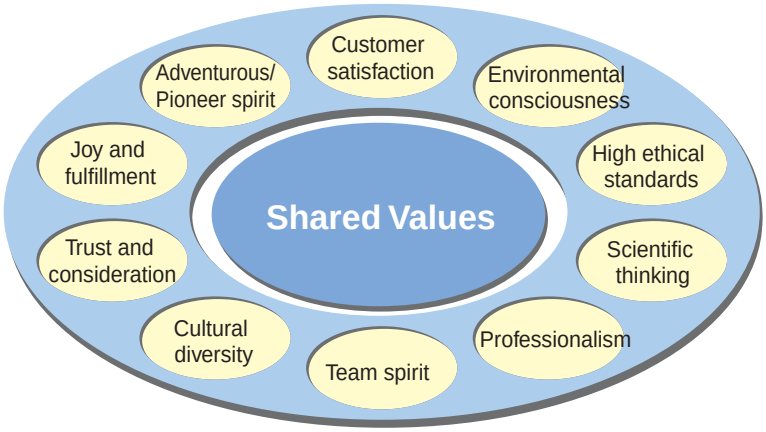
Corporate Management–Aiming to be an ideal company

Corporate Mission and Governance

In 1998 we drafted our two fundamental mission statements “We, the Fuji Xerox Group, will strive to;” and “Shared Values”. The statements were intended to serve as a guideline for each of the employees, business management, and decision-making process. These statements were inspired by our fundamental corporate mission, which sets forth our key objective to work for the benefit of our stakeholders, including the customers, employees, shareholders, business partners, and society at large. Corporate governance is a managerial framework that allows the steady attainment of our corporate mission. We strive to develop management systems, maintain and improve business ethics, and improve transparency through information disclosure.

We, the Fuji Xerox Group, will strive to;

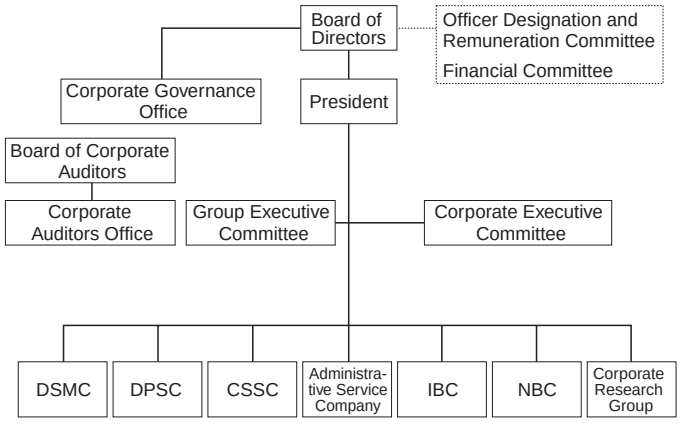
- Build an infrastructure for the creation and effective utilization of knowledge
- Contribute to the advancement of the global community by continuously fostering mutual trust and enriching diverse cultures
- Achieve growth and fulfillment in both our professional and personal lives



Management System

We have made a continual effort to improve transparency of management and strengthen power of our board of directors, so as to keep a step ahead of legislative changes. One of the examples is control by our external board of directors, which we established as early as 1962. In 1999 we adopted the Executive Officer System and established the Officer Designation and Remuneration Committee, and the Financial Committee as sub-committees under the Board of Directors. To build a constructive and cooperative relationship between the Corporate Executive (President) and the auditors, for example, they signed the “Auditors’ audit agreement” which guarantees the auditors to retrieve information and encourages the management to reflect auditors’ opinions. As being a joint venture company, we deployed the external auditor institution since the company foundation to assure thorough auditing. The Corporate Executive Committee and the Group Executive Committee are the top decision-making bodies for managerial execution. Under these bodies, there placed the seven subconferences headed by the president, which clearly define lines of authority and responsibility to help speed the decision-making process. Business operations of the internal companies and affiliates, domestic and overseas, are performed under this control system.

Management Organization



Internal Companies

Subconferences below the Corporate Executive Committee

Customer Satisfaction & Quality Conference	Refer to page 10 for details of the product quality and safety in light of customer satisfaction
Risk & Ethics Conference	The following page
New Xerox Conference	Fundamental policies and companywide measures for strengthening management and New Xerox activities
Environment Conference	Page 28
Information Process Conference	Implementation of information technology for the company-wide process innovation
Technology Conference	Technological strategies and technology selections
Marketing Conference	Cross-company marketing activities

Ethics and Compliance–Developing high ethical standards

One of our Shared Values statement is "High ethical standards". The key to a good standard of corporate behavior is for each employee to have a high sense of ethics so that they have the ability to make the proper judgments in rapidly changing situations, which are often beyond the existing standards. The sense is comprised with the personal and corporate ethics.

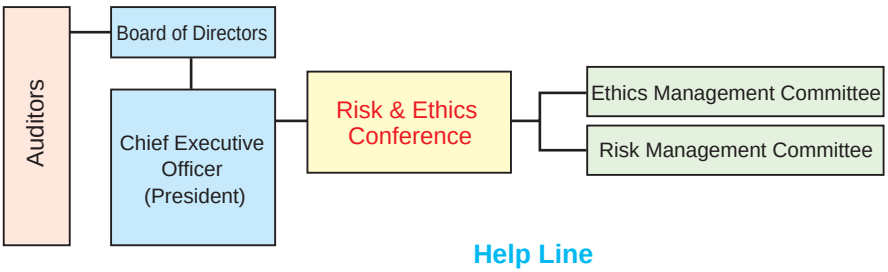
Ethics and Compliance Management

Ethics- and compliance-related issues are deliberated by the Ethics Management Committee (chaired by the Director in charge) and are resolved by the Risk & Ethics Conference meetings (chaired by the President). Internal supervision of the legal compliance is carried out by the Head Office Legal Department. The General Affairs and Personnel Departments are in charge of personal ethical issues and compliance within the workplace, and support the internal companies and affiliates.

Employee Code of Conduct and Ethics Training

In 1998 we published our Code of Conduct for the executive officers and group employees. It was revised in 1997 and 2002. The Code of Conduct is applicable to our domestic and overseas affiliates with modification where necessary. At sometime between 1999 and 2001 all the employees participated in an ethical training program. In 2002, most of them submitted a written pledge to follow the ethical standards.

Risk & Ethics Conference



Monitoring and Auditing

Standards of ethics and compliance are monitored through daily inspections and self audits by the heads of each division and department. In parallel, the internal monitoring division (Management Auditing Division) performs its own detailed checks focusing on one particular aspect of management. The results are reported to the President and the Executive Officers who in turn devise amendment measures to deficiencies.

Help Line

In 1997 we introduced a consultation line to cope with sexual harassment. We subcontracted the operation to an external company so that employees may freely talk relevant concerns without reservation. Also in 1997 we established an ethics consultation desk, which was upgraded in June 2003 to a corporate ethics help desk. Besides helping our own employees, the new desk offers the service to temporary staff employees and the employees of our affiliated companies. In this way we are strengthening the security and protection of our employees.

Content of Employee Code of Conduct

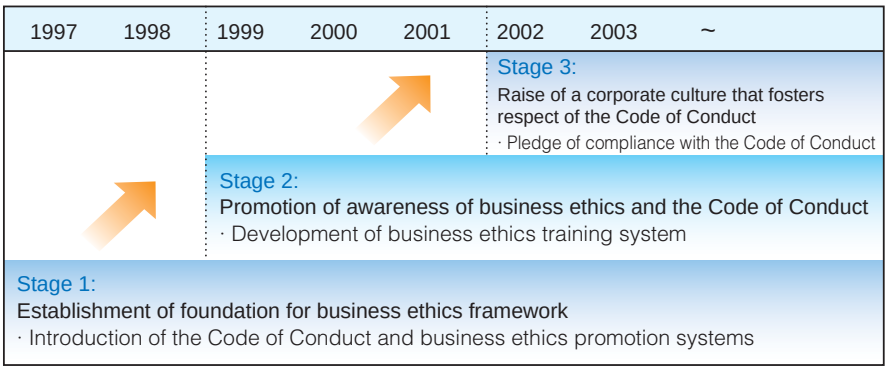
General Rules

(Purpose of introduction, Scope of application, Fundamental employee responsibilities, Reporting obligations, Consultation offices, Responsibilities of General Section and Division Chiefs, Submission of written pledges, Penalties imposed on violators, Procedures for amendment)

Articles

1. Respect of human rights
2. Prohibition of conflict of interests
3. Self sufficiency in personal life
4. Respect for health, safety, and environment
5. Sincerity in communications
6. Fair business competition
7. Fair purchasing activities
8. Restriction on receipt of gifts
9. Limitations on giving of gifts
10. Compliance with public procurement rules and association with civil servants
11. Giving and receiving gifts among employees
12. Respect of the property of others
13. Protection of corporate assets
14. Prohibition of fraudulent bills or unapproved side businesses
15. Prohibition of ideological or religious promotion as a Fuji Xerox employee
16. Prohibition of personal use of undisclosed information obtained from operation
17. Requirement for accurate recording and reporting

Development of Business Ethics Framework



Information Disclosure–Aiming at greater transparency and fairness

Policy

In 1999 we replaced our “Corporate Information Confidentiality Regulations” with “Corporate Information Treatment Regulations”. Under the earlier regulations, business information was confidential in principle. Now we are encouraged to release such information as has significant influence on benefits of the shareholders and customers, health and safety of the employees and neighbor citizens, and natural environment. Under our information disclosure guidelines, the new regulations define the followings:
(1) All the business information may be disclosed when no specific reason is noted.
(2) The confidentiality of information is subject to the creator’s liability.
(3) Creators are expected to utilize information asset without excessive protective control.
The regulations also contain provisions to protect personal and other confidential information so as to prevent the inappropriate acquisition or use.

Disclosure Guideline

With the intent to be a transparent and fair company, Fuji Xerox developed a guideline to disclose business information in view of the social responsibility. Accordingly, the guideline advocates prompt disclosure of information that relates benefits of the shareholders and customers, effects on health and safety of the employees and neighbor residents, and/or the natural environment if so concluded.

Corporate Information Treatment Regulations–Three principles

1. Policy
   All corporate information may be disclosed in principle.
2. Principle of self-liability in treatment of information
   Original creators are expected to utilize the information asset without excessive protective control.
3. Harmonize effective use and protection of information
   The company shall balance the needs to disclose and protect business information. This is to encourage the utilization without excessive protective control.

Information Ethics and Information Security Education

In January 2000, we delivered all the employees copies of our “Corporate Information Treatment Handbook” to improve the awareness and discretion of information ethics and information security. Furthermore, sometime between March and December 2002, we opened educational seminars to the some 28,000 employees, including those of our domestic affiliates as well as our temporary staff. To help complete the execution in 10 months, we introduced a training website, which allowed employees to study at respective convenience.

Web-Based Training on Information Ethics

Evaluating Our Business Ethics and Information Disclosures

Social Appreciation

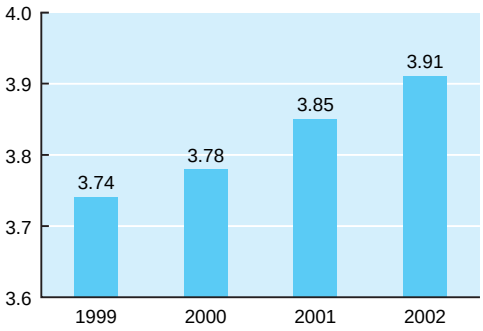
During the last three years, Fuji Xerox received three consecutive prizes in recognition of its achievements in the business ethics and information disclosures. In the “Corporate Social Contribution Awards” sponsored by the Asahi Shimbun Foundation (Chairman: Shinichi Hakoshima), we won the Grand Prize in 2001, the Corporate Ethics Prize in 2002, and the Information Disclosure Prize in 2003. In addition, we were awarded the “Prize for Efforts in Business Ethics” by the Business Ethics Research Center in recognition of our efforts to implement and practice corporate ethics in December 2002.

Testimonial of Corporate Social Contribution Prize and Information Disclosure Prize Awarded by the Asahi Shimbun Foundation

Evaluation by Employees

We annually survey and analyze the ethics and compliance status in part of our employees’ poll. According to the results, the evaluation has been improving each year since 1999 when the ethics training started. In FY 2002 we implemented a multi-facet appraisal for managers by superiors, colleagues, and subordinates. The results indicate achievement of the ethics and compliance standards.

Employee Morale Survey
Employees Who Rate the Company as “Having a High Moral Standing”



Average value of responses on five-level scale

Employees rate the company’s ethical standing as gradually improving since 1999.

Communications between Corporate Officers and Employees

Top Caravan

It is essential for corporate governance to improve mutual trust and understanding between the management and employees. Part of such communication is the top caravan, or meeting with management. 5 to 6 executives meet with employees to discuss mutual interest or concern. From August 2002 to February 2003, total 1,150 employees (including affiliates) participated in a series of the caravan held in 14 different venues. Some of the participated employees formed 25 follow up teams that released a joint statement entitled “Proposals to Top Management” in March 2003. The top management reviews the proposals for possible execution in FY 2003. The meetings are continued with wider scope to include managerial staff.

Objectives of Top Caravan

- An opportunity for top management to share with employees the future corporate directions
- Top management and employees to promote mutual understanding through dialogue
- Employees who have little contact with top management to present concerns and wishes, and receive an immediate response on a face-to-face basis
- Employees to raise questions about persistent problems for solution
- Dialogue leads to prompt and better action

Top Caravan in Place–The informal setting helps encourage active discussion

Customers–Earning satisfaction and trust

Understanding for Better Service

We at Fuji Xerox have positioned customer satisfaction as a core of our Shared Values statement and the associate enhancement as a prime objective of our business operations. We define the goal to enhance customer satisfaction as “development of a long-term mutual trust through achievement of maximum customer satisfaction by continuously creating and providing such values as our customers require”. We consider that our effort in this regard will lead to improved business achievements for Fuji Xerox and its affiliates.

The Customer Satisfaction Guideline of Fuji Xerox and Its Affiliates

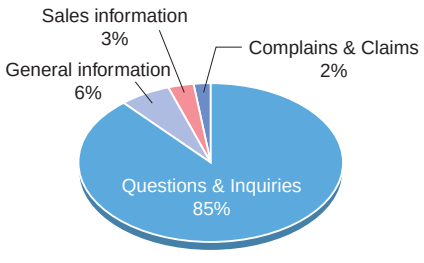
1. Business be started by listening to our customers
2. Business be ruled in our customers’ perspective
3. Business be accounted by responding to our customer expectations
4. Business be rewarded by obtaining our customers’ satisfaction
5. Business performance be measured by our customers’ reputation

Understanding Customer and Market

The first step towards customer satisfaction is to understand the customer and market. As the proportion of our direct channel of sales and services is relatively high, we are able to routinely obtain customers’ needs and views to our business.

Call Center

We have established the Call Center (toll free: 0120-274-100) to receive comments and inquiries of our customers. To enable the Center staff to give on-the-spot replies to inquiries, we provide the Center staff with training programs and an information support system to timely reply customers’ inquiries.
(Following data based on January-December 2002)



Reception Content

Responding to Customer Needs

On-Site Response

If we receive claims and complaints from our customers, we will promptly attempt to solve whatever problem of our products, services, or organizations. The Call Center received last year total 920 complaints and claims, and 54% of the total is on organizations, 28% on products, and 18% on staff. The information was provided to the responsible groups for amendment and follow-up. All views and opinions of our customers are promptly relayed to concerned parties to modify and/or develop products, services, and structure, etc.

Managerial Involvement

Our top managements also work to improve customer satisfaction by holding Customer Satisfaction & Quality Conference. The conferences are held once a month and attended by the Deputy President and the presidents of the group companies, headed by the President of Fuji Xerox. The conferences are intended to provide the top managements with an opportunity to recognize and discuss problems concerning customer dissatisfaction and facilitate necessary solutions.

Customer Satisfaction Monitoring

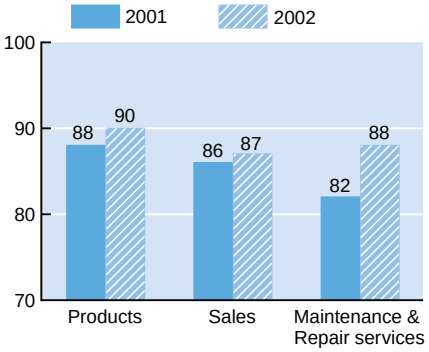
Capturing Customer Satisfaction

We regularly monitor the satisfaction of our customers so that we may fine-tune our products and services to meet or even exceed customer expectations. Monitoring is carried out through Fuji Xerox surveys and by a third party.

Survey Results

The following bar graph shows our level in satisfaction of the leading private companies and central governmental agencies. Polled in our annual customer survey. The survey was made up of 52 questions. The customer evaluated them on seven-point scale ranging from “Completely Satisfied” to “Completely Unsatisfied”. Each year we use the survey as a key reference for improving customer satisfaction. In case of dissatisfaction with our performance, we visit the customer in person to listen to the opinions. The information gained is then used as reference for our countermeasures.

Customer Satisfaction Survey
(Proportion of total responses marked with Completely Satisfied, Satisfied, and Reasonably Satisfied)



Results of Third Party Survey

Fuji Xerox was voted 1st for the fourth consecutive year in both color and monochrome laser printer categories of the 2002 Printer Customer Satisfaction Survey℠ (Commercial users)* performed by J.D. Power Asia Pacific.

* Response from 2,571 companies with 30 or more employees. For details, refer to: www.jdpower.co.jp/index_e.html

Quality Assurance and Product Safety

Every effort is made to supply our customers with products that are useful, safe, and of quality, and quality assurance activities to the following fundamental principles are performed:

(1) Be responsible for the product delivery
(2) Meet the customers' expectation
(3) Be prepared for unexpected incident

As the safety of our products is the most important, we always strive to assure it so that our customers can use our products with relief.

Responsibility in Product Delivery

Our role is to provide such products as build up our supporters through satisfaction and reputation. To develop superior products, we have established the fundamental principles as "Quality Assurance Regulations".

Meeting Customer Expectations

We make a continual effort to provide a level of quality that lives up to customer expectations. Customers do not always clearly state what they want in a product or service. In such case, it is our role to find out and provide products that satisfy customer expectations.

Prepared for Unexpected Incident

To deal with unexpected problems we have an emergency response system available 24 hours a day, 365 days a year. In the event of a breakdown or other occurrence, we immediately notify the managerial officer concerned, and make an effort to minimize inconvenience of our customers.

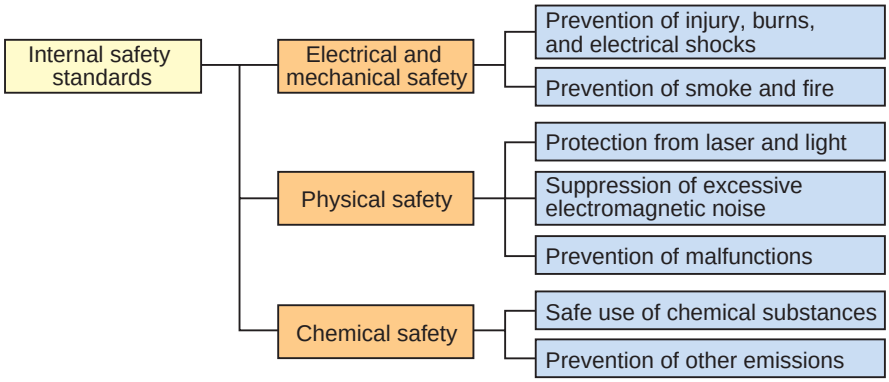
Product Quality Regulations

1. Continual improvement of product quality to meet customer satisfaction
2. Consideration to avoid possible impact to customers' health or property, and neighbor environment
3. Disclosure of product quality and security of customer particulars
4. Compliance with legal and voluntary standards in product delivery
5. Scope of quality assurance and product guarantee

Required Safety Level

We have established a set of own safety standards common to our products, setting minimum level of safety required for all products. The standards consist of related laws and regulations, domestic and overseas, standards of the industry association, and voluntary ceilings of higher safety.

Overview of Safety Standards



Flaming Printer

Despite making efforts to ensure product safety, we experienced in 2002 the overheating problem in our printer engines. We expressed our sincerest apologies and regrets for the inconvenience to our customers. Soon after the accident we released an announcement describing the incident and began free replacement of the defective part. We will take every possible means to continue the replacement by notifying customers who are not yet aware of the fault. Also we formed a team of internal and external investigators to seek the root causes in light of technology, process, and management. Based on the findings of the team, we made a number of modifications to our policy, technical standards, management process, and personnel training programs, and established stringent measures to prevent repetition of this or any similar event.

Collaboration with Customers

In 1998 we began collaborative activities to provide our customers with an opportunity to better understand our company as well as products and services. They are so designed as to share respective best practices for mutual benefit. In FY 2002 total 3,150 persons from 1,650 user companies participated in the collaborations held at our West and East Japan Branches. In FY 2003 we will enhance the activities to facilitate our “Open Office Frontier” concept for better collaboration among interested companies.

Collaboration Programs (Application)

Basic Menu	· Management quality · Environmental management systems (ISO 14001) · Knowledge management · Sales Force Assistance (SFA) · New personnel systems · Business ethics/Social contributions · Information security control
Advanced Menu	· Corporate best practice (Some 100 practices including network security, sales information & document management, and Call Center) · Electronic document management process · Maintenance services · Carrier development · Sales force management · Affiliated companies · Ebina recycle line · Takematsu collaboration

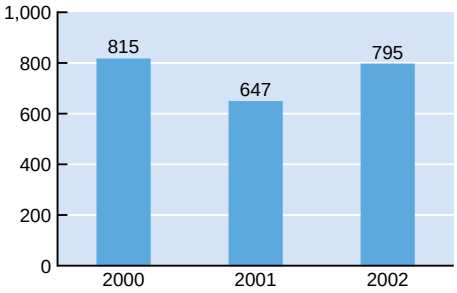
<Friday Collaboration Room>

Collaboration meetings are held Friday afternoon at our eight sales offices in Tokyo. A meeting introduces one of the 16 topics most interesting to our customers. Discussion sessions are held at the end of each presentation, sometimes leading to new cooperation between participating companies and promoting “circulation of knowledge”.

Menu of Topics Presented in Friday Collaboration

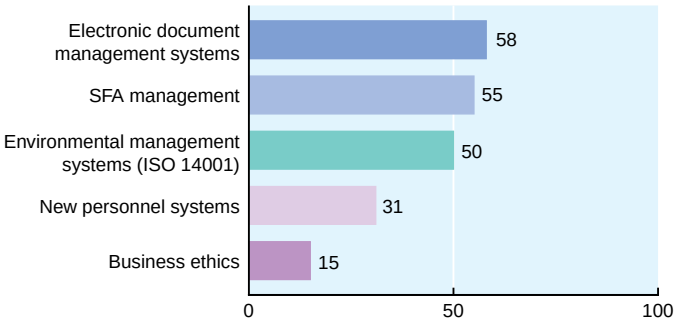
The “Collaboration Room” in the Johoku Office

Collaborative Activities of the Tokyo Office
Customer Participation in Collaborative Meetings



Total 852 companies participated in the collaborative activities held in our West Japan Branch in 2002.

Five Most Popular Topics Chosen by Customers
Seminars by Topic Held in FY 2002



Employees–Career development for advancement and satisfaction

Personnel and Organization

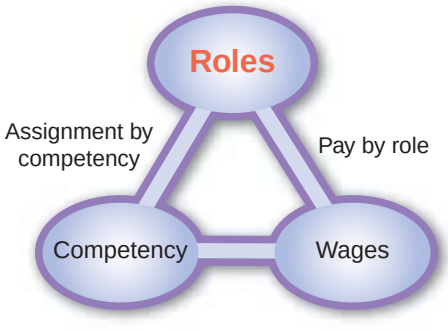
One of our objectives is to promote carrier development of our employees.
We attempt to realize by (1) “inspirational” work and office, (2) challenge spirit, and (3) combination of the corporate strategy, carrier promotion, and development. They not only help boost individual performance but serve to continuously strengthen our company structures.

Personnel by “Role”

Our personnel system focuses on the individual role and competency to improve each performance.

Dedicating “Role”

Under our personnel system, our top managements create the corporate strategies and the organization managers dedicate the necessary roles. Required abilities and standard wage of a role are specified, and employees are rewarded with respective achievements. Information of each role is shown on the intranet.



Even Footing between Company and Employees

Employees can challenge a new role referring to their carrier development plan including timeframe, location, and competency. Basis of our personnel lies in the balance of reward and capability which can be upgraded by professional skills.

Supporting Competency Development

Overall performance and achievement of the company are to progress through and by summation of carrier development of every employee. Fuji Xerox supports the employees’ career development.

Competency Assessment

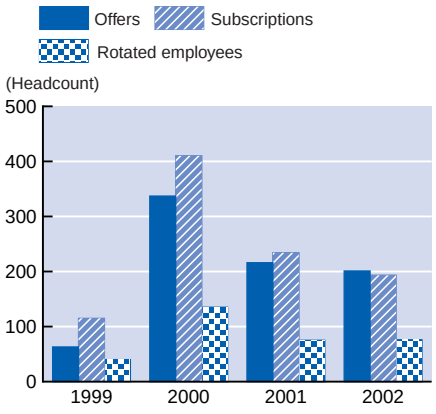
Carrier development commences with accessing individual current competencies and identifying a carrier goal in a mid to long term. Employees and their superiors have an annual meeting for performance appraisal and specifying competencies to develop present improvements and a carrier goal. In addition, from a company-wide point of view, coherence of strategy implementation and competency stock can be reviewed and the findings are reflected to future recruitment and training.

Employee Satisfaction

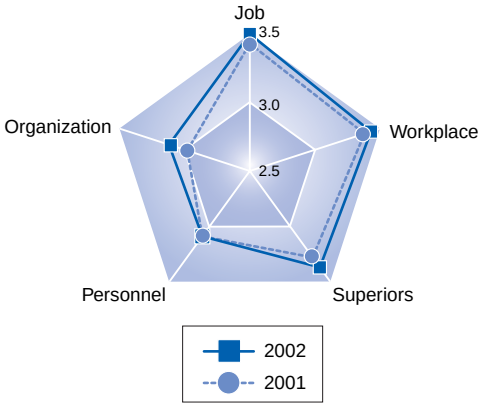
Employee satisfaction is annually surveyed company-wide, which we call “Moral Survey”. The survey is composed with total 59 questionnaires including 5 clusters of assignment, office, superior, promotion, organization, and free description. Summary of the result is published throughout the company and individual organization, from assembly shop to senior management, which consider possible solution and improvement. The results of the 2002 survey indicated a trend towards greater satisfaction.

Subscription and Rotation

It is our routine to offer a new assignment identifying necessary competencies by means of the “Personnel News”, an internal newspaper, and Intranet. Willing employees can subscribe if the requirement is close to that of their carrier goal. In case there is little discrepancy between those, employees will assume a new assignment without approval of their present organization. 75 persons were rotated this way in FY 2002.



Internal Recruitment System Performance



Employee Work Satisfaction
(Based on 5-level evaluation)

Respect of Diversity

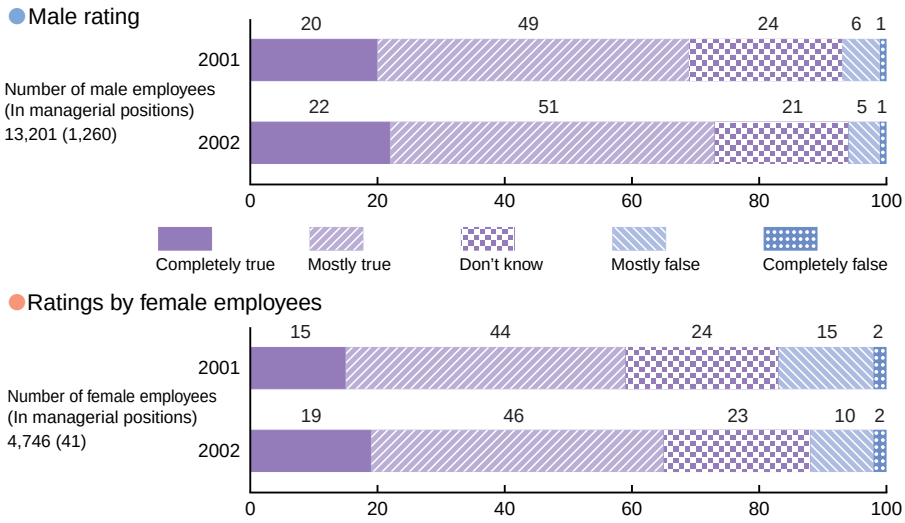
"Respect of diversity" is featured in our "Shared Values" statement.
Our senior management and union members work together to create a workplace where employees feel free from such discrimination as in religion, race, gender, and such.

Equal Opportunity for Male and Female

The number of female employees in managerial positions at Fuji Xerox is relatively low in proportion to that of male.
Yet, the Moral Survey of 2002 showed 27% of male and 35% of female employees had felt inconvenience and disadvantage because of gender, which indicated improvement if compared to the previous year.

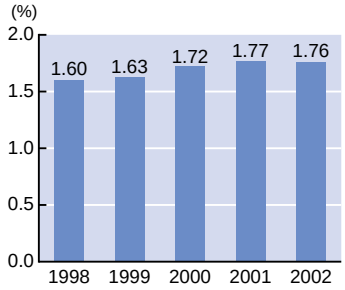
Employee Ratings (As a result of morale survey)

Question: Do you think job opportunities are equal?



Employment of Disabled

Our employment ratio for disabled persons slightly fell below the statutory requirement ratio of 1.8%. This is an issue that claims our continued attention.



Employment Ratio of Disabled
(As of March 31 each year)

Employment of Retired

We are in the process of facilitating alternative options to support individual career plans. In 2001 we introduced a re-entry program of retired employees who wish to continue working. In FY 2002 total 21 retired persons were reemployed under this system.

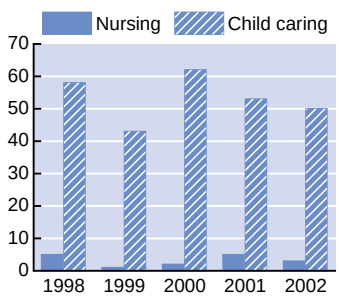
As a Family Member

Our personnel scheme also regards a private life of the employees essential to vocational performance.

Caring Leave

Our employees are eligible to take up to two years leave for nursing their family who suffers age-related dementia, other serious sickness, or injury. In FY 2002 total 5 employees took this option, including some in managerial positions. Employees who need to take care of sick or injured family are also eligible to apply daily working hours of up to 2 hours less.

Number of Caring Leave



Childcare Suspension

Employees who wish to continue working after delivery are eligible to suspend till the baby is 1 year old. In FY 2002, 50 employees including male made use of this option. Working hours are also flexible for employees who need to take care of their children of no older than 4 years.
In FY 2002, we were awarded the Health, Labour and Welfare Minister's Prize for Excellence in recognition of our employee welfare practices.

Mr. Arima, President, Received Award from Mr. Sakaguchi, Minister of Health, Labour and Welfare

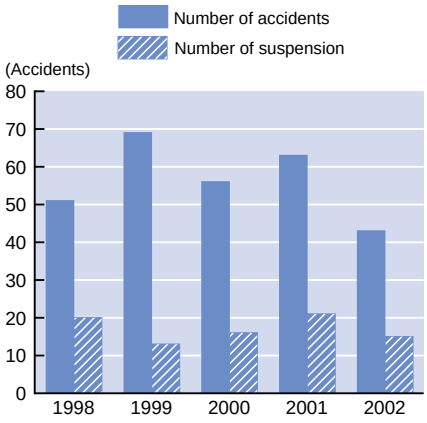
Health and Safety

It is our priority to ensure safety in the workplace and assist in health care of the employees. Health care of employees is promoted by our Health and Safety Committee, physical and mental consultations, and such.

Reduction in Labour Accidents

In FY 2002 we experienced 43 labour accidents, 68% of the previous year. Most remarkable reduction was in the motorcycle accidents of our service engineers in the metropolitan area. It was achieved in Tokyo area by efforts of the Labour Accident Prevention Committee, and road safety seminars performed in cooperation with the local police, and our Safety Newsletter.

Labour Accidents



Both 0.56 of our overall accident frequency rate and 0.01 of accident severity rate in FY 2002 were well below the domestic average.

Ebina Plant Keeps Safety Record

Our Ebina plant renewed, at the end of 2002, the safety record of cumulative 41.71 million hours, the first place in the general machinery manufacture industry.

Health Control

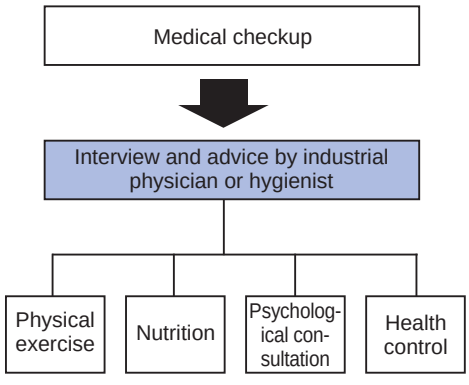
Our assistance for health control of the employees is of primary protection in the preventive medicine.

Types of Preventative Medicine

Primary protection	Health improvement
	Specific prevention
Early detection and treatment	
Treatment and rehabilitation	

Annual Physical Checkups

As a primary protection measures, all employees are to annually receive consultation by an industrial physician or hygienist after physical examination. This is intended to encourage employees to look after their own health and prevent lifestyle-related diseases or mental illness before they occur, whether they appear healthy or not. 10 industrial physicians, 10 hygienists and 13 health supervisors are in charge of such promotion. In FY 2002, 97.5% of the employees received physical checkups and 90% had health consultation.



Mental Health Education

In 2001 we began a mental health program for our managerial staff. The program is designed to help managers find telltale signs in routine operation of the subordinates and enable to consult and advise at early stage. By the end of FY 2002, we had held cumulative 101 sessions, which were attended by 3,645 managerial staff.

Managerial Staff Receive Mental Health Seminar

Information Sharing for Awareness

A company-wide Safety Forum is held for related information sharing for common understanding. At the manufacturing facilities, it includes the Safety Promotion Conference, which are tailored to suit each characteristic.

Safety Promotional Conference at the Ebina Plant

Our industrial physicians relay health-related information through Labour Accident Newsletters and such through the intranet.

Communication

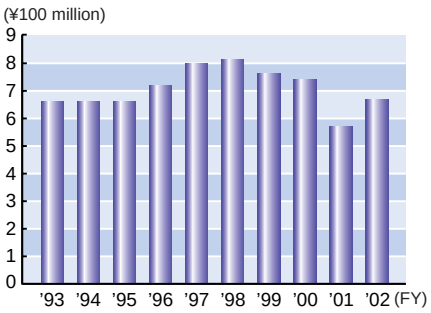
Social Contribution

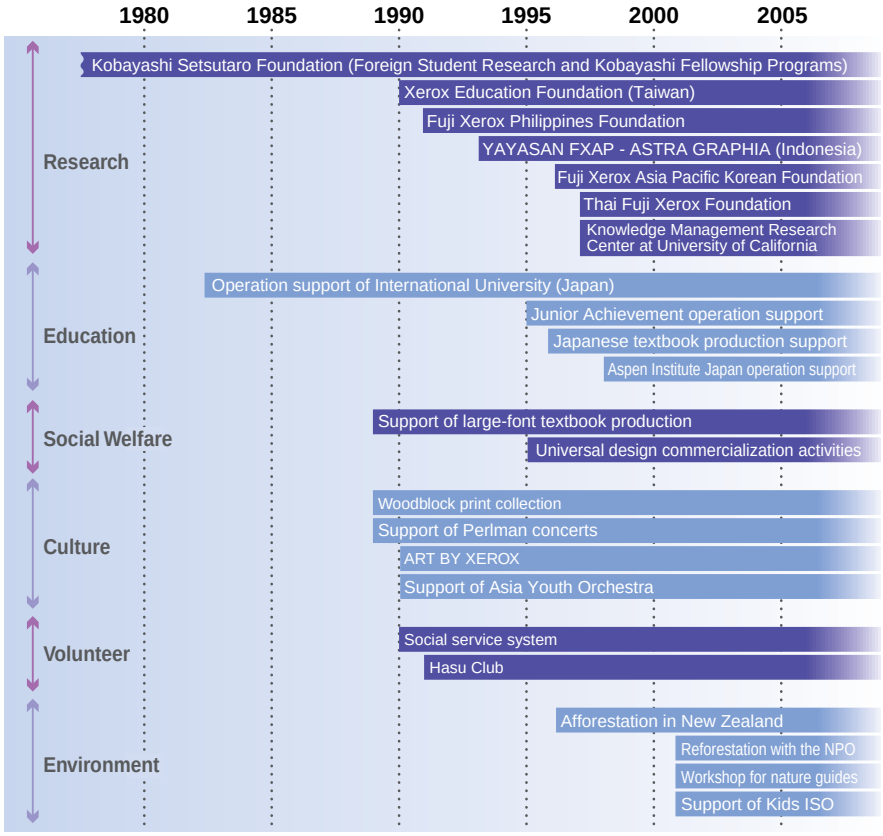
It is our primary social responsibility to deliver a unique set of values contained in our advanced products, systems, and services. On top of this, we voluntarily utilize our business resources, from long-term, global, and local perspectives, to play a greater role in building an even better society. Together with the affinity and commitment of our employees, we perform various social activities and continue to make steady contributions.

Web For details, refer to: www.fujixerox.co.jp/company/social/ (Japanese version only)

In October 1990 we established the Social Contributions Department to centralize our various social, cultural, and local activities under a common set of objectives. The department devises and implements a wide range of social contributions. In FY 2002, the associate expenditure amounted to ¥670 million (¥730 million when the affiliates are included).

Social Contribution Expenditure





Academic Research, Education

Kobayashi Setsutaro Foundation

The Kobayashi Setsutaro Foundation, named after our first president, was established in December 1977 for better mutual understanding among Japan and Asian Pacific countries and regions. The fund consists of the Foreign Student Research Program which supports comparative studies among those countries and regions by overseas students, and the Kobayashi Fellowship Program which assists Japanese students in research of Asian matters.

To date total 661 students have received assistance under the Foreign Student Research Program and 67 students under the Kobayashi Fellowship Program. The endowment stood at ¥2.5 billion as of March 2003.

Annual Party for the Beneficiaries

Aspen Institute Japan

Established in 1998, the Aspen Institute Japan aims to groom a new generation of professionals that will lead Japan in the coming decades. Located in a natural setting far away from daily life, the institute provides the ideal site for tomorrow's leaders to envision future trends and issues within society, as well as review established principles and values through consideration of current issues against a context of classic eastern and western literature, and open discussion. The institute is supported by many companies, including Fuji Xerox.

Social Welfare

Fuji Xerox strives to remove barriers of the disabled for a society where everyone lives with little difficulties.

Large-Font Textbooks

Although a number of volunteer groups produce textbooks of larger print for the weak sighted, it usually takes several people and more than two months to complete a single book. To help support the efforts of such groups, we offer our color copiers free of charge at our branches, local offices, and sales companies.

Universal Design

Recent years have seen an increasing demand for products of universal design, which help the aged and disabled live a life more easily. People of weak sight and/or impaired hearing may be benefited by advanced data processing devices. If equipments are easy to operate for the disabled, they are in turn simple to use for anyone else. Most of our products are so designed. We offer such copiers and printers to the disabled at the subsidiaries certified under the Law for Employment Promotion of the Disabled and Support of Employment, Living, and Participation centers.

DocuCentre 402 FS
Universal design version

Art, Culture

Our mecenat, or support of the arts, was introduced in 1990 to collect and exhibit fine arts.

Art by Xerox

Fuji Xerox offers an atelier to create works reflecting “reproduction”, “quotation”, and “documents” that are our typical business characteristics. The object is to support related research, education, and production. Art by Xerox assists in pursuing fusion of technologies with arts, and economic with cultural values in view of rapid advancement in color reproduction, network, and digital technologies.

The Art by Xerox Studio (Akasakamitsuke)

Support of Asian Youth Orchestra (AYO)

The AYO was established to “offer young Asian musicians opportunities to perform in public”. Fuji Xerox has supported the orchestra since its first concert tour in 1990.

Young Musicians of AYO

Volunteer Services of Employees

Our employees can take a volunteer leave and participate in an internal voluntary unit, the “Hasu Club” for donation.

Short-Term Voluntary Leave

Our employees are eligible to apply and take up to five days* a month of a volunteer leave (* i.e., subtracted from unused paid holidays accumulated for a period of up to three years).

Social Service Leave

Our employees are eligible to apply and take a social service leave for a period of three months to two years to work in welfare facilities or volunteer associations such as the Japan Overseas Cooperation. The applicants continue to be paid full wages and bonuses during the service.
When we first announced the scheme for a volunteer leave in 1990, some outsiders showed concerns that we had overstepped our role as a corporation and that few employees would find time to participate in such a service. Nevertheless, total 38 employees took this leave so far.
The aim is to allow employees to “broaden their social perspective and realize a vibrant corporate culture where employees can achieve personal objectives”.

An Employee on Social Service Leave
Helps the Disabled

"Hasu Club", the Donation Group

The Hasu Club was established as a voluntary employee organization in December 1991. Meaning "Fractional Club" in Japanese, the purpose is to raise funds by small-change ("fractional") donations of less than ¥100 in salary and bonus payments in addition to discretional amounts (anything from ¥100 to ¥9,900). Under this framework, the members make 14 payments a year, while retiree members make a single payment each year.
When the funds are donated to an external organization, the company also sends an equivalent amount as a matching donation.
In 2002 the club made total 145 donations with a cumulative value of ¥12.3 million.

■Social Welfare Group Support for Special Olympics

Special Olympics is an international organization dedicated to supporting individuals with mental retardation through sports training and competition. During the national Special Olympic games in July 2002, the Hasu Club offered its support by sponsoring the torch run, and supplying banners, streamers, and T-shirts. In all, total 250 Fuji Xerox employees and family members participated in the games.

Runners Carrying the Olympic Torch

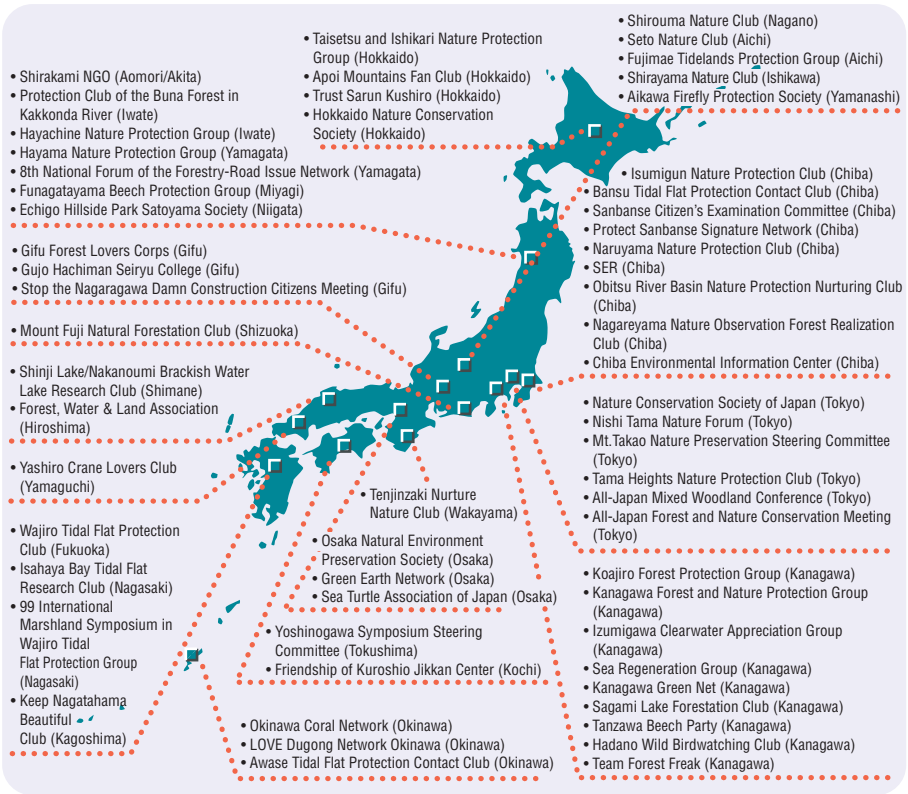
■Cultural & Educational Group Supporting Art Creation of the Disabled

Able Art is an effort to help people with disadvantages to experience the joy in creation of art and craft. In commemoration of its 10th anniversary, the Hasu Club sponsored the "Wonder Art Contest", a public exhibition of art produced under the Able Art program. The Club lent it assistance in the storage, judgment, and exhibition of the art works, and helped to set up the Able Art website.

Able Art Calligraphy Exhibition

■Nature Preservation Group Joint Activities with Environmental Groups

We conduct nature appreciation tours, make donations to nature preservation groups, and perform joint efforts with local environmental groups.



■International Support Group Lending a Hand in Asia

The Hasu club began its overseas activities in June 1994 when it helped dig wells in the Philippines. In later years, the members helped local residents with afforestation in China and the Philippines. In November 2002, they set up a swing in the playground of an elementary school in Cambodia and donated a set of keyboard harmonicas presented by Japanese children.

A Hasu Club Member Installs a Swing

Activities of Affiliates

Our affiliates also perform a wide range of activities to establish a rapport with local citizens.

Suzuka Fuji Xerox Acorn Square

A volunteer group at Suzuka Fuji Xerox has planted a small forest of white oaks, ring-cupped oaks, and Japanese tanbark oaks in one section of the factory gardens. Named Acorn Square, the forest is intended as a nature appreciation park for elementary school children. Furthermore, the group is making preparations to develop the forest into a nature appreciation field for children by planting hardwood trees in an adjacent field and developing a habitat for dragonflies and killifish.

Children Search for Acorn Treasure

Hiroshima Xerox Supports Green Map Production

Green maps are those containing embellished with various snapshots, symbols, and notes drawing attention to spots of interest and greenery within one's city or suburb. In Hiroshima, the local citizens embarked on a project to produce a green map of the city. Titled the "Hiroshima Eco-Peace Map", it was intended to enhance citizens' appreciation to their local surroundings and draw attention to city planning designs that connect the past with the future. Hiroshima Xerox supported this project by supplying mapmaking participants with digital cameras, scanners, and printers, and producing picture prints.

The Hiroshima Green Map Production Workshop

Thai Fuji Xerox Charity Project

The Thai Fuji Xerox Charity Project is to support children living in the suburbs. The idea for the project first came from THFX service engineers doing service rounds, who would often come across children going to schools without proper facilities. Wishing to do something to improve the situation, the engineers eventually came up with the idea to donate stationeries and food, and established a scheme delivering such items during their frequent trips to the suburbs. The donation activities started a trend within the company, eventually evolving into an established annual practice.

President of THFX, Mr. Pratin Buranabunpot (on the left) Meets the Children of the Suburbs

Working with the Global Community

Fuji Xerox has announced its participation in the Global Compact, the United Nations voluntary initiative, and has submitted a report backing its declaration to the Secretariat. Fuji Xerox is the 7th domestic member company and the second to submit a report. First proposed by Secretary-General Kofi Annan in an address to the World Economic Forum on 31 January 1999, the initiative asks the companies to support 9 principles in the areas of human rights, labour standards and the environment so that they become more responsible global citizens.

Given our corporate social responsibilities in performing business in Japan, China, and the Asian Pacific region, Fuji Xerox supports and commits to uphold the 9 principles of the Global Compact Initiative. Our report to the Secretariat concerned environmental matters. In the future, we intend to make organizational changes to enable production of a report covering human rights and labour standards, etc.

The Nine Principles of Global Compact

<Human Rights>
1. Businesses should support and respect the protection of internationally proclaimed human rights within their sphere of influence; and
2. Make sure that they are not complicit in human rights abuses.

<Labour Standards>
3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
4. The elimination of all forms of forced and compulsory labour;
5. The effective abolition of child labour; and
6. The elimination of discrimination in respect of employment and occupation.

<Environment>
7. Businesses should support a precautionary approach to environmental challenges;
8. Undertake initiatives to promote greater environmental responsibility; and
9. Encourage the development and diffusion of environmentally friendly technologies.

Environmental Policy

Environmental Measures Timeline

Product Recycling		Environmental Management
Incorporated 3R design into packaging		Achieved zero emissions at six domestic sites including those of affiliates
Shifted from parts- to module-based recycling	2002	Began environmental action plans at domestic and overseas affiliates
	2001	Basic Environmental Strategy/Environmental Action Plan drafted
Started recycling of plastics overseas		ISO 14001 certification acquisition plan for non-manufacturing sites promoted
Achieved full recycling of end-of-life machines	2000	1st Eco-Workshop for Fuji Xerox Group held
Introduced product labeling of recycled natural resources		The Group's "Ecology & Safety Vision" and "Basic Policy" established
Recycling Procurement Guidelines established	1999	Ecology & Safety Department established at the headquarters
Closed-loop recycling technology for plastics developed	1998	Statements of "We, the Fuji Xerox Group, will strive to;" and "Shared Values" established

		Environmental Conservation
Completed dismantle & recycle line for copiers	1997	1st zero-emission factory established
Asset Recovery Management Department established	1996	Basic Environmental Policy revised
Recycling Design Guidelines established		
Began deployment of reconditioned used parts in copiers	1995	ISO 14001 certification acquisition plan drafted
Established toner cartridge recycling line	1994	Green Product Concept established
		On-site recycling center launched
	1993	Environmental Vision established
		Midterm Environmental Plan established
		Basic Environmental Policy established
	1991	Environmental Safety Department established
Began recycling of photoconductor drums and other consumables	1990	
	1989	CFC Countermeasure Committee established

		Pollution Prevention
		Environment and Safety Office established
	1985	Committees integrated into Environmental Safety Council
		Product Safety Committee established
	1972	Pollution Prevention Committee established

The Fuji Xerox group common statement, “Shared Values” positions the environment as a matter of prime importance. Based on the spirit of the statement, in 1999 we reviewed our basic environmental policy (established in 1991, revised in 1996), reflecting our aim to be a world leader in environmental technology, establishing our Ecology & Safety Vision and Ecology & Safety Basic Policy.
Furthermore, as a member of the Fuji Photo Film Group, we aim to realize “high environmental quality” as set forth in the “Fuji Photo Film Group Green Policy” established in April 2002.

Fuji Xerox Group

“We, the Fuji Xerox Group, will strive to;”

“Shared Values”

Fuji Photo Film Group

Green Policy

Fuji Xerox Group Ecology & Safety (E&S) Vision

The Fuji Xerox Group will introduce and develop into all aspects of its business world-class ecology-conscious activities that emphasize respect for the environment. Companies in the group will strive to offer customers products, services, and related information that are safe and kind to the environment, and thereby contribute to the environmental conservation efforts of individuals and society.

Fuji Xerox Group Ecology & Safety Basic Policy

Based on the recognition that environmental conservation and safety preservation are the basis of corporate existence, the Fuji Xerox Group will, through its entire workforce, strive to ensure that its business practices progressively reduce environmental impact. We will work to protect the lives and assets of our customers and society, which will be maintained and improved.
This policy shall apply to the entire operations of the Fuji Xerox Group.

1. [Complying with legislative and self-regulatory standards]
   All business activities shall observe the legislative requirements and industry standards pertaining to safety and environmental conservation; in addition, all internal regulations and codes shall also be observed.
2. [Saving energy and other resources]
   All products and operation sites shall promote the saving, recycling, and reuse of energy and other resources, based on evaluations of the environmental impact.
3. [Developing and introducing the latest technology]
   The latest technological advances shall be developed and introduced to reduce environmental impact and increase product safety.
4. [Improving management and supervisory systems]
   Environmental conservation and product safety management systems shall be constantly improved, in part through the performance of a variety of internal audits.
5. [Creating a more harmonious relationship with society]
   The company will participate in environmental conservation and product safety initiatives led by government, industry, and the rest of society; it will also get involved in such activities as a corporate citizen, allowing employees to participate of their own volition.
6. [Adopting an environmental marketing approach]
   By working to understand and share the environmental needs of customers, and by sharing knowledge gained through environmental conservation activities, the company will contribute to upgrading environmental management for the customers.
7. [Enforcing information disclosure]
   Information regarding environmental conservation and product safety activities shall be disseminated widely inside and outside the company, and any feedback acted on appropriately.
8. [Formulating contingency plans]
   In the event of some unforeseen event causing, or threatening to cause, damage to the local environment, or in the event of a product safety incident, the company shall respond appropriately and rapidly in good faith, and shall ensure that any repeat occurrence is prevented.
9. [Raising awareness through education]
   The company shall educate all employees on environmental conservation and product safety issues, and work to raise employee consciousness of these and related policies.
10. [Cooperating with partners]
    The company will work to gain the understanding of business partners and other firms with whom it is cooperating, so that both may work together on these common issues.

Overview of Basic Environmental Strategy and Environmental Impact

As a step towards realizing our “Ecology & Safety Vision”, we established our Basic Environmental Strategy in FY 2001, introduced eco-efficiency as a corporate performance indicator and set the targets to be achieved by FY 2010. Regarding environmental impact, we aim to reduce the impact arising at all stages of the product lifecycle, including resource input, production, distribution, use by the customer, disposal, and recycling. Furthermore, in an effort to meet these targets, we have been implementing our Action Plans for FY 2002-2004 in all divisions and affiliates.

Web For further details regarding our Basic Environmental Strategy and Action Plans, refer to: www.fujixerox.co.jp/eco/2002/eco_plan/ (Japanese version only)

Basic Strategy

A. Transform Fuji Xerox and its affiliates into a fully recycling-oriented company

Reduce our own environmental impact throughout product lifecycle stage

B. Offer outstanding environment-conscious products and environmental solutions to our customers

Develop environmentally conscious products and services that can help customers reduce their own environmental impact

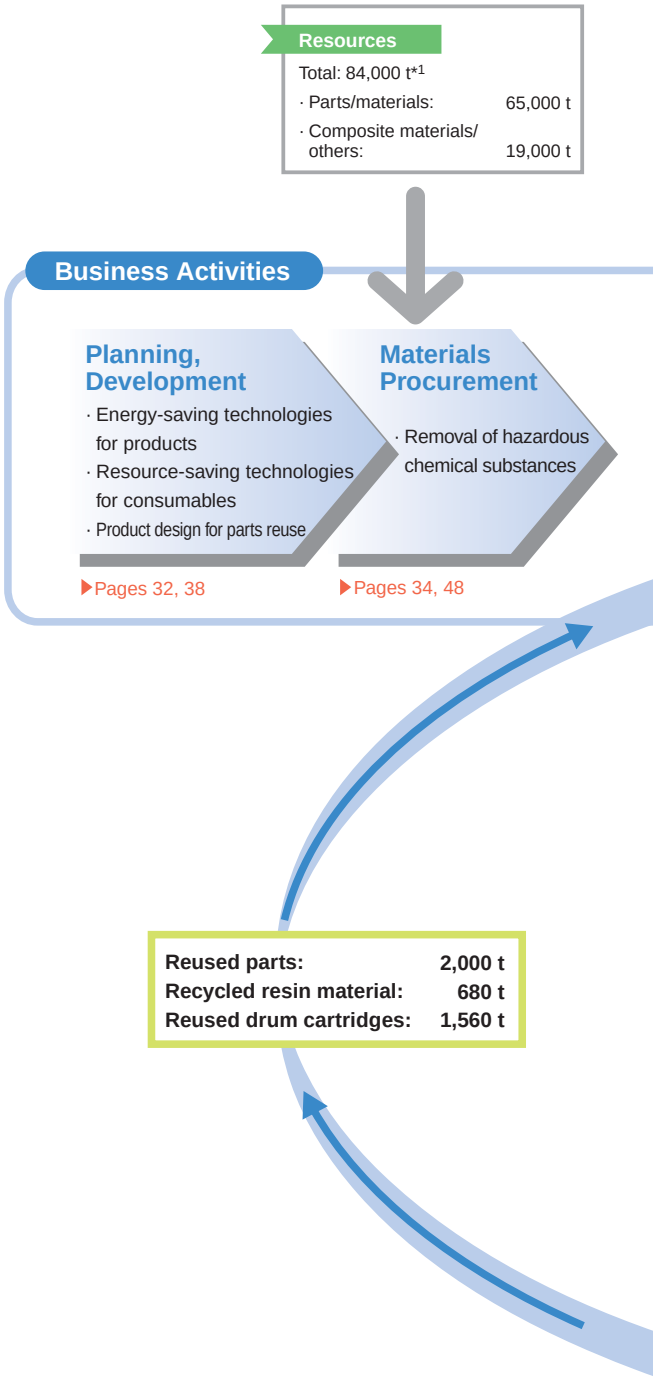
C. Strengthen infrastructure of environmental management
- Improve environmental awareness among employees
- Establish a system for managing performance index
- Establish an environmental management system

Impact To Be Reduced; Targets of Major Impacts

CO_2 emissions (Global warming)	New resource input (Resource depletion)	Hazardous chemical substances (Pollution)
Double eco-efficiency (compared with FY 2000) by FY 2010 Refer to page 24 for details		Schedule of elimination or phase-out plan for specific chemicals

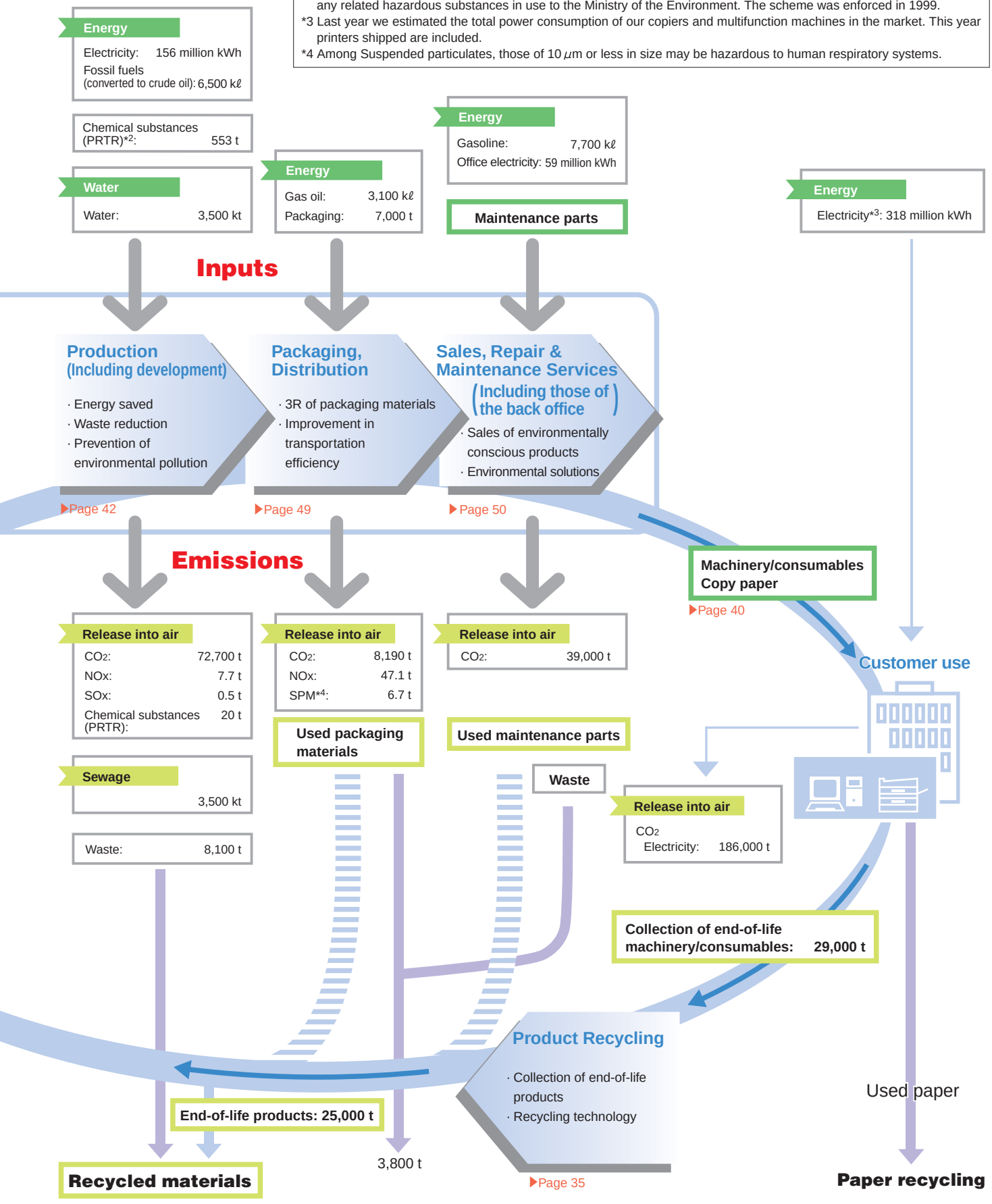
Priority Activities in FY 2002

① Development and provision of energy-saving products	▶Pages 32, 33
② Evolution of consumables production technology	▶Pages 38, 39
③ Expansion of product recycling operations including parts reuse	▶Pages 35-37
④ Expanded use of renewable resources such as pulp of used-paper and afforestation	▶Pages 40, 41
⑤ Reduction of hazardous chemical substances · Reduced use of specified chemical substances in products · Reduced use of volatile chemical substances in the manufacturing process	▶Page 34



▼ Domestic environmental impact

*1 In the previous year's report we only indicated the procurement amount of Fuji Xerox. This year we have indicated the amount for all the domestic six sites.
*2 Stands for Pollutant Release and Transfer Register System. Under this system companies must monitor and report any related hazardous substances in use to the Ministry of the Environment. The scheme was enforced in 1999.
*3 Last year we estimated the total power consumption of our copiers and multifunction machines in the market. This year printers shipped are included.
*4 Among Suspended particulates, those of 10 μm or less in size may be hazardous to human respiratory systems.



Summary of Activities in FY 2002

FY 2002, the beginning of our Action Plan (FY 2002 to 2004), saw a consolidated environmental effort by our business divisions and affiliates. In order to achieve the eco-efficiency target of FY 2002, we attempted to reduce our environmental impact more than planned because of the downward revision of the expected increase in sales. While the targets for CO_2 emission and new resource input were not cleared, our Action Plan made respective progress as scheduled.

Eco-Efficiency

Eco-Efficiency and Targets

Eco-efficiency indicates the economic value of an operation against the environmental impact caused as a result, that is, the balance between environmental and economic performance. Our Basic Strategy calls for us to halve our CO_2 emissions and new resource inputs per sale (thereby doubling eco-efficiency) by 2010 in comparison with 2000 levels. Our Action Plans call for eco-efficiency to be increased 1.3 times in FY 2004 and 1.14 times in FY 2002. Actual achievement for FY 2002 is shown below.

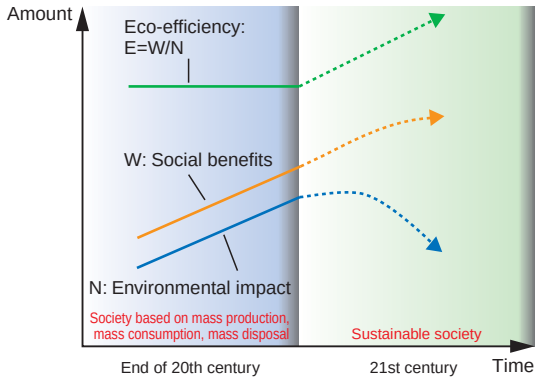
CO_2

As shown in Figure 2, the eco-efficiency of our business operations fell short of the target amount. This was mainly due to the increase in energy consumption following the startup of new consumables production in FY 2001. We intend to increase the production of new consumables, which consumes less energy, thereby curbing our overall CO_2 emissions. On the other hand, the eco-efficiency of products installed in the market place, as shown in Figure 3, has exceeded the expected amount due to the advancing energy-saving technologies.

New Resource Input

Regarding the eco-efficiency of the new resource inputs which are the parts and materials for production use, fell short of the target amount (Figure 4). This was because our efforts boosting “reduce” product design and recycling were not enough to offset the increase in materials input for new product line. Another indicator is the eco-efficiency of natural forest materials inputs (i.e., the proportion of natural forest chips used in paper) as seen in Figure 5. Here we see that the results have exceeded the target amount due to improvement in paper recycling efficiency and increase in use of pulp sourced from plantation forests (Figure 5). The above eco-efficiency indicators concern domestic environmental performance. In future we intend to expand the scope of our environmental performance evaluations to include results of our overseas affiliates.

Figure 1: Transformation to a Sustainable Society
(From Environmental White Paper 2001)



$$\text{Eco-efficiency} = \frac{\text{Social benefits (Sales*)}}{\text{Environmental impact } (CO_2 \text{ emissions/New resource input})}$$

(* Sales include domestic sales and export)

Figure 2: Eco-Efficiency of Business Activities (CO_2 base)

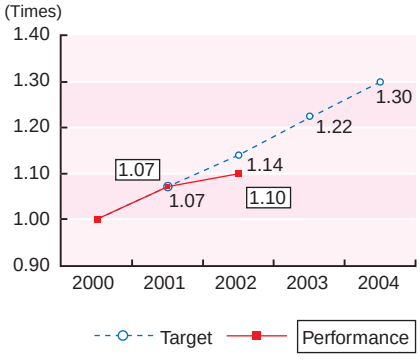


Figure 3: Eco-Efficiency of Electricity Consumed by Products in the Market (CO_2 base)

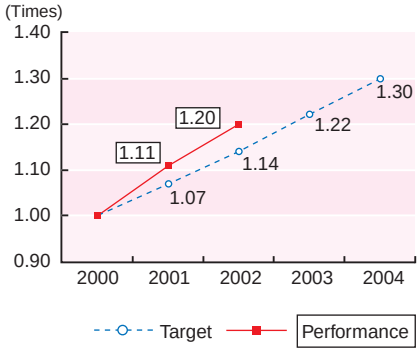


Figure 4: Eco-Efficiency of New Material Input

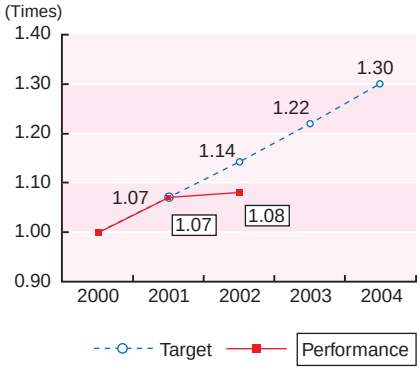
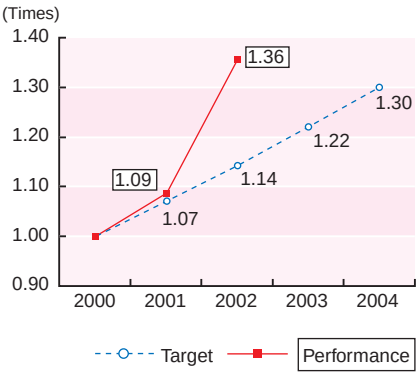


Figure 5: Eco-Efficiency of Inputs of Materials Derived from Natural Forests



Reduction of Chemical Substances

Reduction of Hazardous Substance Content in Products

We have achieved substantial reduction in lead-based solder in printed circuit boards and bromine-based fire retardants in plastic parts but failed to achieve complete abolition as originally planned. In FY 2002 we initiated various efforts to bring our products in line with the requirements of RoHS to be executed in the EU in 2006, and are aiming to phase out these and other specified substances.

Reduction of Volatile Substances

We also aim to reduce air emissions of volatile chemicals which are used, for example, in the production process as an activator. By FY 2004, we hope to reduce the volume of such substances by 40% compared with the level in FY 2000. Being applied to the photoreceptor drum and developing agent, these substances have a strong effect on print quality. Development of alternative substitutes is therefore no easy task. Yet, in FY 2002, we have prospect to succeed in the development.

Principal Results

The following table indicates the progress made by each domestic divisions and affiliates in regard to the execution of our Action Plans.

Main objectives	Target values	Results	Self evaluation	Detailed description
Research of environmental technology (Research, development)	· 2 items (Automatic photo-chromatic glass and organic EL materials)	· 2 items (As planned)	○	P47
Green product design and development (Green product)	· Application of external environmental award: at least one · Achieve green product targets (For energy consumption, noise, etc.)	· 2 items (Received two prizes: the Energy Conservation Prize and the Excellent Energy-Saving Apparatus Prize) · 6 out of 7 products in concern	○ △	P32
Provision of environment-conscious products (Sales, solutions)	· Achieve the sales ratios of environment-conscious products, No targets set during the year due to organizational changes · Develop package software to reduce paper usage, Sales of DocuWorks (Document management software): 120,000 licenses	· 47% (Performance under new organization) · 180,000 licenses (In general markets)	— ○	P50
Reduction of environmental impact of maintenance services (Customer service)	· Collection ratio of exchanged parts and end-of-life consumables: no less than 99.90% · Recovery ratio of manifest issued for used service materials: no less than 95%	· 99.99% (Both) · 100%	○ ○	
Advancement of recycling system (Resource recycling)	· CO_2 reduction through reuse of parts for production: 11.4 kt · Obtain governmental license of wide area recycle operation	· 12,500 tons (Including 2,000 tons saving by new resources reduction) · Granted in March 2003	○ ○	P35
Recycle of used paper pulp and protection of natural forest (Paper)	· Content of eco-conscious pulp: 60% (The second half of FY 2002)	· 62%	○	P40
Reduction of environmental impact of logistics (Distribution)	· CO_2 per product emitted in the primary distribution: 5.5 kg · Percentage of simplified package for product shipping directly from factory: 36%	· 3.9 kg · 40%	○ ○	P49
Reduction of environmental impact of business operation (Business activities)	· Reduction ratio of CO_2 equivalent impact: 6% (Compared with FY 2000) · Reduction ratio of production-related waste: 6% (Ditto) · Reduction ratio of volatile organic compounds: 40% (By FY 2004) · Introduction ratio of low-emission vehicles: 50% or more · Monetary ratio of green (affirmative) purchasing: 50% or more)	· 7.3% · 14.1% · Delayed (Achievement projected by FY 2005) · 86% (Against vehicles subject to replacement) · 89% (Non-production site)	○ ○ △ ○ ○	P42 P44 P45 P46 P48
Development of common infrastructure	· ISO 14001 certified sites: 11 domestic sales companies · Access rate (page views) of our environmental website: 530,000 per year	· 11 sites (14 if including the head office, etc.) · 920,000	○ ○	P29 P31

Environmental Accounting

10

Environmental accounting is a methodology to evaluate the costs and benefits of environmental activities to reduce environmental impact. Environmental accounting provides an objective account of the characteristics and scale of environmental activities as well as information to support managerial decisions concerning environmental improvement. To function as an effective tool in these matters, it is necessary to apply environmental accounting on the same broad scale as financial accounting.
Fuji Xerox first made preparations to implement environmental accounting in 1998, and has released environmental accounting information on a regular basis since 1999. During the first year of implementation, environmental accounting was applied to our 3 production sites and 1 research center, but the scope was expanded to include our sales and service divisions in 1999 and all our domestic subsidiaries in 2001. In FY 2002 we included the performance of our 4 overseas production sites. Within the next few years, the scope of environmental accounting will be on par with that of our consolidated financial accounting coverage.

Domestic Product Recycling to Change

Costs and Benefits Up Slightly

In FY 2002 our product recycling expenses accounted for 70% of the total environmental expenditure. At the same time, the economic benefit from recycling operations accounted for just over 95% of overall income. In a year-on-year comparison, expenses have increased by 200 million yen while benefits have increased by 800 million yen. The rate of increase during this time has slowed for both titles, as the increase in product collection fell short of the planned amount. We expect this to recover in FY 2003.

Income-Expenditure Ratio Up 3.6 Points

In FY 2002 our year-on-year income-expenditure ratio improved by 3.6 points, thanks to an improvement in the profitability of our product recycling operations. This has been brought about by rationalization of our domestic product collection logistics and improvement in the efficiency of our recycling process. As a result, the benefits brought by our recycling operations are almost able to offset our upstream and downstream costs, suggesting we have reached a key turning point in our recycling operations.

Overseas Recycling Efficiency must Improve

Fuji Xerox has established operations to recycle products in Korea, Taiwan, Australia, and other territories. The income-expenditure ratio in those countries and regions stood at 96.3% in FY 2002, 1.7 points less than that of the domestic operations. Although our overseas collection and recycling face some restrictions such as fewer recyclable models and geographical conditions, the efficiency of such operations is still in need of improvement.

Unit: 1 million yen

Environmental conservation cost category		Key activities and their results	Fuji Xerox, parent-only			Domestic sites and 4 overseas sites		
			Investments	Costs	Benefits	Investments	Costs	Benefits
1. Manufacturing Area Cost		Costs and benefits of reduction in environmental impacts from production and services within manufacturing area	104	832	276	156	1,105	504
Breakdown	(1) Pollution Prevention	Avoid air pollution, and ground and water contamination	36	292	0	46	326	0
Breakdown	(2) Global Environmental	Prevent global warming and protect the ozone layer (Including energy conservation efforts)	68	208	169	108	247	381
Breakdown	(3) Resource Recycling	Reduce resource input and reduce/reuse waste	0	331	107	2	532	124
2. Upstream/Downstream Cost		Costs and benefits of green (affirmative) purchasing and product recycling	79	9,445	9,287	79	11,073	10,682
3. Administration Cost		Costs and benefits of EMS certificate/maintenance, environmental impact monitoring, etc.	4	761	0	7	1,152	1
4. R&D Cost		Costs and benefits of developing environment-conscious technologies, products and production technologies	74	3,662	0	74	3,715	0
5. Social Contribution Cost		Costs and benefits of supporting environmental NPO's, gardening neighborhood, afforestation, etc.	0	230	0	2	242	0
6. Environmental Remediation Cost		Costs and benefits of restoring contamination	0	42	0	0	42	0
Total			262	14,971	9,562	318	17,328	11,187

Particulars of Environmental Accounting Report

1. The accounting period was from April 1, 2002 to March 31, 2003.
2. The scope of environmental accounting report was covered the Fuji Xerox parent company, the domestic subsidiaries, and our 4 overseas production sites.
3. The environmental accounting methods were performed in compliance with the Ministry of the Environment's FY 2000 Environmental Accounting Guidelines.
4. The figures falling under "Investment" represent an aggregation of the costs of environmental asset subject to depreciation acquired during the term.
5. Depreciation
   ① Calculated depreciation of environmental facilities under the same method as used in our financial accounting, and added the total to expenses in our environmental accounting ledger.
   ② Aggregated the depreciation costs of all pollution-prevention facilities in use such as wastewater treatment equipment.
   ③ Aggregated the depreciation costs of all global environmental conservation and resource recycling facilities in use acquired in and after 1995.
6. Calculated the environmental portion of compound costs by price difference or proportional allocation.
7. Entered the economic benefits that could be measured excluding any deemed benefits based on estimates.

Diversifying and Advancing Environmental R&D

Environment-Conscious Products Nearing 100%

Research & development costs constitute the second largest expenditure among environmental conservation expenses. Almost 98% of the cost arose at the Fuji Xerox parent company alone. The year-on-year environmental R&D cost rose 7% in FY 2002. The Eco-Mark was awarded to 4 out of the 5 family copiers and multifunction machines introduced in FY 2001, amounting to a total of 15 series. We attempt to achieve full Eco-Mark certification for all future products.

Energy-Saving Benefits Equivalent to 500 Million Yen

The amount of energy saved through use of our products by our domestic customers in FY 2002 amounted to 500 million yen. It is calculated by using the energy consumption efficiency provided by MOE. Although it constitutes an economic benefit of our R&D efforts, we did not enter this figure into our environmental accounting ledger. Similar amount of annual saving has been seen in the recent years.

Extending Product Life and Responding to RoHS

One of the most rational ways to conserve natural resources is to extend the life of parts and products. We are currently developing such technologies to achieve this. In parallel, the scope of our environmental R&D activities is expanding to accommodate the European RoHS (Restricting the use of Hazardous Substances) regulations, develop energy-saving manufacturing technologies, and easy-to-recycle product design.

Environmental Conservation Benefits at Landing

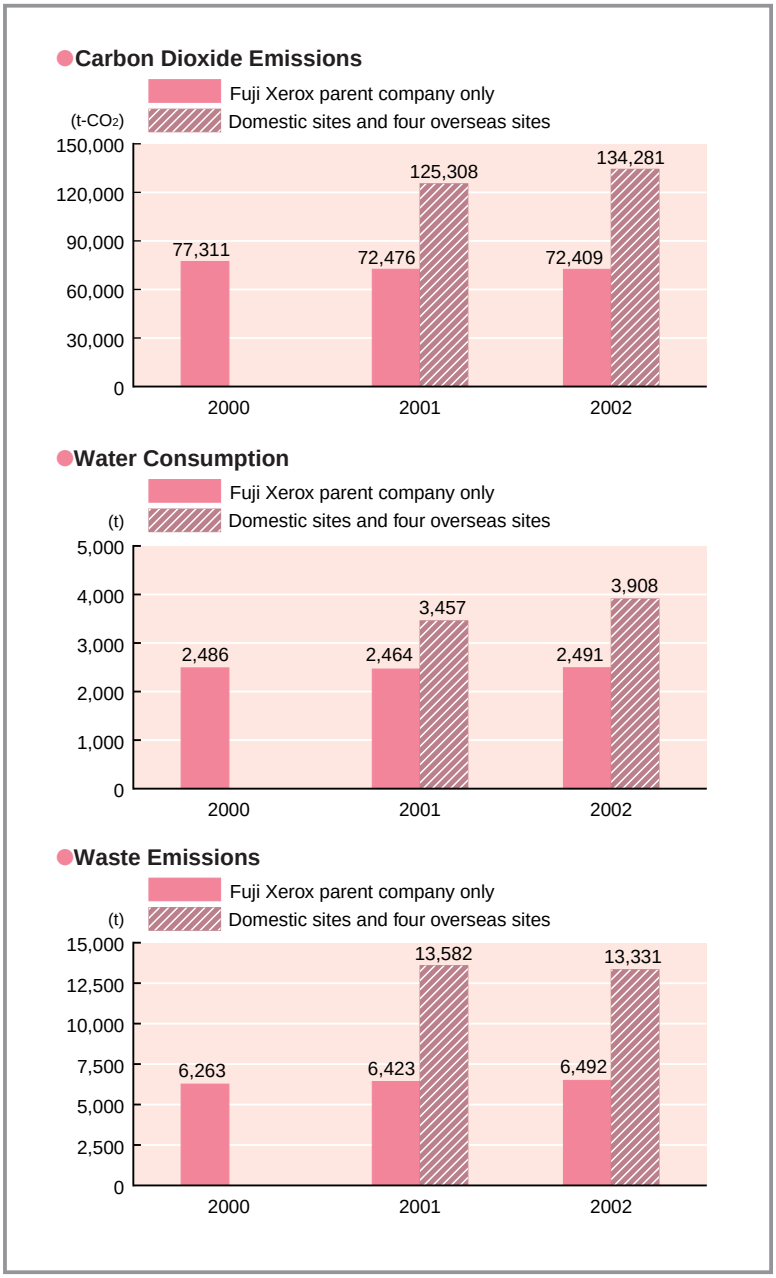
CO_2 Emissions Remain Constant at Parent Company

Curbing environmental impact is the physical aspect of environmental conservation benefit. In terms of CO_2 emissions, the year-on-year energy consumption ratio of the Fuji Xerox parent company fell slightly in FY 2002. Even though energy consumption increased along with the increase in manufacturing volume, this was more than offset by the results of energy conservation measures. If the 4 overseas factories are included, our total CO_2 emissions increased by 7%.

Overall Waste Slightly Declined

The year-on-year total waste emissions (combined total of municipal waste, industrial waste, and valuables) of the Fuji Xerox parent company in FY 2002 edged up slightly. This was helped by the steady reduction of waste at our factories. If the 4 overseas sites included, the FY 2002 year-on-year emissions have fallen slightly.

As these figures illustrate, our environmental conservation efforts are at a turning point. In the future, we will need to further improve our environmental conservation activities and develop innovative environmental technologies.



Environmental Management

Organization of Our Environmental Management System

Basic Environmental Strategies and Action Plans are deliberated and delivered by the Ecology & Safety (hereinafter, E&S) Steering Committee, which is headed by the President. Once determined, the strategies and action plans are passed on to the heads of our internal companies and affiliates for implementation. Immediately under the E&S Steering Committee lies the E&S Promotion Panel and the E&S Recycling Committee. The E&S Promotion Panel discusses and drafts plans of action against urgent issues, while the E&S Recycling Committee considers ways to improve our recycling system. Through these three administrative groups, the company implements its environmental strategies throughout the Fuji Xerox internal company structures.

Policy Execution

E&S Steering Committee | President

Environmental Managing Directors ..... E&S Department

Promotes environmental strategies in domestic and overseas companies.

Document Products & Supply Company (DPSC)

President (Managing Directors) — E&S Deliberation Panel

Asset Recovery Management Department

Environmental Product Safety Department

We have established the Asset Recovery Management Department and Environmental Product Safety Department in our Document Products & Supply Company (DPSC). The DPSC develops and produces copiers, printers, multifunction machines, and their consumables. The Asset Recovery Management Department is in charge of product recycling while the Environmental Product Safety Department covers environmental safety of products.

Companies

Presidents (Managing Directors) — E&S Deliberation Panel

The environmental management staff of research departments and companies in charge of sales, maintenance, and office services support the environmental policy management of company presidents.

Comprehensive Activities

E&S Promotion Panel | Environmental Managing Directors

- Environmental Management Teams
- Green Product Teams
- Task Teams

Under the E&S Promotion Panel we have established various sub-panels that consider energy conservation and waste reduction in manufacturing plants and the environmental consciousness of products. Furthermore, we form Task Teams to address important issues.

Recycling Committee | DPSC President

The Recycling Committee promotes comprehensive recycling operations encompassing procurement, development, manufacturing, distribution, and sales.

Fuji Xerox Eco Workshop

Each year we hold our Fuji Xerox Eco Workshop, which is attended by the directors, and executive staff in key divisions and affiliates. The workshop gives attendees the opportunity to update and upgrade their knowledge through presentation of new environmental policies and case studies of notable achievements.

Environmental Managers' Conference

The Fuji Xerox Environmental Managers' Conference is held once a year. Attended by environmental managers from the heads of internal companies and managers of affiliates responsible for implementation of ISO 14001 environmental management systems, the conference serves to reconfirm the environmental policies of Fuji Xerox and its affiliates as well as provide information regarding the advancement of such systems.

This year's Fuji Xerox Eco Workshop was held at Tokyo International Forum on "World Environment Day", June 5, 2002. The underlying theme of this year's workshop was, "Fuji Xerox's Efforts–Towards the Realization of a Sustainable Society".

Environmental Management System

Part of our environmental management strategy involves making an effort to acquire ISO 14001 certification for all of our sites. In FY 2002 we achieved ISO 14001 certification at further 14 sites, including those within the Fuji Xerox parent company and our domestic subsidiaries. This brings the number of ISO 14001-certified sites to 55 sites (48 domestic and 7 overseas). This means that we have now achieved implementation of ISO 14001-based environmental management systems at all key centers within the Fuji Xerox group, including R&D facilities, manufacturing plants, sales departments, and repair and maintenance facilities. In FY 2003, we plan to obtain certification for our remaining domestic service affiliates and our overseas sales companies. In the near future we will attempt to reduce our energy consumption and further improve resource-recycling systems through the ISO 14001 framework.

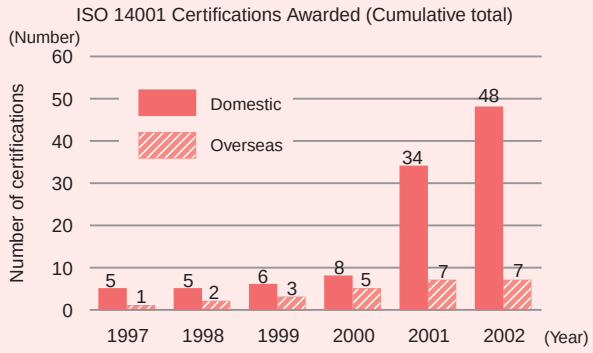
Continued Improvement by Merging Environmental Systems with Daily Business Activities

Evaluation of Environmental Benefits

The manufacturing plants of the Fuji Xerox parent company were the first to implement environmental management systems, achieving significant improvements in energy consumption and reduction of hazardous substances, waste, and wastewater. Although the impact reduction at these plants are not yet perfect, the improvement ratio is being fluctuated. Aside from reduction of environmentally hazardous substances, the plants with R&D divisions are also beginning to increase efforts on energy-saving products. This comes from the experience of having implemented environmentally beneficial considerations into the sales and service divisions when implementing environmental management systems. The incorporation of environmentally beneficial considerations into daily business operations has given new momentum to our environmental management systems.

Secondary Auditing Systems

The key to improving an environmental management system is generally considered to be improved planning. In our particular case, improvement of planning means improving the quality of our internal auditing systems. This is because our plan review and internal audit occurred during the same term. Aside from normal procedure of registering internal auditors, we have also established a secondary audit to supplement our internal auditing system.



Increasing Use of Digital-Format Environmental Documentation

Documents of environmental management system are being increasingly produced, stored, and sent in digital format. We use our own document management software (ISO Xross) to change documents to digital form and store them on the company intranet. This helps to make document viewing and amendment of records easier to manage and alleviate the burden of the environmental secretariat.

Group Audits Applied to Overseas Sales Companies

A total of seven of our overseas manufacturing and recycling sites (Shenzhen, Shanghai, Taiwan, Incheon, Bupyeong, Australia, and New Zealand) have acquired ISO 14001 certification. Our overseas manufacturing plants are also working towards achieving zero emissions. Furthermore, our sales companies in Asia and Oceania (14 offices in 12 countries) are scheduled to implement environmental management systems in FY 2003. In an effort to acquire ISO 14001 certification, seven companies in the Philippines, Vietnam, Singapore, Malaysia, Indonesia, Thailand, and AP,*1 etc., have applied for inspections under the group application system,*2 already common practice in Japan. With the implementation, the efforts of Fuji Xerox and those affiliates towards reduction of environmental impact have reached full momentum.

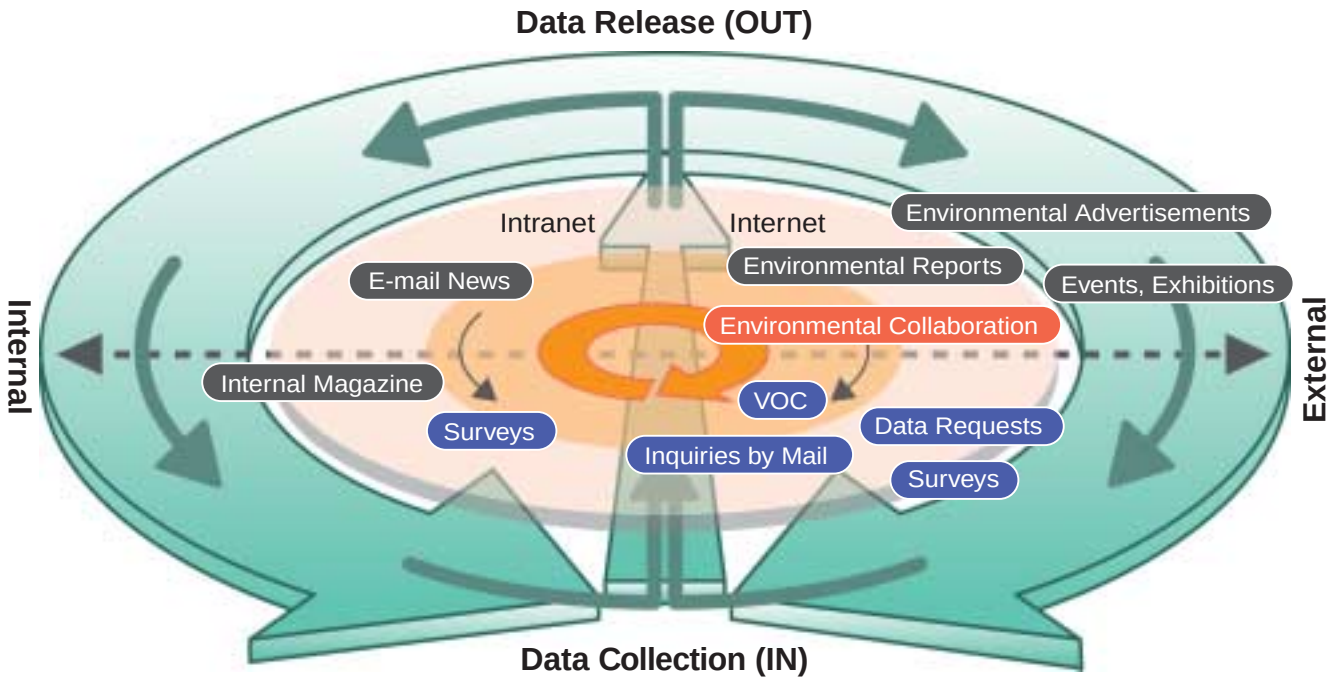
Picture shows a workshop on acquisition of ISO 14001 certification in overseas sales offices (March 2003). The speaker is relaying the experiences of Tokyo Xerox, also a sales company, in applying for ISO 14001 certification.

*1 Asian-Pacific: Head sales office for the Asian and Oceania region
*2 This is a group application and examination system, wherein companies that have established a common environmental management system may apply for ISO 14001 certification as a single body. We use this system for companies performing similar operations and located in a common region.

Environmental Communications and Education

Through official website, exhibitions, advertisements, and other media, we make a continual effort to provide public with such environmental information as impact reduction and product performance. Our inquiries counter is a window to receive and respond to related queries and comments. It is our intension to do more than just disclose environmental information. Environmental knowledge of public including our stakeholders be fused in our environmental conservation efforts, and a knowledge circulation flow powered by those information exchange be created. In addition, the employees in charge are required to take continual training programs and have environmental awareness and initiatives.

[Wide range of information collected and released to internal and external companies]



Aiming to Enhance Environmental Awareness and Initiative of Employees

Environmental Trainings Systems

Fuji Xerox performs “Eco-Literacy” program to provide basic environmental knowledge, which is common among employees of the Fuji Xerox group. Based on the contents of the ISO 14001 promoter training, the program provides the overall knowledge including the environmental efforts of Fuji-Xerox family. As the program can be retrieved through Internet, employees are free to study at any time and anywhere. In FY 2003, the training programs will be implemented in our overseas affiliates planning to be ISO 14001 certified.

We also deploy dedicated training programs for such divisions as require specific environmental knowledge. For instance, energy-saving technology course for R&D division, and new laws, regulations course for sales forces.

Raising Environmental Awareness on a Continual Basis

Regular account for environmental enlightening opened in our domestic internal magazine, “Xerox Life” in 1992. In 1994 the title was changed to “Green Xerox–Making an Effort for the Global Environment”. The report ran 64 times in July 2003. Similar regular story, eco@FXG, started in the overseas internal magazine, “Cross Point” in FY 2002.

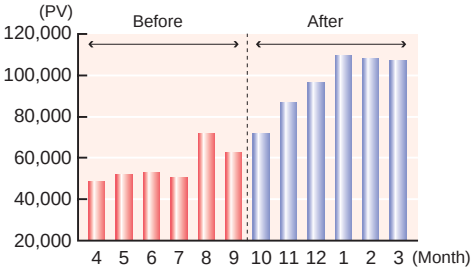
Collecting and Releasing Environmental Information

Widely and Timely

Environmental Website

The Fuji Xerox website contains various environmental information on our products, activities, and safety. Among product information, “Green Purchasing Network Registered Products”, “Eco-Mark Certified Products”, and “Products Satisfying Requirements of Green Purchasing Law” are available. Regarding activities, each manufacturing site presents its efforts to reduce environmental impact. As for safety, the site demonstrates the characteristics of chemicals used in our products, as well as “Material Safety Data Sheets”, which provide information to help customers use products safely. In August 2002 the website was renewed with new contents, which soon doubled the number of page views.

Web www.fujixerox.co.jp/eco/
(Japanese version only)



Showing Our Achievements

Environmental Exhibitions

We exhibit at various events to introduce our environmental efforts and improve appreciation of wider public. At the “Eco-Products Exhibition” in Tokyo, we made presentations of our related activities and products with advanced features.
During this exhibition we surveyed impression of the attendees and received 788 responses. The review and analysis were relayed to the divisions in charge for reference to improve future exhibitions and events.

View of 2002 Eco-Products Exhibition Venue

Sharing Our Knowledge through Advertisements

Environmental Advertisements

In FY 2002, we ran a series of advertisements emphasizing the high efficiency and quality as well as various environmental features of our products to raise interest of existing and potential customers. The series received high praise, winning the first place in the Japan Industrial Advertisement Prize (sponsored by the Nikkan Kogyo Shimbun, Ltd.) Series Section.

Maintaining Two-Way Communications with Our Customers

Collaborations

We regularly offer our customers a series of presentations of our environmental activities. Referred to as “collaborations” (refer to page 12), each presentation set focuses on unique aspects of the operations. Customers are free to choose the topic of the presentation from two major categories–one dealing with basic matters, and the other dealing with advanced ones. Basic contents are given by consultant staff, while advanced are given by the division in charge. They also provide customers with an opportunity to voice their opinions as well as exchange advanced information.

We are open to plant tours of our Nakai research center and manufacturing sites at Ebina, Takematsu, and Iwatsuki. In FY 2002, 1,700 persons from 117 different organizations came to see.


Ebina Plant Tour

Making the Most of Customer Opinions

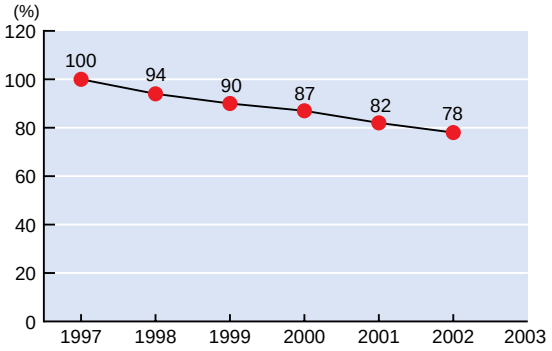
We listen to opinions of our customers in regard to our environmental activities. In FY 2002 we received total 70 statements and requests through our Customer Center. The center relays the queries to the relevent division for review and response. The information is also used as an important reference when developing products and modifying our website.

Development and Supply of Energy-Saving Products

A substantial proportion of the environmental impact of our products stems from the electrical energy consumed by our customers. We at Fuji Xerox make a continual effort to reduce the power consumption of our monochrome and color copiers, printers, and multifunction machines through the development and application of energy-saving technologies, thereby curbing the environmental impact of our users. In 2002 we were awarded our fourth consecutive Energy Conservation Prize by the Energy Conservation Center, Japan, as well as the Excellent Energy-Saving Apparatus Prize by the Japan Machinery Federation in recognition of our efforts.

Power Consumption Rate Down 4% per Year

The average power consumption of our products is now 78% of that in FY 1997 (refer to the right diagram).
The component consuming the greatest amount of electricity within our product line is the “fuser”, which applies heat and pressure to fuse the toner on a paper that has been transferred from photoreceptor drums. Our current energy-saving technology is the cumulative outcome of a series of technologies developed by our research and development departments, including less power consumption of the fuser when in standby mode, shorter warm-up time, and toners enabling stable image quality at lower fusing temperature.



This data was calculated from the machine population in the domestic market and the respective energy consumption ratios.*1

*1 Based on the “Energy Consumption Ratio” method for calculating the energy consumption of copiers and multifunction machines as set forth in the Law Concerning the Rational Use of Energy

Outstanding Achievement in 2002: Awarded fourth consecutive Energy Conservation Prize, as well as the Excellent Energy-Saving Apparatus Prize

The monochrome printer DocuPrint 181/211 (Awarded the 2002 Energy Conservation Prize*2)

Our novel fuser technology (refer to “Quick Fuser” diagram in Figure 1) has shortened warm-up time to a mere 14 seconds. And we have reduced the standby power consumption to 3.5 W through implementation of our unique power-management LSI. As a result of these advancements, in comparison with the previous model, the daily power consumption has been reduced by 88%.

*2 The Energy-Saving Equipment and Systems Prize of the Energy Conservation Center, Japan

DocuPrint 181/211

DocuCentre Color 320/400CP

Color multifunction machine DocuCentre Color 320/400CP (Awarded the 2002 Excellent Energy-Saving Apparatus Prize*3)

Boasting a warm-up time of 45 seconds and high print speed, this product series realizes substantial reduction in power consumption during standby mode (8 W) and improves usability thanks to our original toner-fusing technology (free-belt nip type, refer to Figure 2 on the opposite page) and low melting-point EA toner.

*3 The Japan Machinery Federation Excellent Energy-Saving Apparatus Prize

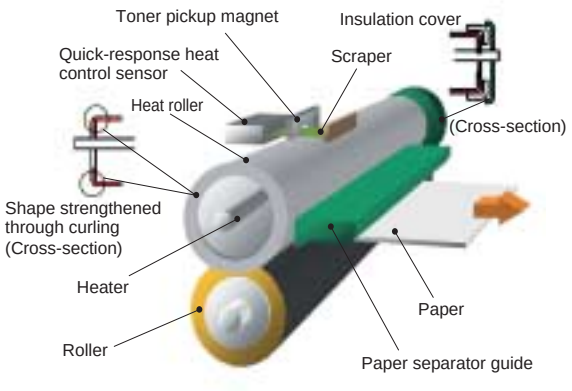


Figure 1: Quick Fuser

Color multifunction machine DocuColor 1250CP (Awarded the 1999 Energy Conservation Prize)

Combining the functions of copier and printer, this machine was one of the first to realize energy-saving features (operating on standard 100V/15A power supply), as well as reduce weight and installation space. Also it was the first to be certified under the Energy Star Program and the Eco-Mark.

DocuColor 1250CP

The Energy Star logo is awarded to OA machines deemed to have reached the energy-saving standards set forth in agreements between the Japanese and US governments. The Energy Star program is operated by the Energy Conservation Center, Japan.

High-speed color printer DocuPrint C2220 (Awarded the 2000 Energy Conservation Prize)

This printer uses a free-belt nip fuser, a power management system, and power loss reduction technology to achieve high energy-saving performance. The fuser realizes a short warm-up time through a fuser roller and pressure-exerting endless belt. Power management is performed through a special SLIM2 chip. It reduces power loss in sleep mode as well. The machine only has 45-second warm-up time and 5 W power consumption in the mode.

DocuPrint C2220

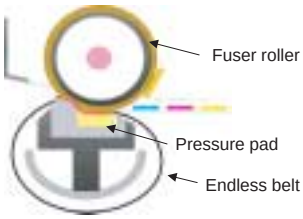


Figure 2: Cross Section of Free Belt Nip Fuser

High-speed digital copier/multifunction machine DocuCentre 507/607/707 (Awarded the 2001 Energy Conservation Prize)

This machine achieves both low-energy consumption (50% less than its predecessor) and warm-up time of only 30 seconds, thanks to a new “roll-in-roll” fusing technology (refer to Figure 3).

DocuCentre 507/607/707

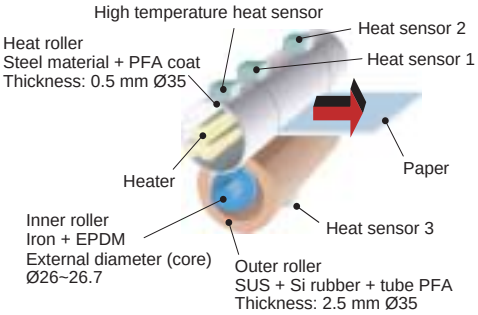
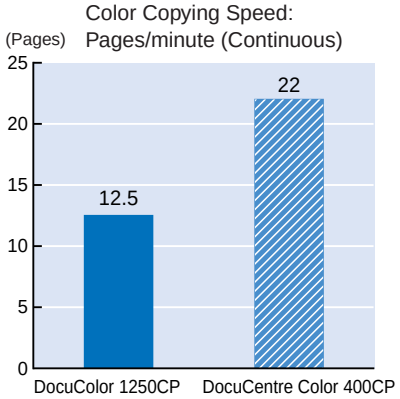
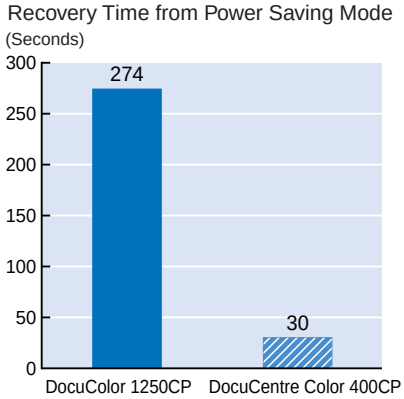


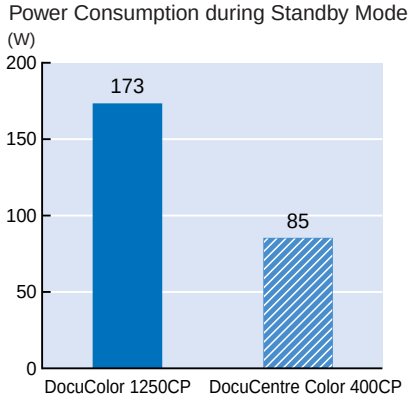
Figure 3: Diagram of Roll-in-Roll

Significant Strides Made in Energy-Saving Technology over the Last Three Years

The following three graphs show a comparison between our DocuColor 1250CP, which won the Energy Conservation Prize in 1999, and our DocuCentre Color 400CP, which won the same prize in FY 2002.
They illustrate the significant advancements made in both performance and environmental considerations. Specifically, the new copier prints at almost twice the speed of its predecessor, is quicker to recover from the power-saving mode, and uses less power when in the standby mode.







Reducing Specified Chemical Substances in Products

In 1999 we released our Green Procurement Guidelines, which set forth our materials standards for reducing the chemical substance contents deemed to have an adverse effect on the environment. With the cooperation of our suppliers, we have also strived to develop substitution technologies and improve production facilities. Because of these efforts and the application of alteration technologies, we have made significant progress in eliminating or reducing specified substances. Furthermore, in view of the tightening of the EU environmental regulations, as of FY 2002 we have assigned special teams to examine ways to improve the environmental performance of each stage of the production process, including development and procurement.

Activities in FY 2002

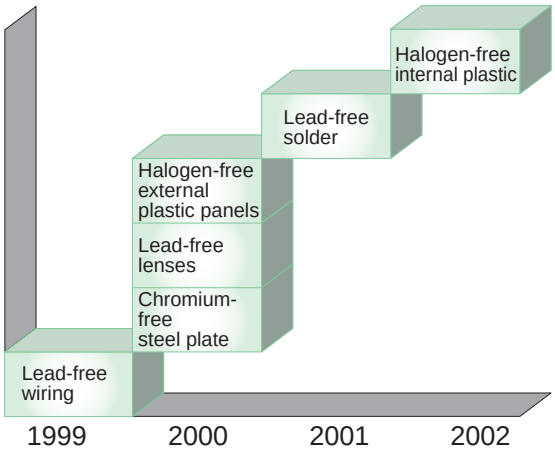
We established a “Parts & Materials Environmental Database” to help us monitor the chemical content of each of the parts used in our products. The database is shared directly with our suppliers. Since becoming fully operational in FY 2002, the database has helped to speed up our efforts to reduce hazardous chemicals as well as identification of chemical substances requiring the development of other substitutes. (Refer to the Green Procurement section on page 48.)
Our efforts in FY 2002 focused on reducing bromine-based additives used in internal plastic parts, marking our first attempt to reduce the substances in parts other than external panels and housings.
During the year, we also reduced lead-based solder used in large printed circuit boards by 66%. Initially, temperature control was considered to be a problem with lead-free solder, given its high fusing point. However, we managed to overcome this problem with a new type of solder developed in cooperation with Suzuka Fuji Xerox. The new technology has since been transferred to the company’s production plant in southern China where it is being applied to printed circuit boards for our printers.
In case the conversion to lead-free production results in increased production costs, in view of our emphasis of environmental considerations, we will be giving top priority to full implementation of such. Furthermore, we are developing technologies to minimize such cost increases and resolve other issues concerning production.

New Efforts in Hazardous Substance Reduction

We at Fuji Xerox attempt to satisfy the regulations under the EU’s RoHS (Restricting the use of Hazardous Substances) initiative. Under our schedule, we will eliminate use of lead, mercury, hexavalent chromium, cadmium, and PBB/PBDE* in all products introduced in FY 2004, and eliminate halogen-based resin additives and vinyl chloride in and after FY 2005, as well as the chemical substances deemed to be hazardous under our own regulatory system. We have assigned special teams to examine ways to improve the environmental performance of each stage of the production chain, and have started discussions with each of our domestic and overseas suppliers in an effort to improve our level of green procurement. Furthermore, to make our suppliers aware of our new conditions regarding hazardous substances in raw materials, we have distributed guidelines entitled Fuji Xerox Standards of Green Procurement.

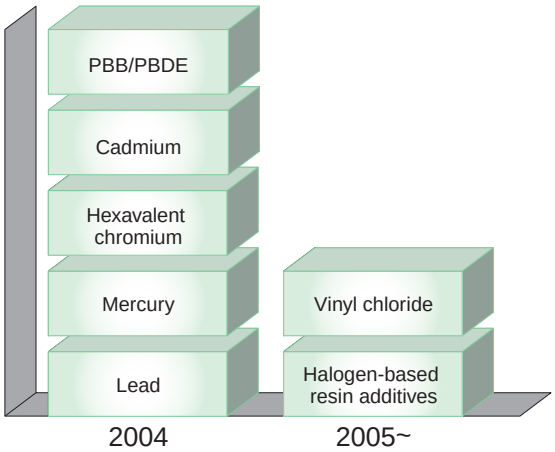
* These are abbreviations for “Poly-brominated biphenyl” and “Poly-brominated diphenyl ether”, which are used as fire retardants in printed circuit boards and other resin parts.

Technologies Implemented to Reduce Specified Chemicals



Lead-Free Large-Scale Printed Circuit Board

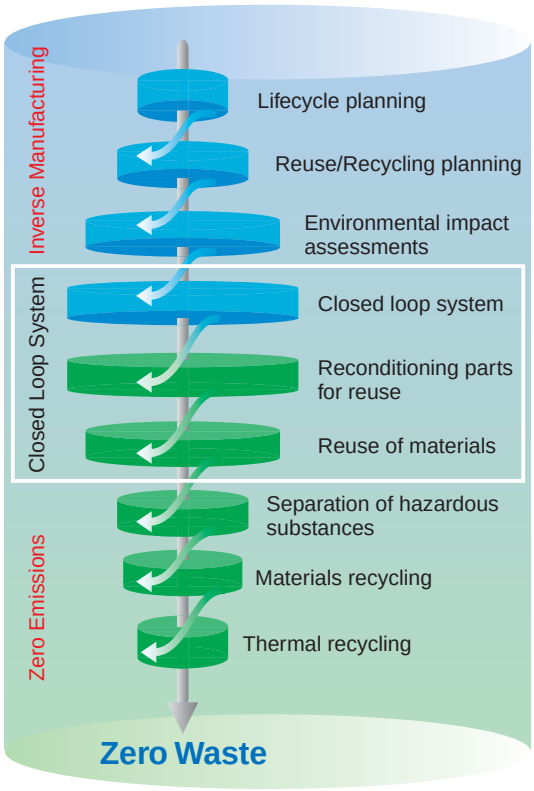
Chemicals to be Reduced under Our Specified Chemical Substance Reduction Plan



Product Recycling Activities

Products Using Reconditioned Parts Reaches 200,000 Mark

One of the aims of our Basic Environmental Strategy is to curb new resources being channeled into production. Our key measure for achieving this is our “Resource Recycling System”, which also functions as the cornerstone of our environmental conservation activities. In 1995 we became the first in the industry to offer products using reconditioned parts of end-of-life products, and have been developing reconditioning technology ever since. We have annually produced over 30,000 machines using reconditioned parts, and reached a cumulative total of 200,000 units in April 2003.

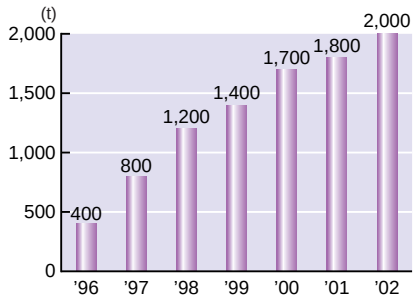


Our resource recycling system is based on the concept that end-of-life products serve as resources that can be completely recycled within a “closed loop system”. This loop is a recycling system that aims to achieve two goals–“inverse manufacturing” and “zero emissions”. The purpose of inverse manufacturing is to build such products as with a minimal environmental impact through extensive use of reconditioned used parts, while that of zero emissions is to eliminate waste disposal by turning parts that cannot be recycled into new resources. Input amount of new resources for production is reduced to a minimum while landfill is virtually eliminated.

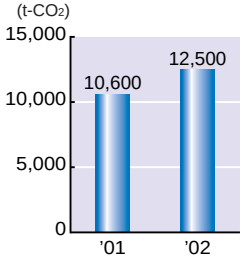
Performance of Our Resource Recycling Activities

In FY 2002, our efforts through our resource recycling system, including the use of reconditioned used parts, helped to decrease new materials input by 2,000 tons. They also effectively reduced CO_2 emissions by our suppliers during the production by 12,500 tons. Furthermore, following implementation of the system, the landfill accounted for a mere 0.09% of the total weight of collected end-of-life machines.

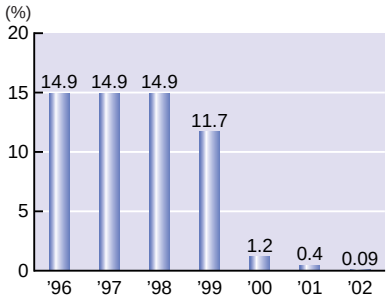
New Resource Inputs Saved through Reuse of Used Parts



CO_2 Kept in Check through Reuse of Used Parts in the Production Process



Waste Disposal from Used Products (Landfill) Close to Zero



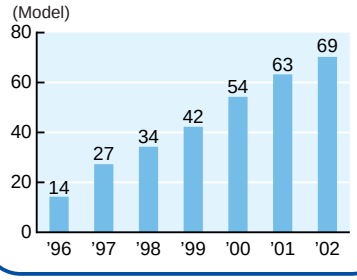
Recycling throughout Product Lifecycle

Our product recycling system encompasses every stage of the production chain

Planning
Lifecycle Planning

To broaden the scope of our 3R activities, product planning is required to incorporate designs that facilitate reuse of used machine parts for successors.

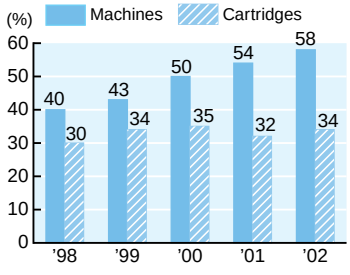
Number of Models Using Recycled Parts
(Cumulative total)



Design
Design for Reuse and Recycle

We are designing products of long-life, high-rigidity to facilitate the reuse of used parts. In parallel, our suppliers are improving parts in view of reuse/recycle in accordance with our Recycling Procurement Guidelines.

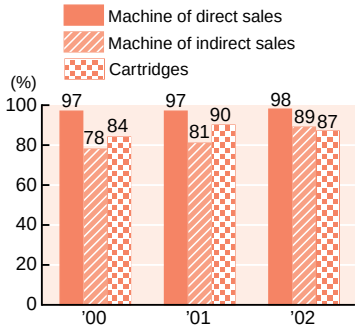
Reused Parts
The chart in solid shows the number-wise percentage of parts reused in a machine. The chart in stripe shows the weight-wise percentage of parts reused in a toner cartridge.



Collection
Closed Loop System

Fuji Xerox maintains a high collection ratio of end-of-life consumables and machines, typically of direct sales channel. Our sales subsidiaries are also striving to improve the ratio, which deemed an important aspect of environmental management practice.

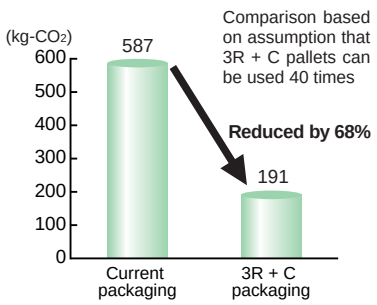
Collection Ratio for Machines/Cartridges



Packaging Materials of 3R + C

In January 2003, we firstly implemented our “3R + C” packaging material to reduce the environmental impact of our distribution operations. It realizes the 3Rs as well as the common use for different products. Under this, plastic recycled from end-of-life machines (ABS resin) is formed into pallets, which helps to reduce reliance on wooden pallets. The new plastic pallets are very strong and can be used as often as 40 times. Furthermore, when the pallets reach the end of their life they can be further recycled into other packaging material as seen in the picture labeled “During storage”. Once this becomes fully operational, it is estimated to reduce new material inputs by 97%, CO_2 emissions by 68%, and energy consumption by 66%. The packaging panels are sized to fit the eight of our mainstay products.

Difference in CO_2 Emissions between 3R + C Packaging and Current Packaging

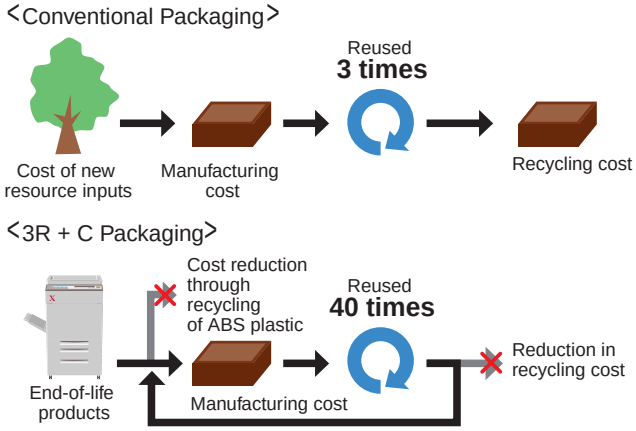


3R + C Packaging

During storage

During shipping

Comparison of Cost of 3R + C Pallets and Conventional Packaging

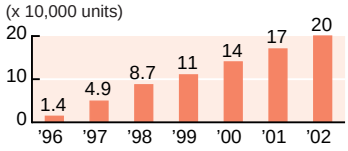


from the upstream product planning to downstream resource recycling

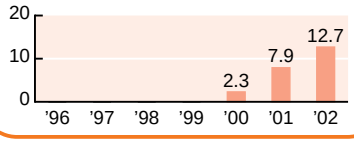
Production

The cumulative total number of machines using reconditioned used parts has reached 200,000. This achievement was largely attributable to the expansion of reusing modules and sub-assemblies. The reused number of modules and sub-assemblies has reached a cumulative total of 127,000 since FY 2000.

Cumulative Total of Machines Using Reconditioned Used Parts



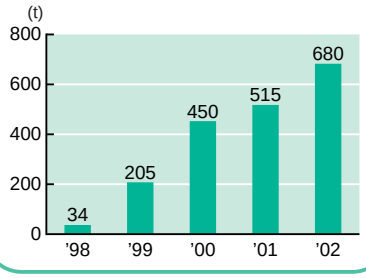
Cumulative Total of Module



Materials Recycling

Besides reuse of reconditioned used parts, our recycling activities now include recycling of materials. In FY 2002 we recycled 680 tons of ABS plastic into new external panels.

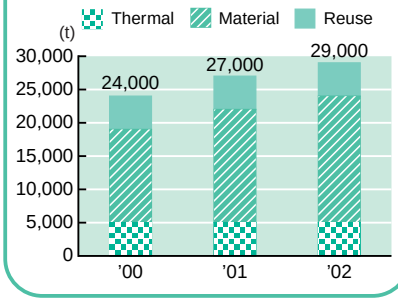
Domestic Recycled Plastic



Recycling
Zero Waste

We have established a nationwide "Complete Recycling System" based on a network of leading recycling companies.

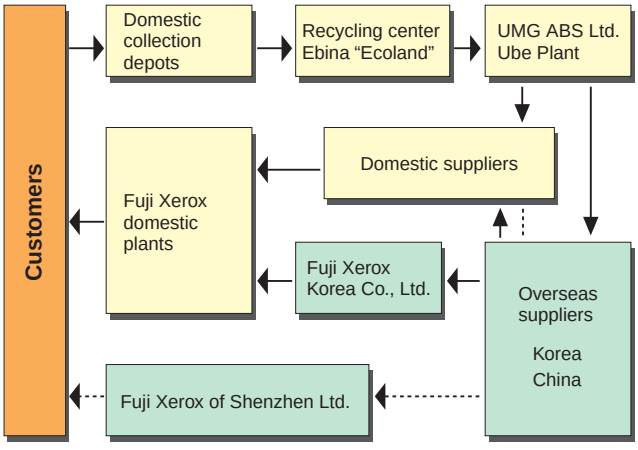
Used Products Recycled into New Resources
(Machine and cartridge)



Expansion of Recycling Activities

We also pursue possible improvement through cooperation with our suppliers. One of the fruits is the introduction of easy-to-disassemble designs that reduce the dismantling and sorting time by 40%. Another instance is the elimination of lead-containing solder in large-scale circuit boards. Furthermore, we supply recycled ABS resin to our overseas suppliers.

Expanding Plastic Recycling Operations Overseas



Recycling Activities in Australia

In September 2002, Fuji Xerox Australia (FXA) was awarded the Eureka Prize for Industry by the Australian National Museum in recognition of its exceptional performance in recycling operations. Sponsored by the New South Wales State Government and other associated bodies, the prize has been awarded each year since 1990 to companies and groups that have made outstanding scientific achievements. The prize was awarded in recognition of FXA's management policy of giving equal emphasis to the creation of wealth as well as conservation of resources and reduction of waste. FXA currently reuses/recycles 90% of its waste through the "Eco-Manufacturing Center", the company's plant for recycling printers and consumables, and aims to reduce this to zero by FY 2005.

Philip Chambers (on right), Managing Director of FXA receives a commemorative picture from the Australian National Museum.

EA Toner Saves Resource Input and Energy Consumption

In FY 2002 we began full-scale production of our new EA toner. Formed through a chemical process called “Emulsion Aggregation”, it requires 35% less energy to produce and realizes high print quality using 35% less toner than the conventional toner. Besides its energy-saving benefits, the new toner keeps high print quality on a variety sort of paper. And output prints have non-oily surface, which allows easier writing and tagging. From production point of view, as raw materials can be selected from broader candidates, the toner possibly plays a key role in the development of next-generation type with lower fusing temperature, thereby reducing the operating energy consumption even further.

High Environmental Performance through New Technologies

Conventional Process Near Deadlock

One of the common ways to improve print quality while reducing toner consumption per page of laser printers is to make the particle size as small as possible. Under the conventional manufacturing process, toner is created by melting and mixing such ingredients as carbon black and coloring agent into strands that are pulverized into a powder. The powder is then sifted into different particle size. Toner made by this method has its limitations, however. Manufacture of particles less than 6.5 microns in diameter is virtually infeasible due to higher cost, lower yield, and more energy consumption. Furthermore, extremely fine-grain toner has poorer flowability and transferability.

Particle Size Controlled at Will

EA toner is made up of emulsified polymer resins, pigments, wax particles, and auxiliary agents. These ingredients are mixed together, whereupon they aggregate into emulsified droplets, which are fused chemically to form the toner particles before being washed and dried (Figure 1). One significant advantage of this method of toner manufacture is that it is easy to control the size (performed during aggregation) and shape (performed during fusion) of the toner particles. Furthermore, when adjusting the particle shape, it is possible to coat the particles with resin to improve the flowability. These two factors constitute major advancements in toner manufacturing technology.

Standard Particle Size of 5.8 Microns

During the early stages of EA toner development, we performed a series of tests to determine the particle size and evenness. In one such trial we measured the distribution of particles of 3 microns at center. The result is shown in Figure 2. As demonstrated, the EA process brings a high degree of evenness, even without sifting. Furthermore, the smaller the particle size becomes, the less energy is required. Yet very fine particles are sometimes difficult to handle, which must be taken into account. Although rounder particles bring improved transferability, it is also hard to wipe off the remaining particles on a transfer device. Given these tradeoffs, we performed a great deal of trial and error to determine the optimum size and shape for EA toner. As a result, it was concluded that 5.8-micron potato-shaped particles (Figure 3) gave the best performance and were most suitable for commercial production.

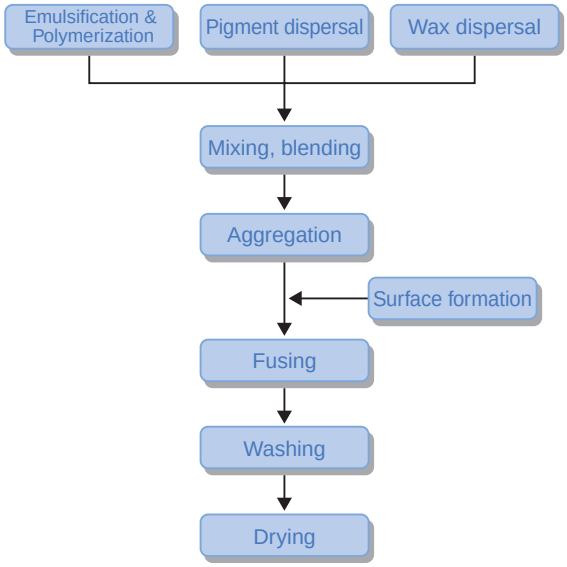


Figure 1: EA Toner Manufacturing Process

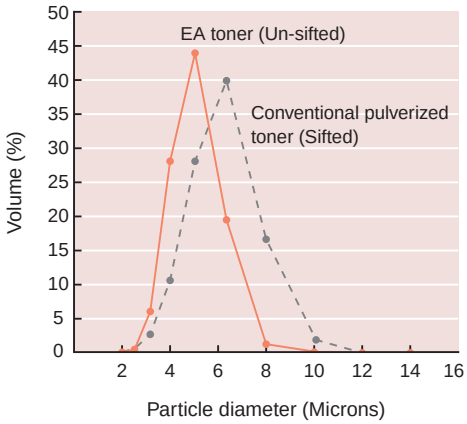


Figure 2: Particle Distribution of EA Toner and Conventional Pulverized Toner

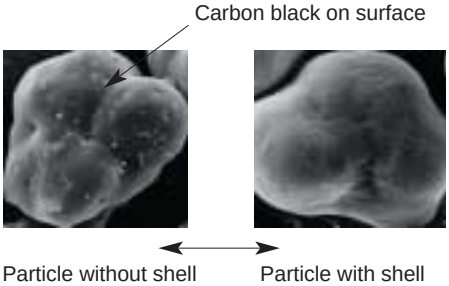


Figure 3: Commercial–Use Potato-Shaped EA Toner

High Print Quality on Any Paper

Color image quality of laser copiers and printers is produced by image sharpness, glossiness, and color balance. Besides, the sharpness is brought by the accuracy of placement of individual toner particles during the transfer process. Figure 4 shows the difference in image quality between EA toner and conventional pulverized toner. The image of EA toner is sharper as the particles, being extremely fine and even in shape, are less likely to spill into the sections that are supposed to be blank. EA toner also produces prints with an even degree of glossiness regardless of the smoothness of the paper surface. In this respect, EA toner prints appear more attractive than conventional toner prints which tend to look patchy due to the unevenness in glossiness. During our development of EA toner, the final challenge was to bring the color reproduction performance of the new toner to a level beyond that of conventional toners. We finally achieved it by careful selection and blending of pigments.

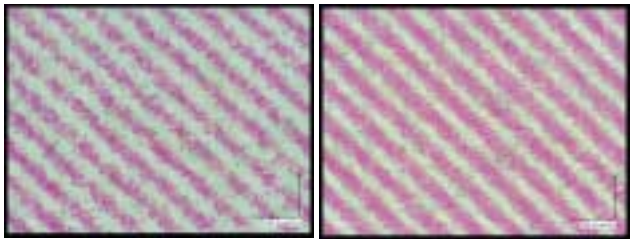


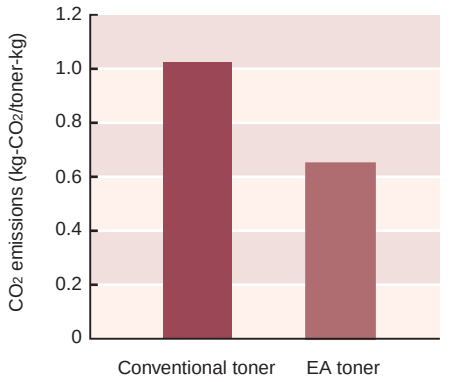
Figure 4: EA Toner Produces a Sharp Image, Even on Rough Paper

Oil-Less Feature Free Post-Marking

Some conventional color copiers apply oil to the heat roll to prevent the paper from sticking to the roll. The separation oil is crucial for color toners, because they consist of three or four toners of different colors, which are printed in consecutive layers. In addition, the fusing viscosity of a color toner has to be made lower to accommodate a wide spectrum of colors. One way to alleviate this problem is to add wax to the toner. However, this also serves to reduce the toner flowability and cause the poor storage performance. We have solved this problem by sealing wax particles inside the EA toner surface. Copies printed with this sort of toner therefore only contain oil within the picture or lettering itself, enabling users to make handwritten notes or attach labels in blank space.

Manufacturing Energy Cut by 35%

Because it is produced with chemical reactions, EA toner can be manufactured with less energy than that for conventional toners. In terms of CO_2 as a result of the energy consumption, EA toner emitts 35% less. This rate of performance was only made possible by switching to the new manufacturing process. Furthermore, as shown in Figure 5, the new toner realizes 20% increase in transfer efficiency, which has reduced the toner consumption rate by 35% and toner waste by 68% during printing.
As the resin contained in EA toner can be modified at will, the performance of EA toner is expected to improve further. The next challenge is to develop low fusing-point toner, which will require even less energy for printing. We estimate that adhesion temperature can be lowered by at least 10℃ than that of conventional oil-less toners.



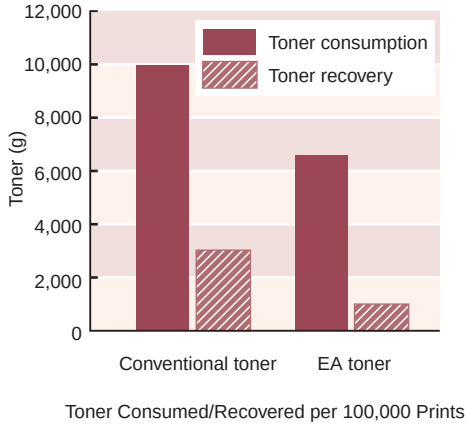


Figure 5: EA Toner Conserves Both Energy and Resources

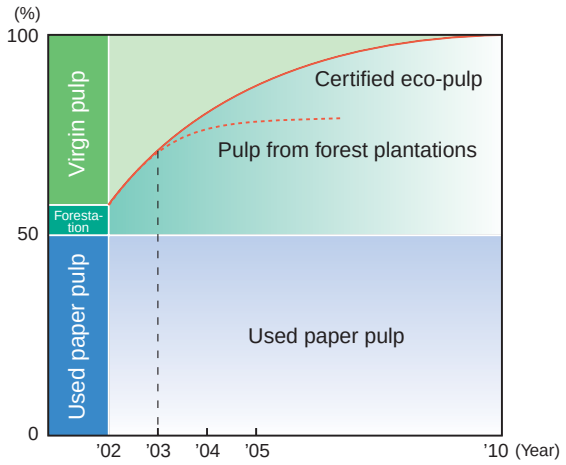
Conserving Forestry Resources through Eco-Conscious Pulp

Forests function as the cradle of life, providing habitat for animals, birds, and insects, besides absorbing CO_2 which is considered to be a major cause of global warming. The paper consumption is an integral part of the printer and copier industry. We at Fuji Xerox regard it our role to protect forest resources and make various recycling efforts with our consumables selling affiliate, Fuji Xerox Office Supply.

Eco-Conscious Pulp

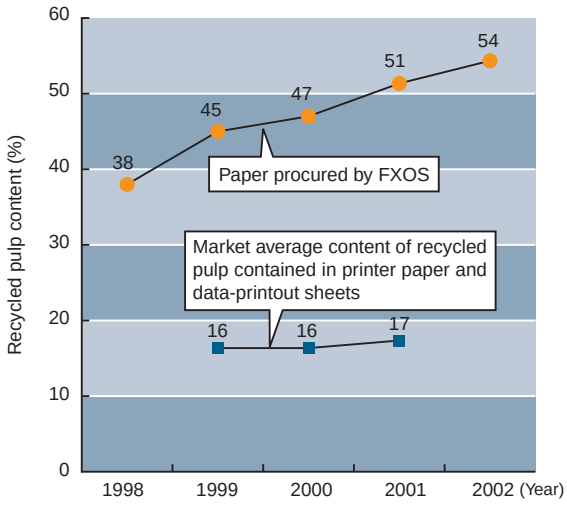
We are attempting to develop pulp with low environmental impact. The ratio of pulp made from planted forest and "certified eco-pulp*" is increasing while the recycled paper pulp content stays high.

* Certified eco-pulp: Pulp of the forests that the Forestry Stewardship Council approves meeting its raising standards.



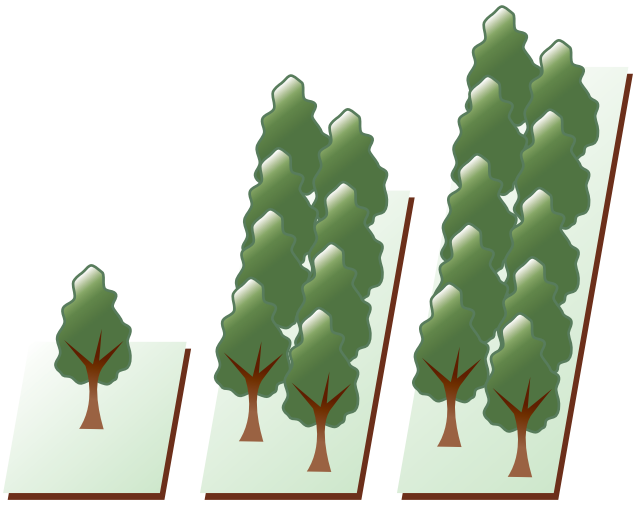
Promoting Recycled Pulp

Fuji Xerox Office Supply (FXOS) made an early start in the development of recycled paper closely working with paper manufacturers for many years.
The recycled content FXOS delivered in 2002 is as high as 54%.



Replacing What We Use
Participating in New Zealand Forestry Operations

In 1992, Oji Paper Co., Ltd. and ITOCHU Corporation established their own forestry businesses in New Zealand. Fuji Xerox joined the forces with FXOS through an equity participation agreement in May 1996. Under the group's current afforestation plan, the plantation area will be increased each year to reach 10,000 hectares in 2004. 14-year old trees will be harvested, starting with the trees planted in the first year. By such rotation of forests, we will become a pulp supplier for our own business.



1997
Forest surface area: 5,000 ha

Harvest to begin in 2004. The plantation area will be reached 10,000 hectares.

90,000 tons of trees expected to be harvested each year until 2007.

240,000 tons of trees expected to be harvested each year as of 2008.

C² paper for color and monochrome printing, with more than 30% COC certified pulp

Paper at our customers

Customers

FXOS COC certification

Ordering & Delivery

FXOS

Product distribution

Oji Paper COC certification

Production

Dedicated storage excluding non-certified chips

Distribution

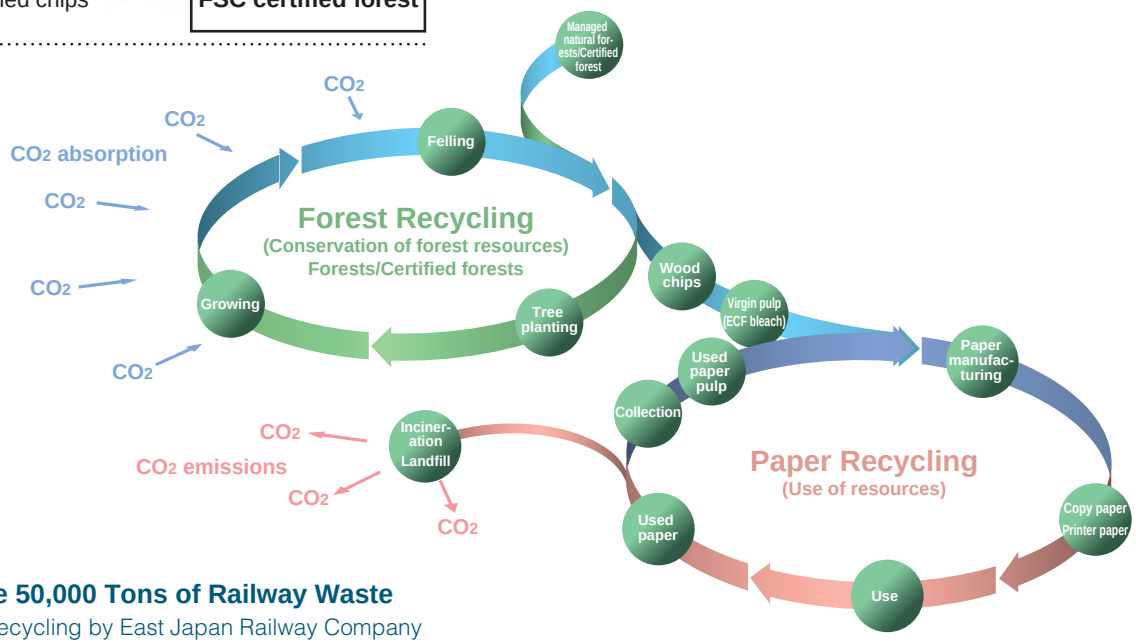
Oji Paper Ebetsu plant (Production)

Import of certified chips

FSC certified forest

C² Type Paper COC Certified

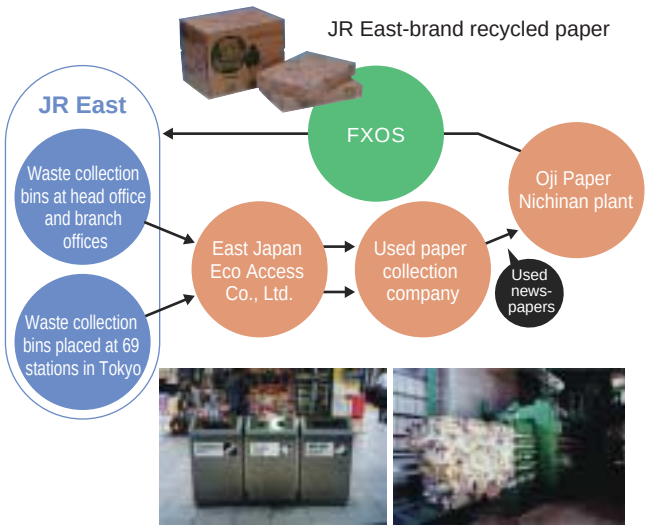
In May 2002, Fuji Xerox Office Supply introduced "C²" paper made from the chips with "Chain of Custody" certification of the Forest Stewardship Council, Germany. The COC approves such paper products as are genuine in terms of origin, milling, and distribution. COC certified paper, in other words, is environment-conscious, protecting diversity of natural life.



Annually Recycle 50,000 Tons of Railway Waste

Waste paper recycling by East Japan Railway Company

The East Japan Railway Company with support of FXOS has established its own closed-loop paper recycling system. Under this system, the company makes JR-brand copy paper of 100% recycled content from discarded newspapers and magazines collected from its railway cars and stations.
The papers and magazines collected from 69 stations in Tokyo by the head office and branch offices are taken to the depot at East Japan Eco Access Co., Ltd., part of the JR East group. After sorting, the paper is sent by sea to Oji Paper's Nichinan plant where it is recycled into JR-brand copy paper. The recycled paper is then shipped back to the depot in Tokyo.
The recycling system has played a significant role in raising awareness of the importance of recycling among JR East employees.



On-Site Activities

Energy Conservation (Global warming prevention)

The energy consumption of our domestic and overseas development and production facilities has tended upwards over the past few years, mainly due to the startup of low-end printer and toner production plants. Yet our efforts towards reducing energy consumption have continued. For instance, we focused on improving the efficiency of high energy-consumption equipment such as boilers, environmental laboratories, and air-conditioning systems, and have achieved significant progress in this regard. It is another highlights in FY 2002 that the surface area of our tree plantation in New Zealand almost reached 10,000 hectares. In and beyond FY 2003 we will make greater use of nighttime electricity and natural energy sources, as well as make energy conservation efforts in our overseas production sites.

70% of CO_2 Emissions Attributable to Electricity Consumption

Production Plants Account for 70% of Energy Consumption

When measured in terms of CO_2, the energy consumed by our development and production facilities accounts for a little over 71% of that by the entire group. Furthermore, electricity accounts for almost 70% of the consumed by the group (Figure 1 & 2). The next most common sources of energy used are kerosene (around 12%) and gas oil (around 11%). The gas oil is used to power generators in the Shenzhen plant. Kerosene is used to heat buildings and production equipments. Propane gas is mainly used to heat the boiler in the EA toner plant in Toyama prefecture.

Figure 1: CO_2 Emissions at 10 Domestic/Overseas Factories

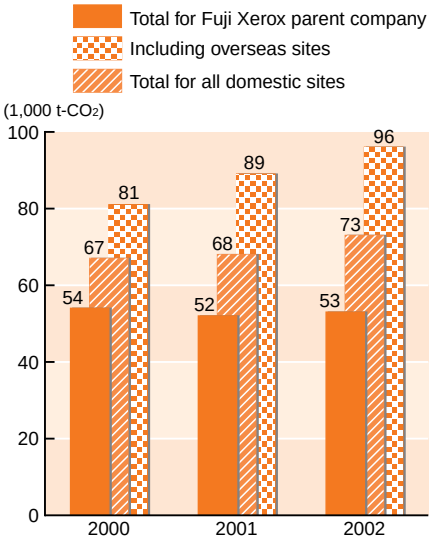
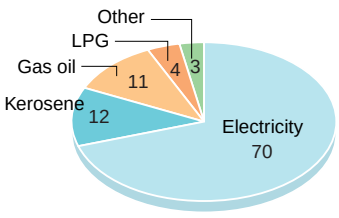


Figure 2: Types of Energy Used
(CO_2 emissions, including those from overseas sites)



Refitting Boilers

Since the time of establishment, we have continued to improve the energy efficiency of the aforementioned plants. To date, improvements have included the replacement of air conditioning equipment and lighting fixtures to inverter-based models and the conversion of our fuel oil for boilers to kerosene or other fuels. Furthermore, we have improved fuel efficiency by replacing large-scale boilers with a series of compact boilers. When the energy saving effects of such efforts are expressed in terms of CO_2 emission, the switch to inverter-based lighting equipments and renewal of air conditioner at the Ebina factory in FY 2002, for example, realized annual savings of 175 tons and 107 tons respectively. Furthermore, the renewal of boilers in FY 2000 realized 967 tons reduction in CO_2 emission.

Clean Room Energy Consumption Regulated through Smart-Control System

Given that they operate 24 hours a day, 365 days a year, our data center and server room consume a substantial amount of electricity. Our environmental testing laboratory also consumes a large amount of energy for its size as it must be maintained at a constant temperature and humidity. The same can be said for our clean rooms. Although we initially considered reducing the energy consumption of the clean room to be a formidable task, we solved the problem by implementing a smart-control regulating system. Under this system, a computer regulates the energy supply by selecting from a series of operating patterns with the configuration most suited to the conditions of electrical demand. The combined effects of converting to this as well as the two above improvements at the Ebina factory in FY 2002 realized annual energy savings equivalent of 214 tons in CO_2.

Offsetting Peak Demand through Nighttime Electricity

Peak power demand at Fuji Xerox occurs for a few hours in the afternoon during summer. To help curb this demand, we are making an effort to use cleaner nighttime electricity by storing it up in ice-thermal storage systems*1 for subsequent use during the day. In FY 2002 we implemented our fourth ice-thermal storage system at our research laboratory in Kanagawa prefecture. In addition, we have implemented an experimental sodium-sulphur (NAS) battery storage system at our Ebina Site in cooperation with Tokyo Electric Power Company. The system has reduced electricity costs of the Ebina plant by 16 million yen a year.

Figure 3: NAS Batteries Used to Store Nighttime Electricity

Reducing Energy Consumption through Application of Advanced Technology

As described above, the reduction of electricity consumption in development and production facilities is of crucial importance. Further energy consumption reduction necessitates implementation of co-generation systems and conversion of fuels, kerosene to natural gas. On top of these, it will be required to develop and apply advanced technologies, such as of our EA toner (Page 39).

*1 Under this system, ice is made during the night using cleaner nighttime electricity, which is then used for air-conditioning during the day.

Efforts to Prevent Global Warming

1.7 Million kWh Annually by Wind Power

Fuji Xerox has entered into a contract with the Japan Natural Energy Company Limited (JNEC) in effect to purchase 1.7 million kWh of wind power generation per year under the Green Energy Certification System. Under this system, JNEC subcontracts the actual electricity generation operations to the windmill company Windtech Minami Towada, who sells the electricity (Figure 4) to an electric power company. Fuji Xerox then purchases the equivalent amount of power from the electric power company and is issued with a Certificate of Green Energy from JNEC for the amount purchased, thereby in effect purchasing electricity that is wind-generated. Fuji Xerox considers that this contract will help reduce CO_2 emissions and serve to promote the nation's wind-power generation. The purchased electricity is to save 607 tons of CO_2 emissions each year.

Figure 4: Windmills Near Lake Towada
(The wind power station in Tashirodaira)

Solar Energy

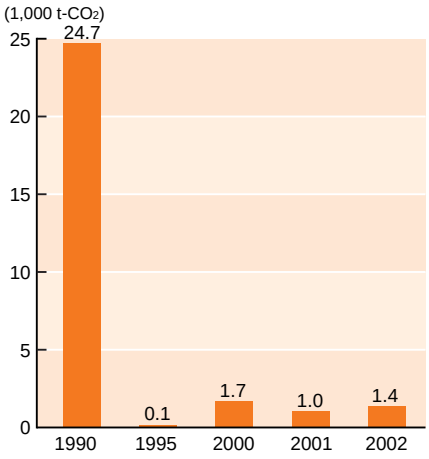
In 1999 we established a solar electrical generation system in cooperation with New Energy and Industrial Technology Development Organization (NEDO) at our Ebina site (Figure 5). In FY 2002 the system generated a total of 80,000 kWh, resulting in savings of 28 tons of CO_2 emissions.

Figure 5: The Solar Power Generation System at the Ebina Site

Efforts to Reduce Other Greenhouse Gases

We began to reduce non-CO_2 greenhouse gas emissions in the early 1990's. Those emissions during FY 2002 amounted to 1 ton, or 1,400 tons in CO_2 (Figure 6). The gases mainly arose from evaporated cleaning fluids consumed. We are currently perfecting substitution technologies to enable replacement of such fluids with environment-conscious agents.

Figure 6: Five Non-CO_2 Greenhouse Gases Used



70,000 Tons of CO_2 Absorbed by Tree Plantations

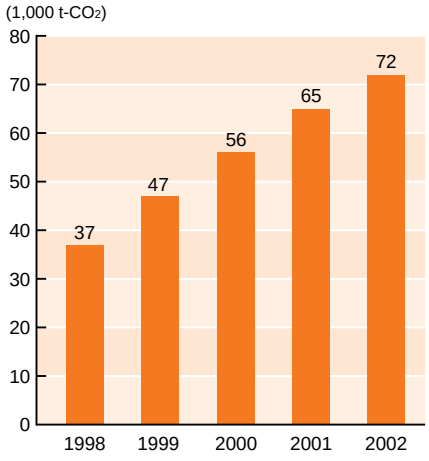
Besides helping to protect natural forests, our afforestation in New Zealand (Figure 7) absorbs CO_2 in the air.
Our plantation comprises 12 plots of eucalyptus trees. One plot is afforested each year and trees in the first plot can be felled after 12 years. Once harvested, we will plant trees in the vacant plot, thereby realizing a forest that is self-sustaining. First harvest will be in FY 2004. Using plot surface area, average growth rate and carbon content as calculation factors, we estimate that our New Zealand eucalyptus forests had absorbed some 72,000 tons of CO_2 in FY 2002 (Figure 8). This amount is nearly equal to our annual CO_2 emissions of our domestic development and production sites.

Responding to the Kyoto Protocol

Fuji Xerox agrees with the scheme of the Kyoto Protocol and is currently devising measures to meet its obligations. In 1990, our domestic CO_2 emission stood at 120,000 tons. That in FY 2002, however, stood at 110,000 tons, a reduction of 8%. Our emissions of CO_2 and five other gases in FY 1990 amounted to 140,000 tons, exceeding the FY 2002 amount by 24%. We intend to continue our efforts towards reduction of CO_2 emission and examine the use of other mechanisms such as emissions trading and the absorption effects of forests, in cooperation with the government.

Figure 7: Forestry Plantation Located in the Howden Mountain Range in the South Island of New Zealand

Figure 8: Rate of CO_2 Absorbed Each Year through Forestry Plantations



Waste

We count municipal waste, industrial waste, and valuables in “wastes”. We consider valuables to be one of the wastes as total volume fluctuates according to the market, and occasionally ends up as waste when the market price falls below cost. Zero emissions is defined as the state where incineration*1 or landfill accounts for no more than 0.5% in weight of the wastes. With Fuji Xerox Imaging Materials (Toyama pref.) and Niigata Fuji Xerox Manufacturing achieving zero emissions in FY 2002, we have now achieved full zero emission operation in all of our domestic operations. We are making efforts to maintain our materials recycling ratio*2 at a high level while striving to reduce wastes amount to conserve natural resources.

Fuji Xerox Emissions Reduced by 8.6%

Cardboard and Sludge Decreased

During FY 2002 the wastes from Fuji Xerox parent company increased by 300 tons due to the increase in production of consumables. At the same time, however, we managed to reduce our sludge emissions, thanks to the restart of sludge compression following the completion of modifications to our wastewater treatment facilities by FY 2001. Furthermore, our emissions of used cardboard fell due to the increased use of reusable containers. As a result, total wastes emissions fell by 8.6%, bringing our cumulative total waste emissions within the target reduction rate of 3% per year. At the same time, however, the emissions reduction ratio of our domestic manufacturing sites reached only 2% in FY 2002. This stemmed from the boosted production of consumables.

Overseas Sites in Bid to Achieve Zero Emissions

Except for a few countries and regions, effective use and proper treatment of wastes are yet to make headway in Southeast Asia. Nevertheless, our factories in the countries and regions are striving to achieve zero emissions according to Japanese standards. In FY 2002, the Shenzhen site in China joined forces with a local Japanese company, and began negotiations with the local authorities and support of local waste processing companies to achieve zero emissions. In FY 2003, we intend to do the same efforts at the Incheon site in Korea.

Using Fallen Leaves as Compost

Aside from industrial waste, our production sites also produce waste of food and oil (from the in-house cafeteria) and fallen leaves, etc. (from the surrounding gardens). In most cases, kitchen waste is converted into compost while fallen leaves and branches are either converted to compost on site or disposed to contract with agents. In an effort to reduce the latter, the Ebina site has built an on-site compost pit breeding a colony of earthworms. The advantage of this particular disposal processing is that it consumes no energy whatsoever. In these and other ways, our efforts to reduce waste are never-ending.

Recycling Used Paper in Offices

Paper and cardboard account for 40% of the wastes emitted by Fuji Xerox. In FY 2002, we began to reuse paper used for print quality evaluation, implementing an on-line ordering system of the paper for office use. In addition, advancing evaluation technology reduces the number of test paper.

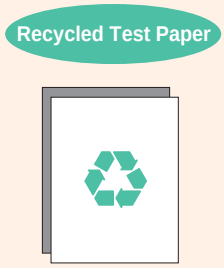


Figure 1: Wastes Emissions and Recycling Rate

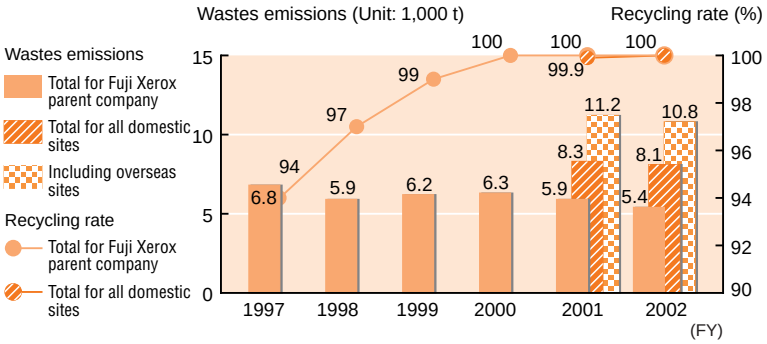
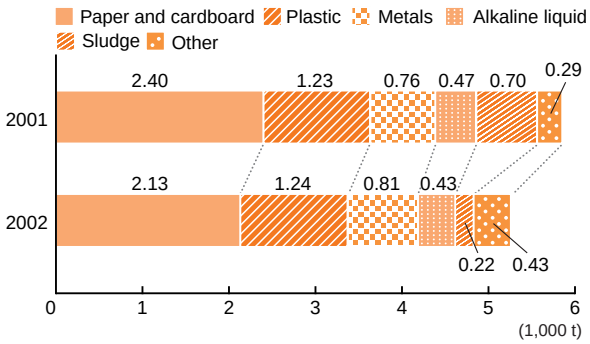


Figure 2: Breakdown of Wastes (Fuji Xerox parent company)



*1 Burning waste in an incinerator. We make a distinction between this and other methods of disposal as waste disposed of in this way cannot be recycled into anything else.
*2 The recycling of wastes back into similar raw materials is called “materials recycling”. By the same token, the recycling of materials into fuel is referred to as “thermal recycling”.

Chemical Substances

Our chemical management system was significantly upgraded in Autumn 2001 with the start up of our manufacturing plant for EA toner,*1 which is made up of a wide range of chemicals. We plan to increase the share of EA toner, which will lead to a steady increase in the usage of chemical substances. While this does not spell a change in our fundamental approach to chemical management, it has caused us to strengthen our anti-pollution and labour safety systems. In addition, we have continued to maintain our chemical substance database and environmental pollution monitoring systems.

Air Emissions Up Only Slightly, Even with Startup of Chemicals Plant

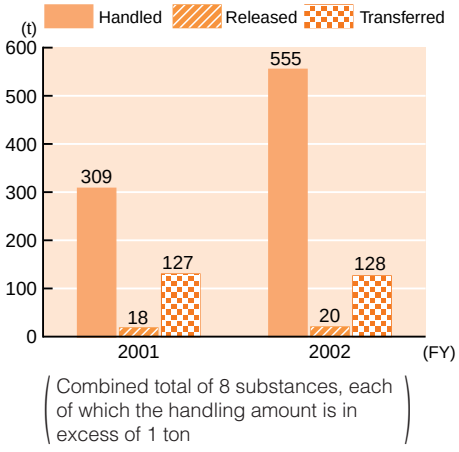
Preventing Chemical Spillages

The EA toner plant has employed every sort of safety feature to minimize the risk of chemical spillages. The plant has implemented a rigorous chemical management system and constructed concrete pits under chemical storage tanks, so that any leaks or spillages will be contained within the plant.

Complete Incineration of Volatile Hazardous Gases

One of the ingredients of EA toner is a volatile substance called styrene monomer. Although the waste gas is emitted when processing the liquid, we collect the gas and burn it completely, thereby preventing any emission into air. When the EA toner plant first began operations, we burned the styrene monomer gas in a large-scale boiler, consuming a lot of propane gas. Since then however, we added a dedicated compact incinerator, which is brought on line to the production volume. This has improved the efficiency of our incineration operations.

Figure 1: Handling and Release of PRTR Substances



Combined total of 8 substances, each of which the handling amount is in excess of 1 ton

Details on the volatile substances handled by each site are reported on pages 53 to 55.

Wastewater Management

We at Fuji Xerox perform stringent wastewater controls based on our own voluntary measures, which demand even higher standards than those required by the Water Pollution Control Law and the Sewage Law. During FY 2002 there were no infringements of sewage quality standards at any of our production sites.

Management of Environmentally Hazardous Chemicals

Once every two months we monitor our storage of waste PCB oil and equipment containing PCB oil.

Items	Storage	
	Number	Weight of PCB
Waste PCB oil	–	1,000 kg
High-voltage capacitors	56	3,824 kg
Fluorescent light stabilizers	5,358	386 kg
Items other than fluorescent lights Low-voltage capacitors	116,140	8,362 kg
Waste cloth	–	450 kg

Table 1: Ground and Groundwater Contamination Survey

Site name	Ground		Groundwater		Cleanup	Post-cleanup inspection (Monitoring of wells)
	Date of execution	Results	Date of execution	Results		
Ebina	to 1998	Nothing detected	to 1998	Nothing detected	–	Annual inspection (5 wells)
Iwatsuki	to 1998	Contamination detected (TeCE, DCE)	to 1998	Contamination detected	Ground and groundwater cleanup completed in 2003	Discretionary inspections (9 wells)
Takematsu	to 2000	Contamination detected (Se, As)	to 2000	Nothing detected	Ground cleanup completed in 2001	Annual inspection (11 wells)
Nakai (Research)	Aug. 1998	Nothing detected	–	–	–	–
Suzuka Fuji Xerox	Dec. 1998	Nothing detected	Dec. 1998	Nothing detected	–	–
Niigata Fuji Xerox	to 2001	Nothing detected	to 2001	Nothing detected	–	–
Fuji Xerox IM	to 2001	Nothing detected	to 2001	Nothing detected	–	–

Completion of Ground Cleanup

During the ground survey of our Iwatsuki plant in 1996, it was found to be contaminated with an organic chlorine-based compound. Soon after the discovery we embarked on a cleanup program, involving the removal, decontamination, and return of the cleaned soil. The decontamination process included flushing underground streams and pumping air into the ground to activate the soil. As a result, by the end of FY 2002 we achieved the legal standard of ground decontamination at all affected areas. In FY 2003, it is scheduled to perform biannual voluntary inspections.

Figure 2: Groundwater Decontamination Facility at Iwatsuki Plant

*1 EA Toner is a group of colored powders to form images on a paper. The toner is made by Fuji Xerox Imaging Materials (FXIM). During the manufacturing process, several chemical substances are dissolved in separate containers of water (a process known as “emulsification”) and then mixed together, causing a chemical reaction (referred to as “polymerization”). The reaction causes the formation of minute particles of resin of a uniform size and shape.

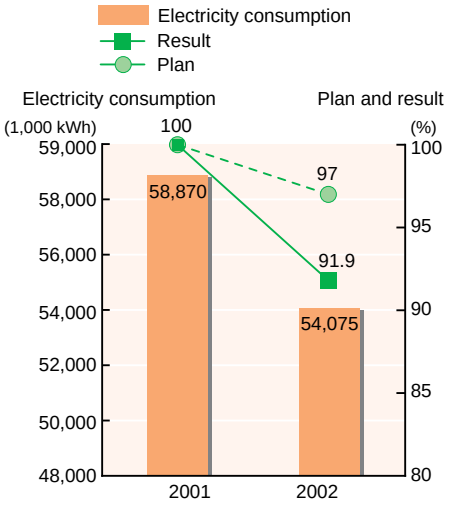
Administration, Sales, and Service

We at Fuji Xerox perform ISO 14001-based environmental management at our administration, sales, and service divisions (companies). In FY 2002, 14 additional sites acquired ISO 14001 certification. For all of these divisions/companies, we have established common targets of 3% year-over-year improvements in (1) electricity consumption, (2) paper purchase amount, (3) low-emission vehicles, and (4) green (affirmative) purchasing (refer to page 48). Furthermore, we are currently helping 14 of our sales companies in the Asia-Pacific region to be ISO 14001 certified. We expect all the domestic and overseas affiliates to obtain the certificate by the end of FY 2003.

Targets Cleared by a Wide Margin through Full Participation

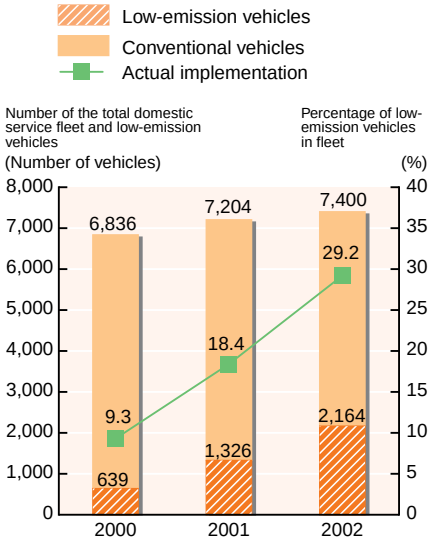
Electricity Consumption Reduced by 8.1%

Largest proportions of the energy used by our administration, sales, and service divisions are electricity and gasoline. By fine-tuning our use of lighting, office machines, and air-conditioners, etc., we were able to achieve an immediate reduction in our electricity consumption. Through this and other means we managed to reduce electricity consumption by more than 8% in FY 2002. To further reduce energy consumption, we will need to make our office facilities and vehicles more energy-efficient.



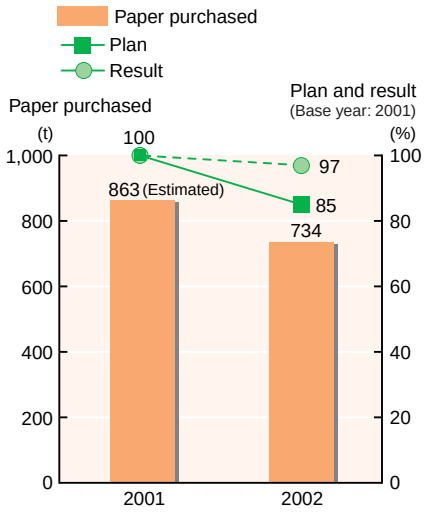
Low-Emission Vehicle Ratio Nearing 30%

The Fuji Xerox domestic service fleet comprises more than 7,000 vehicles. To improve the fuel efficiency and reduce the air pollution, we are making efforts to convert to low-emission models. In FY 2002, low-emission vehicles, including 30 electric cars, accounted for 29.2% of the replacement fleet, a year-on-year increase of approximately 11%. In FY 2003 we aim to double the number of low-emission vehicles.



Paper Purchase Volume Reduced by 15%

Given that most of our administration, sales, and service divisions are located in leased buildings, our wastes are collected and sorted but it is difficult to ascertain the waste amount by these divisions. Nevertheless we are striving to reduce waste by capturing the procured amount of office-use paper. In parallel, we reduce the need to print documents through document management software and discretionary reduction of the number of documents distributed in-house. The divisions are also making an effort to reduce the number of plastic sheets used for overhead projectors.



Small electric vehicle used for maintenance and support services

Activities in Research, Distribution, and Sales

Research and Development

Several years or more are required to commercialize the technologies being studied at our research division. We challenge to realize future environmental breakthroughs. The division is perfecting a number of new materials and components offering improved functions and performance, and some of which are nearly ready for debut. Such materials will not only be incorporated in our products but will be provided to environment-conscious party. Fuji Xerox positions the development of new environmental technologies as part of the ISO 14001 practices, which helps to raise associate awareness among our researchers. We will continue to make an utmost effort in this regard.

Low-Energy Consumption Displays and Communications Technology

Nearing to Large Flat Displays

In 2001 we unveiled an electronic paper (Figure 1), which is thin and flexible akin to paper. Since then, we have developed a new type of color display, the “Zero Display” (Figure 2). Like the electronic paper, the display is able to hold images without electricity (Table 1). Zero Display is made up of toner particles in two different colors that are each given a positive and negative charge and sandwiched between two flat electrodes, a clear one on the screen side and an opaque one on the rear. When a positive voltage is applied to the clear electrode on the screen side and a negative charge to the backside electrode, the negatively charged particles are attracted to the screen surface. By changing the voltage of selected areas on the screen, it is possible to form an image.
Zero Displays can be easily produced in large sizes since it simply being a matter of increasing the size of the flat electrodes. The display shown in Figure 2 is being used as a signboard. As it requires no electricity to keep an image, the displays can be transported and set up easily.

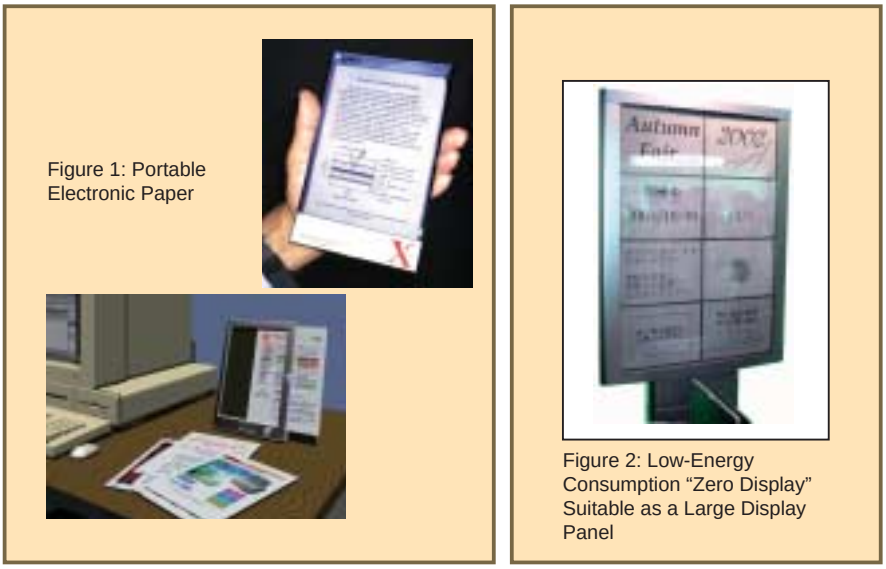


Figure 1: Portable Electronic Paper

Figure 2: Low-Energy Consumption “Zero Display” Suitable as a Large Display Panel

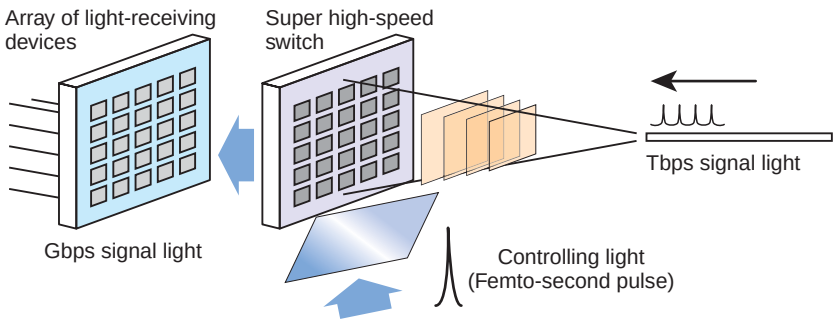
Table 1: Comparison of the Two Display Technologies

	Reflective	Powerless display	Thin & Lightweight	Flexible	Color capable	Available in large sizes
Electronic paper	◎	◎	◎	○	○	○
Zero Display	◎	◎	○	×	○	◎

Way to 1,000 Gbps Optical Transmissions

Broadband communication has become popular as a convenient Internet connection. The Internet providers are working hard to improve transmission speeds. We have been developing high-speed communication devices using novel optical technology, which promises to boost data transmission rate up to 100 times that of broadband capability. The key to this innovation is “switching”, wherein the spatial data for documents and pictures, and chronological data for communications is converted (“switched”) in an extremely short amount of time, 10^{12} times per second to be exact, using a pulsed laser. The laser makes it possible to turn the spatial light switch on and off at such high frequency (Figure 3). The devices are made of organic materials, which are cheaper and consume less energy than conventional semiconductor devices. This research is performed as a part of the “Femto-second Technology Research and Development” project being carried out by the Ministry of Trade, Economy and Industry. Once this technology reaches a practical stage of telecommunications system, simplification of the switching system, significant improvement of response speeds, and reduction in production costs can be expected.

Figure 3: Conceptual Drawing of Surface Light Switch



Green Procurement and Green Purchasing

We at Fuji Xerox name the acquisition of raw materials, parts, and software for production as “procurement” and that of furniture and consumables for office use as “purchasing”. In recent years we have made substantial efforts to improve the greenness (affirmativeness) of our procurement and purchasing operations. In green procurement, we have kept one step ahead of domestic and overseas regulations regarding hazardous chemical contents. In addition, we have reduced hazardous substances contained in our products, based on the assumption that all the end-of-life products in field may not be recovered and recycled. In green purchasing, we have selected five product categories for which we will give priority to daily purchasing. We are currently reviewing these categories to include service products like printing service, hotel accommodation, etc.

Environmental Measures for Procured Materials

Towards Stricter Procurement Standards

Cooperation with the supplier is essential if we are to improve the environmental consciousness of our procured materials (Photographs below and on the right). In 1999 we released our “Green Procurement Guidelines” to our domestic and overseas suppliers. We revised the guidelines in FY 2002, changing the title to “Green Procurement Standards”. The revision was made in view of the progress suppliers had made in reducing specified chemical substances and in consideration of the strengthening of regulations regarding hazardous chemicals in other countries. Classifications of some chemicals were changed from phase-out to elimination. Lead, hexavalent chromium, mercury, and cadmium are the examples. Products on sale as of FY 2004 will be completely free of these substances.

A Supplier Discusses Environmental Issues

Stringent Voluntary Standards

Halogen additives such as bromine are blended in some plastics as fire retardant. Most of halogen-based additives emit dioxin and PCBs if incinerated at low temperature. Besides making a commitment to eliminate use of such additives, we have set our own voluntary targets to phase out all types of halogen additives in and after 2005. We are doing this in view of the hazardous properties of halogen-based substances, which can transform into other hazardous substances or build up in the bodies of animals and humans. Furthermore, we intend to reduce the content of other chemicals considered to be hazardous to the environment such as beryllium, chromium, and their compounds.

Exhibition of Environment-Conscious Products by Supplier

On-Line Data Release

As part of our program for promoting green procurement, we have established a database of the composition, properties, and weights of the supplied materials, and installed direct data exchange links with our suppliers (Figure 1). It is powerful to reduce hazardous chemical substances as well as develop substitute materials.

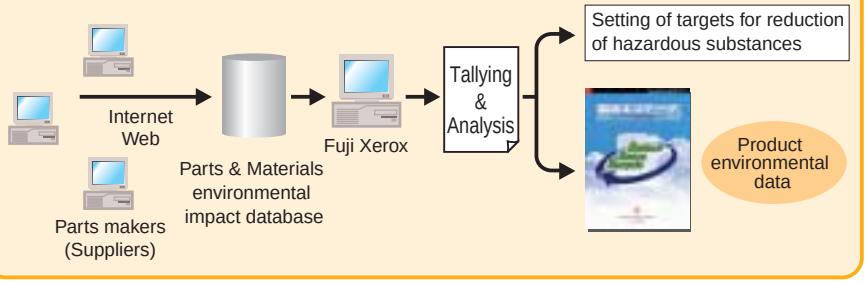
Web For our product environmental data, refer to:
www.fujixerox.co.jp/eco/product_eco/
(Japanese version only)

Furthermore, we have joined the “Japan Green Procurement Survey Standardization Initiative”, managed by the nation’s electrical and electronics industry, which provides information on global regulatory trends of hazardous substances.

Green Purchasing

Since winning the “Green Purchasing Prize” in later 90’s, we have given priority to purchase of environment-conscious products. Our green purchasing was first applied to stationery items, but was later expanded to include personal computers, copiers, printers, print paper, and general sundries. In FY 2002 green products accounted for an average of 89% of all products purchased by the 45 domestic affiliated companies. In 2003 we plan to further boost our green-purchasing ratio following the completion of our new on-line purchasing system.

Figure 1: Environmental Impact Database



Packaging and Distribution

Besides delivering brand new products to our customers, we also collect end-of-life products. Environmental impacts of the logistics are of packaging materials, truck fuel, and electricity consumed at the warehouse. For many years, we simply discarded the packaging materials such as cardboard, plastic wrapping, and polystyrene foam after use. In recent years, however, we have reduced our packaging usage in domestic shipments. We have also decreased our reliance on wooden pallets by switching to pallets made of 100% recycled plastic. In trucking operations, we have improved loading and routing efficiency, and are considering replacing older trucks with particulate-free models in response to the new diesel emissions regulations that will apply in metropolitan areas.

Increase in Use of Simplified Packaging

Use of Simplified Packaging

Our packaging is required to endure any possible stress regardless the destination, domestic or overseas. After leaving the factory, products are sent to a central or regional warehouse before being forwarded to the customer. The packaging must be strong enough to withstand stacking weight, as well as the bumps and vibrations sustained during transportation. In FY 2002 we developed and implemented new simplified and reusable packaging materials that offer our products adequate protection during transportation while reducing environmental impact.

New Direct Shipping Operations

Also in FY 2002 we made outstanding improvements in our manufacturing system, enabling substantial reduction in shipping lead-time following the receipt of an order. As a result of these changes, we are now able to ship products directly from the central warehouse and eliminate the need to stack products. In the spring of 2002, we applied the new system to deliveries within 100 km distance from the central warehouse, and are gradually increasing the scope of application ever since.

Short-Distance Shipments Covered with Shrink-Wrap Only

Figure 1 shows the packaging we use for direct shipments. The product is simply placed on top of a pallet, tied down and covered with shrink-wrap. We apply this to some mid-speed machines within metropolitan areas. For shipments of machines with a document feeder and/or sorter, however, we deploy special vibration-absorbing air-cushion packaging (“Zero Carry”) as shown in Figure 2. The air cushion packaging can be used many times for different machines of similar size and is extremely cost effective, as it has eliminated the production and disposal cost of polystyrene foam, which had to be configured separately to fit each type of machine. We also use Zero Carry packaging for long-distance distributions.

Machines Now Shipped with Options Attached

Many of our copiers and multifunction machines come with a number of optional modules such as automatic document feeders and sorters/finishers. In the past, we shipped these options separately and assembled them at the customer’s office, creating a considerable amount of waste. As of 2001, however, in the case of large-batch orders in metropolitan areas, we began to attach such optional parts at our factories, and converted to the simpler packaging as described above. We are unable to apply this packaging to smaller deliveries, however, to maintain an efficient loading in our delivery trucks. This serves as another example of our efforts to reduce packaging through conversion of our production system.

Environmental Impact of Shipping Operations on the Rise

Fuji Xerox sub-contracts all domestic shipping and collection operations to an affiliated distribution company. Nevertheless, we have developed our own system for monitoring and managing the environmental impact caused by these operations, the results of which are indicated in Figure 3. As shown in the figure, the increase in shipment and collection has pushed up the CO_2-conveted emissions amount. Yet the environmental impact per product has been steadily decreasing, on account of an improvement in loading ratios, the development of better shipping routes, and the increased proportion of compact printer/copier shipments.

Figure 3: Environmental Impact of Distribution Operations

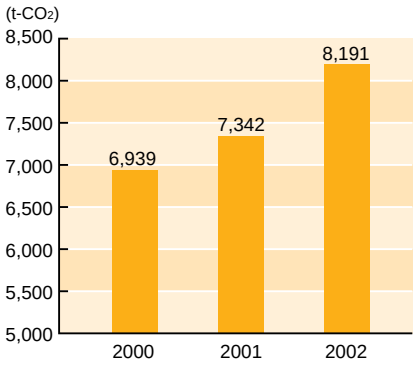


Figure 2: Air Cushion Packaging Used in Long Distance Shipments

Figure 1: Shrink Wrap Packaging Used in Metropolitan Shipments

Sales Operation–Aiming to reduce environmental impact with our customers and local society

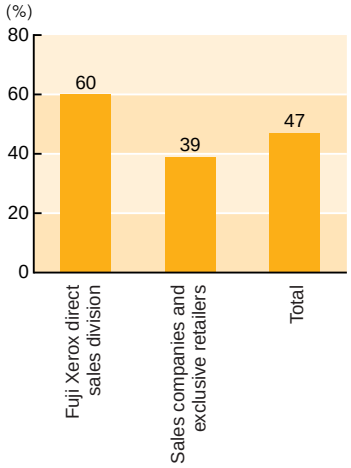
The copiers and multifunction machines continue to generate environmental impacts through paper and electricity consumption at the customer site. To alleviate those impacts, our sales forces provide customers with information on how to make the most of the business and environmental performance of our products, as well as offer software oriented solutions and communication services.

Reducing Environmental Impact of Our Customers

Environment-Conscious Products

Fuji Xerox has developed a wide range of power-saving products to reduce energy consumption by customers (refer to page 32). Our energy-saving products have been awarded the Eco-Mark or produced on a resource-recycling production line. In FY 2002 we had 160 different types of environment-conscious products registered. In our sales division, improving the sales ratio of environment-conscious products has been positioned as a key objective and indicator within our environmental management system.

Environment-Conscious Product Sales Ratio



The "Earth Conscious" mark, Eco-Mark is awarded by the Japan Environment Association to products that meet the environmental standards in 28 different categories including power saving in use and standby mode, and recycling of end-of-life products and parts.

Efficient Use of Paper through Software Solutions

In many offices, paper is still the chief medium for the communication and storage of information. Yet, in view of the environmental impact caused in its production and the limitations of office space, it is desirable that paper consumption should be minimized. To reduce paper reliance at the customer site, we are currently promoting "document solutions", involving the use of special software and high-speed digital multifunction machines to convert paper documents to electronic data. The solutions simultaneously resolve the issues of data sharing and paper reduction.

Solutions for Paper Reduction and Data Sharing (DocuWorks, DocuShare)

Most business information such as proposals and quotations are still marked on paper. By using our digital multifunction machines and document handling software "DocuWorks", such documents can be easily transformed into digital data through a computer network. The digital document management system enables document copying as simply as making a regular photocopy; users can write on, attach labels to, and change the order of sheets as easily as with paper documents. It handles documents of different applications and manages those with our data-sharing software "DocuShare". The conversion of documents to electronic formats allows information and knowledge to be shared between users on the Internet, and improves business efficiency by allowing one-stop access to information that might be fragmented in paper format. The vast amount of data placed on the Internet is managed through data servers, thereby reducing filing cabinets or paper-based documents.

ISO Documents with ISO XROSS

Our ISO Xross software helps create ISO documentation and avoid pile of paper usage in developing and executing an ISO 14001 system.

Local Community Involvement case study of Chiba Xerox (Sales company)

Our sales companies and exclusive retailers not only perform marketing and sales operations, but also strive towards reducing environmental impact on a regional basis.

Collaboration with Local Companies to Be ISO 14001 Certified

Chiba Xerox collaborates with 23 groups including neighbor companies, universities, research centers, and government in ISO 14001 related activities. The company shares its knowledge on the ISO 14001 system with the said groups, and runs an “auditor exchange program” which invites external experts to attend our own ISO 14001 internal audits. Such knowledge sharing with different industries gives both an opportunity to upgrade the skills and contributes to improvement of the environmental management systems.

ISO 14001 Collaboration Meeting

Participating in Prefectural Government Forestation Operations

In 2001 Chiba Xerox entered an agreement with the prefectural government to participate in its “Corporate Forest” project. The employees and other volunteers planted some 1,500 trees, which helps improve the regional landscape as well.

Employee and Family Member Participants of Tree-Planting Project

Printout Management Software (DocuHouse)

It is not easy to keep track of printout operations–who prints what and how many. Our DocuHouse printout management system enables each division to capture printout status by allowing setting a limit on copy volume and replacing printout cost to other division. Our salespeople use a mobile PC to present the Office Solutions Package including the above mentioned software.

We plan to develop hardware and software products with environment-friendly functions and IT solutions to evaluate environmental impacts.

For details regarding our software products, refer to:

Web www.fujixerox.co.jp/product/cat/soft.html
(Japanese version only)

N-Up and Duplex

Many of our new printers bring special features that can print on both sides (duplex) and multiple reduced pages on a sheet (N-Up). By selecting both functions, for example, it is possible to condense 16 pages of text into four or even two sheets of paper. These are also selectable when outputting facsimile and printer images.

Paperless Facsimiles

Our advanced digital multifunction machines store facsimile data directly onto a network server. The receiver can read the document on a monitor screen. The Direct Fax function directly sends facsimile data in a computer.

ISO 14001 Consultation

ISO 14001 consultation is in part of our services. We support the system implementation and operation including initial preparation, status analysis, development of environmental policies and planning, documentation, internal audits, management review, and internal audit.

Awards

Awards Granted in FY 2002

The Health, Labour and Welfare Minister's Prize for Excellence in the 2002 Family Friendly Corporation Awards

The Corporate Ethics Prize in the 12th Corporate Social Contribution Awards, sponsored by the Asahi Shimbun Foundation

The Prize for Outstanding Business Ethics, sponsored by the Business Ethics Research Center

Ebina production site recognized for "Longest Period of Accident-Free Operation" by the Japan Industrial Safety and Health Association

The Prize for the Best Company by the Global Environment Committee in the 12th Global Environment Awards, sponsored by the Japan Industrial Journal Co., Ltd.

Fuji Xerox Australia awarded the Eureka Prize for Industry by the National Museum of Australia

The office laser printer DocuPrint 181/211 awarded the Agency for Natural Resources & Energy Chairman's Prize in the 13th Energy Conservation Awards. This marks the first time for a single company to win the award four times in a row

The color digital multifunction machine series "DocuCentre Color 400CP/320CP" awarded the Agency for Natural Resources & Energy Chairman's Prize in the 23rd Excellent Energy-Saving Apparatus Awards, sponsored by the Japan Machinery Federation

Fuji Xerox awarded the Best Essay Prize, the Research Commendation Prize, and the Technology Prize in the Japan Imaging Society Awards

FXEC's paper shredding and pressing machine "ShrePress" awarded the Recycling Technology System Award by the Clean Japan Center

Fuji Xerox awarded the 1st place in the 37th Japan Industrial Advertisement Prize, Newspaper Division Series, Section 1, sponsored by the Nikkan Kogyo Shimbun, Ltd.

The five Fuji Xerox series of advertisements concerning the development of its resource recycling system awarded the Special Prize in the Newspaper Division of the 12th Environmental Advertising Competition, sponsored by the NPO Regional Exchange Center and the Nihon Keizai Shimbun, Inc.

Awards Received after April 1, 2003

The Information Disclosure Prize in the 13th Corporate Social Contribution Awards, sponsored by the Asahi Shimbun Foundation

Kagoshima Xerox awarded an official commendation by the Commissioner of the Labour Office, Ministry of Health, Labour and Welfare

Chiba Xerox awarded the Governor's Prize in the 3rd Chiba Prefecture Awards for Excellence in Management, sponsored by the Chiba Quality Award Council

Ibaraki Xerox awarded the Environment-Conscious Company Prize by the Ibaraki Governor

Fuji Xerox Shenzhen awarded the Green Company Prize by the Shenzhen Municipal Government, China

Fuji Xerox Shanghai awarded the Prize for Excellence in Environmental Protection by the Shanghai Minxing-ward Environmental Protection Agency

EA Toner awarded the Japan Imaging Society Technology Prize by the Japan Imaging Society

The Fuji Xerox internal educational video awarded the Educational & Training Prize in the 41st Japan Industrial Picture & Video Competition, sponsored by the Japan Industrial Film Council

The Fuji Xerox Environmental Report 2002 awarded the Prize for Excellence in the 6th Environmental Report Awards, sponsored by Toyo Keizai Shinpo and the Green Reporting Forum

Environmental Performance of Our Main Sites

Note: Waste includes industrial waste (including industrial waste subject to special control), municipal waste, and valuables, excluding waste from end-of-life products collected from the market.

Ebina Site (Ebina, Kanagawa pref.)

Item	Material	Unit	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Waste Generated	Total amount	t	3,056	3,319	3,286	3,312	2,771
	Amt. of material recycling	t	2,228	2,497	2,455	2,562	2,041
	Amt. of thermal recycling	t	725	809	831	750	730
	Total amt. of resource recycling	t	2,953	3,306	3,286	3,312	2,771
	Amt. of landfill	t	39	13	0	0	0
	Amt. of incineration	t	64	0	0	0	0
	Recycling rate	%	96.6	99.6	100.0	100.0	100.0
Energy Consumption	Electric power	1,000 kWh	40,723	39,645	39,041	36,798	37,485
	Electricity generated	1,000 kWh	0	72	81	100	80
	Fuel oil	kℓ	1,362	1,287	1,344	0	0
	Kerosene	kℓ	0	0	0	1,134	1,338
	LPG	1,000 m^3	20	17	16	13	13
	City gas	1,000 m^3	0	0	0	0	0
	CO_2 equivalent volume	t-CO_2	19,296	18,287	18,433	16,472	17,005
Water Usage	Water supply	1,000 t	71	75	83	79	76
	Groundwater	1,000 t	139	159	168	147	125
	Water	1,000 t	210	234	251	226	200
Air Pollution	NOx	t	4.70	4.00	4.40	1.20	1.71
	SOx	t	1.00	1.20	1.40	0.04	0.07
	Particulates	t	0.07	0.03	0.08	0.06	0.08
Water Contamination	BOD	t	1.00	1.20	1.50	2.40	1.88
	COD	t	1.30	1.70	1.00	2.30	2.39
Soil Contamination	Trichloroethylene concentration	mg/ℓ	0	0	0	0	0
	Tetrachloroethylene concentration	mg/ℓ	0	0	0	0	0
	1.1.1-trichloroethylene concentration	mg/ℓ	0	0	0	0	0
PRTR Handled	Toluene	kg	4,214	1,564	1,559	600	32
	Styrene monomer	kg	0	0	0	0	0
	Monochlorobenzene	kg	0	0	0	0	0
	Xylene	kg	9,194	5,139	3,600	200	16
	Monoethanolamine	kg	0	1,740	760	400	0
	Ethylbenzene	kg	0	0	50	100	0
	Hydrazine	kg	0	0	0	0	0
	Dichloromethane	kg	0	0	0	0	0
	Trichloroethylene	kg	0	0	0	0	0

Iwatsuki Site (Iwatsuki, Saitama pref.)

Item	Material	Unit	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Waste Generated	Total amount	t	1,211	1,136	1,301	720	781
	Amt. of material recycling	t	1,147	989	1,114	611	680
	Amt. of thermal recycling	t	0	144	187	109	101
	Total amt. of resource recycling	t	1,147	1,133	1,301	720	781
	Amt. of landfill	t	39	13	0	0	0
	Amt. of incineration	t	64	0	0	0	0
	Recycling rate	%	94.7	99.7	100.0	100.0	100.0
Energy Consumption	Electric power	1,000 kWh	20,020	17,564	17,144	15,965	16,353
	Electricity generated	1,000 kWh	0	0	0	0	0
	Fuel oil	kℓ	201	170	170	167	189
	Kerosene	kℓ	0.4	0.3	0.3	1.2	1
	LPG	1,000 m^3	9	9	8	8	11
	City gas	1,000 m^3	0	0	0	0	0
	CO_2 equivalent volume	t-CO_2	7,775	6,792	6,655	6,308	6,502
Water Usage	Water supply	1,000 t	33	29	51	43	44
	Groundwater	1,000 t	26	22	21	28	33
	Water	1,000 t	59	51	72	71	77
Air Pollution	NOx	t	0.50	0.60	0.20	0.10	0.06
	SOx	t	0.10	0.10	0.10	0.10	0.05
	Particulates	t	0.00	0.00	0.00	0.00	0.00
Water Contamination	BOD	t	13.40	11.50	10.60	7.90	8.05
	COD	t	6.40	6.90	6.20	5.10	4.04
Soil Contamination	Trichloroethylene concentration	mg/ℓ	0.037	0.085	0.007	0.003	0
	Tetrachloroethylene concentration	mg/ℓ	1.12	1.12	0.056	0.002	0
	1.1.1-trichloroethylene concentration	mg/ℓ	1.4	0.5	0.026	0.062	0
PRTR Handled	Toluene	kg	0	0	0	0	0
	Styrene monomer	kg	0	0	0	0	0
	Monochlorobenzene	kg	0	0	0	0	0
	Xylene	kg	0	0	0	0	0
	Monoethanolamine	kg	0	0	0	0	0
	Ethylbenzene	kg	0	0	0	0	0
	Hydrazine	kg	0	0	0	0	0
	Dichloromethane	kg	0	0	0	0	0
	Trichloroethylene	kg	0	0	0	0	0

Takematsu Site (Minami-ashigara, Kanagawa pref.)

Item	Material	Unit	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Waste Generated	Total amount	t	1,628	1,705	1,676	1,856	1,827
	Amt. of material recycling	t	1,341	1,458	1,490	1,654	1,651
	Amt. of thermal recycling	t	287	247	186	202	176
	Total amt. of resource recycling	t	1,628	1,705	1,676	1,856	1,827
	Amt. of landfill	t	0	0	0	0	0
	Amt. of incineration	t	0	0	0	0	0
	Recycling rate	%	100.0	100.0	100.0	100.0	100.0
Energy Consumption	Electric power	1,000 kWh	59,200	61,020	64,741	63,244	65,381
	Electricity generated	1,000 kWh	0	0	0	0	0
	Fuel oil	kℓ	2,807	1,598	109	169	150
	Kerosene	kℓ	0	840	2,238	2,316	2,278
	LPG	1,000 m^3	14	12	13	12	11
	City gas	1,000 m^3	0	0	0	0	0
	CO_2 equivalent volume	t-CO_2	30,037	28,395	29,167	29,012	29,669
Water Usage	Water supply	1,000 t	18	17	18	17	15
	Groundwater	1,000 t	3,204	2,570	2,146	2,114	2,147
	Water	1,000 t	3,222	2,587	2,163	2,131	2,162
Air Pollution	NOx	t	4.90	4.50	3.30	3.60	3.80
	SOx	t	3.10	0.90	0.20	0.60	0.34
	Particulates	t	0.40	0.40	0.20	0.30	0.30
Water Contamination	BOD	t	4.50	3.60	2.70	3.30	2.86
	COD	t	4.50	3.60	2.20	2.50	2.88
Soil Contamination	Trichloroethylene concentration	mg/ℓ	0	0	0	0	0
	Tetrachloroethylene concentration	mg/ℓ	0	0	0	0	0
	1.1.1-trichloroethylene concentration	mg/ℓ	0	0	0	0	0
PRTR Handled	Toluene	kg	10,720	11,350	4,696	4,075	7,294
	Styrene monomer	kg	490	457	1,690	8,183	5,009
	Monochlorobenzene	kg	0	7,400	6,400	8,150	9,353
	Xylene	kg	4,300	9,640	8,412	4,925	6,079
	Monoethanolamine	kg	0	0	0	0	0
	Ethylbenzene	kg	0	0	0	0	0
	Hydrazine	kg	510	390	143	0	0
	Dichloromethane	kg	22,970	11,597	301	0	0
	Trichloroethylene	kg	0	0	0	0	0

Note: BOD/COD emissions for the Takematsu site indicate the portion released into rivers, excluding sewerage.

Suzuka Fuji Xerox (Suzuka, Mie pref.)						Fuji Xerox Imaging Materials (Namerikawa, Toyama pref.)		Niigata Fuji Xerox Manufacturing (Kashiwazaki, Niigata pref.)	
Item	Material	Unit	FY 2000	FY 2001	FY 2002	FY 2001	FY 2002	FY 2001	FY 2002
Waste Generated	Total amount	t	2,061	1,910	1,415	249	525	249	231
	Amt. of material recycling	t	1,701	1,465	1,100	112	455	164	201
	Amt. of thermal recycling	t	201	440	314	137	70	82	28
	Total amt. of resource recycling	t	1,902	1,905	1,414	249	525	246	229
	Amt. of landfill	t	160	5	1	0	0	3	2
	Amt. of incineration	t	0	0	0	0	0	0	0
	Recycling rate	%	92.3	99.7	99.9	100.0	100.0	98.9	99.1
Energy Consumption	Electric power	1,000 kWh	27,910	26,597	25,980	2,251	4,684	2,810	6,562
	Electricity generated	1,000 kWh	0	0	0	0	0	0	0
	Fuel oil	kℓ	0	0	0	0	0	0	0
	Kerosene	kℓ	1,038	963	1,075	0	0	0	0
	LPG	1,000 m^3	0	0	0	329	442	0	0
	City gas	1,000 m^3	0	0	0	0	0	188	457
	CO_2 equivalent volume	t-CO_2	12,665	12,000	12,051	2,653	4,175	1,407	3,330
Water Usage	Water supply	1,000 t	12	1	1	1	0	12	31
	Groundwater	1,000 t	136	124	144	341	830	21	30
	Water	1,000 t	149	124	145	342	830	33	61
Air Pollution	NOx	t	1.72	1.72	1.40	0.00	0.00	0.40	0.69
	SOx	t	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Particulates	t	0.26	0.51	0.60	0.00	0.00	0.00	0.00
Water Contamination	BOD	t	0.04	0.04	0.03	0.00	1.10	0.10	0.13
	COD	t	0.18	0.18	0.17	0.00	1.14	0.00	0.00
Soil Contamination	Trichloroethylene concentration	mg/ℓ	0	0	0	0	0	0	0
	Tetrachloroethylene concentration	mg/ℓ	0	0	0	0	0	0	0
	1.1.1-trichloroethylene concentration	mg/ℓ	0	0	0	0	0	0	0
PRTR Handled	Toluene	kg	0	118,226	152,248	0	0	0	4
	Styrene monomer	kg	0	0	0	128,092	317,444	0	0
	Monochlorobenzene	kg	0	0	0	0	0	0	0
	Xylene	kg	0	2,268	1,969	0	0	0	54
	Monoethanolamine	kg	0	0	0	0	0	0	0
	Ethylbenzene	kg	0	0	0	0	0	0	0
	Hydrazine	kg	0	0	0	0	0	0	0
	Dichloromethane	kg	0	0	0	0	0	0	0
	Trichloroethylene	kg	0	0	0	0	0	0	0

Note: Began operation in second half of FY 2001.

Note: Obtained in October 2001.

Note: Power consumption of overseas sites is converted into CO_2 amounts based on the following:
JEMA Report on Estimated CO_2 Emissions Used in Overseas Power Generation Facilities, March 2002

Taiwan Fuji Xerox (Taoyuan plant)						Fuji Xerox Korea (Incheon plant)		
Item	**Material**	**Unit**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2000**	**FY 2001**	**FY 2002**
Waste Generated	Total amount	t	426	620	540	636	698	260
	Amt. of material recycling	t	87	162	158	138	29	259
	Amt. of thermal recycling	t	213	310	270	248	271	0
	Total amt. of resource recycling	t	300	472	428	386	300	259
	Amt. of landfill	t	0	0	0	1	1	1
	Amt. of incineration	t	126	148	113	247	270	0
	Recycling rate	%	70.4	76.1	79.1	60.8	43.0	99.5
Energy Consumption	Electric power	1,000 kWh	4,739	4,799	4,725	2,400	2,600	2,700
	Electricity generated	1,000 kWh	0	0	0	0	0	0
	Fuel oil	kℓ	0	0	0	1	1	1
	Kerosene	kℓ	2	0	0	5	7	9
	LPG	1,000 m^3	0	0	0	0	0	0
	City gas	1,000 m^3	3	3	2	162	166	168
	CO_2 equivalent volume	t-CO_2	2,854	2,890	2,840	1,928	2,044	2,098
Water Usage	Water supply	1,000 t	20	18	22	16	14	14
	Groundwater	1,000 t	0	0	0	0	0	0
	Water	1,000 t	20	18	22	16	14	14
Air Pollution	NOx	t	0.00	0.00	0.00	1.27	1.77	1.81
	SOx	t	0.00	0.00	0.00	2.70	3.70	3.80
	Particulates	t	2.40	2.40	2.40	0.00	0.00	0.00
Water Contamination	BOD	t	0.00	0.00	0.00	0.00	0.00	0.00
	COD	t	3.50	1.80	2.80	0.60	0.50	0.10
Soil Contamination	Trichloroethylene concentration	mg/ℓ	0	0	0	0	0	0
	Tetrachloroethylene concentration	mg/ℓ	0	0	0	0	0	0
	1.1.1-trichloroethylene concentration	mg/ℓ	0	0	0	0	0	0
PRTR Handled	Toluene	kg	400	400	400	0	0	0
	Styrene monomer	kg	0	0	0	0	0	0
	Monochlorobenzene	kg	0	0	0	0	0	0
	Xylene	kg	0	0	0	0	0	0
	Monoethanolamine	kg	0	0	0	0	0	0
	Ethylbenzene	kg	0	0	0	0	0	0
	Hydrazine	kg	0	0	0	0	0	0
	Dichloromethane	kg	0	0	0	0	0	0
	Trichloroethylene	kg	0	0	0	0	0	0

Fuji Xerox of Shanghai (Shanghai plant)						Fuji Xerox of Shenzhen (Shenzhen plant)		
Item	**Material**	**Unit**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2000**	**FY 2001**	**FY 2002**
Waste Generated	Total amount	t		445	500	1,138	1,187	1,425.4
	Amt. of material recycling	t		425	459	1,102	1,153	1,383.9
	Amt. of thermal recycling	t		0	0	0	0	0
	Total amt. of resource recycling	t		425	459	1,102	1,153	1,383.9
	Amt. of landfill	t		0	0	36	33	41.3
	Amt. of incineration	t		20	41	0	0	0
	Recycling rate	%		95.5	91.8	96.9	97.2	97.1
Energy Consumption	Electric power	1,000 kWh		4,616	4,712	455	885	2,011
	Electricity generated	1,000 kWh		0	0	12,548	12,808	12,510
	Fuel oil	kℓ		0	0	0	0	0
	Gas oil	kℓ		250	226	3,440	3,706	3,644
	LPG	1,000 m^3		0	0	180	109	131
	City gas	1,000 m^3		21	21	0	0	0
	CO_2 equivalent volume	t-CO_2		5,424	5,455	10,540	11,263	12,331
Water Usage	Water supply	1,000 t		49	59	132	208	143
	Groundwater	1,000 t		0	0	138	98	143
	Water	1,000 t		49	59	270	305	286
Air Pollution	NOx	t		0.07	0.05	117.20	121.10	118.20
	SOx	t		1.50	1.30	6.80	7.10	6.90
	Particulates	t		1.10	1.50	0.00	0.00	0.00
Water Contamination	BOD	t		0.00	1.00	4.00	3.80	4.60
	COD	t		2.60	2.40	11.30	10.20	13.60
Soil Contamination	Trichloroethylene concentration	mg/ℓ		0	0	0	0	0
	Tetrachloroethylene concentration	mg/ℓ		0	0	0	0	0
	1.1.1-trichloroethylene concentration	mg/ℓ		0	0	0	0	0
PRTR Handled	Toluene	kg		0	150	290	510	910
	Styrene monomer	kg		0	0	0	0	0
	Monochlorobenzene	kg		0	0	0	90	260
	Xylene	kg		0	0	1,030	2,230	2,240
	Monoethanolamine	kg		0	0	0	0	0
	Ethylbenzene	kg		0	0	50	430	350
	Hydrazine	kg		0	0	0	0	0
	Dichloromethane	kg		0	0	0	0	0
	Trichloroethylene	kg		0	0	0	0	0

Note: Obtained in April 2001.

Independent Assurance Report

Independent Assurance Report
(English Translation)

August 19, 2003

To Mr. Toshio Arima
President and Representative Director
Fuji Xerox Co., Ltd.

We have been asked to review the "Sustainability Report 2003" ("the Report") of Fuji Xerox Co., Ltd. ("the Company"). The preparation of the Report is the responsibility of the Company.

1. Scope and Objectives of Assurance

The objective of this assurance is to express our independent opinion on:

(1) The reliability of processes used to identify, collect and report significant social and environmental information included in the Report; and

(2) The consistency of information included in the Report with supporting documents obtained during our review process on a sample basis.

This independent assurance report, however, does not provide any assurance on the completeness of the information contained in the Report. This is our first year to perform a review for the Company. The scope of our review does not include the information prior to FY 2001.

2. Basis of Opinion and Summary of Procedures Performed

Currently, there are no generally accepted international social or environmental reporting and assurance standards. Therefore, we have referred to emerging practice and guidelines.

To reach our opinion, we conducted the following procedures at the Headquarters, Ebina site and Takematsu site.

(1) At the headquarters

- Interviews with management and persons responsible for processes to control, collect and compile information reported from sites in Japan and abroad; and
- Inspection and comparison of information obtained with related documents.

(2) At the sites we visited

- Interviews with management in charge of environmental matters and representatives from each operational unit who are responsible for information control, collection and reporting; and
- Inspection and comparison of information obtained with related documents.

3. Opinion

On the basis of the above work, we have reached the following opinion:

(1) The Processes used to identify, collect and report significant social and environmental information included in the Report were appropriate and reliable.

(2) The information included in the Report is consistent with the supporting documents obtained on a sample basis during our review process. No significant errors that should have been corrected were identified as a result of our test.

Asahi Sozosha Sustainability Certification Organization Co., Ltd.

CAS Cert

Sites Inspected

Name of Site	Site Classification	Business Lines and Major Product
Fuji Xerox Co., Ltd. Headquarter		Headquarter functions
Fuji Xerox Co., Ltd. Ebina site	Domestic site	Development and production of copiers and related products
Fuji Xerox Co., Ltd. Takematsu site	Domestic site	Development, manufacture and sale of image formation materials

Comments

In the course of our review, we made a number of recommendations. For the benefit of the readers, a summary of our recommendations is as follows.

1. Interviews with Director in Charge

We performed interviews with the CSR officer and the environmental officer as an important part of the examination process. Since this was our first year to perform a review for the Company, the purpose of the interview was to confirm that the policy for and content of the disclosure was not decided based on publicity effect, but was supported by a systematic framework and consistent with the top management's intention based on the corporate mission.

As a result, we confirmed that both officers have a reasonable recognition of what should be done now and matters to be addressed in the future by having a thorough understanding of the corporate mission and the state of the company. In addition, we noticed fair and open corporate culture during the interview, which should serve as a role model for followers.

2. Contents of Social Reporting

Amid the growing interest in corporate social responsibility, the company released this report with more social information. In 1998 the company revised its corporate mission and action guidelines, and established the common value statement "Shared Values" and the guidelines for implementation of those values "We, the Fuji Xerox Group, will strive to", and has performed various activities in an effort to realize these objectives. In comparison with environmental information, social information tends to be qualitative. The social information in this report, however, includes a result of efforts with quantitative information in addition to explanation of the efforts.

Although quality of the report is already high, we hope that in the future the report will be useful for a wider range of readers, taking their opinion into account so that the company's effort and performance are more widely appreciated. We also hope that the company strives to improve the detail and content of its disclosed information. When considering improvements, we hope that the company considers the needs of the stakeholders and reflects their inputs into reporting. We further expect that report does more than merely cover these items but systematically indicate them in line with the corporate missions and corporate governance.

3. Product Development

The report mentions both energy conservation and universal designs. The company has established clear standards covering all phases of the product lifecycle, including technical development, shipment, collection, and recycling, and takes into account wide range of factors when developing products, including quality, safety, function, and the environment. We recommend that this information should be reported in a comprehensive and systematic manner.

4. Product Recycling Systems

The company has been performing product recycling for 10 years. During the interview we learned that the company has improved its recycling system in a way to improve both environmental and financial performance. We inspected a recycling process with environmental and safety features including the advanced washing technology. We confirmed that the company's recycling operations were one of its best practices.

The company provided the qualitative and quantitative information on each stage of the recycling process.

5. Environmental Accounting

The company's environmental accounting is supported by a computer system monitoring the cost and performance data. It also collates the cost data against financial data. The system was sufficient to function as a management tool. In the future, we would like the company to consider the following matters for further improvement.

(1) Application to Corporate Management

How to utilize the environmental accounting for corporate management is subject to future consideration.

We hope that, in addition to its utilization for the information disclosure through reports, the company will use the environmental accounting as a decision making tool to provide information on business activities such as R&D, facilities investment, product information disclosure to consumers, and environmental planning.

(2) Expansion of Coverage on Items of Reporting

The environmental R&D of the company eventually benefits the environmental efforts of the customer. In the future, we hope that the company expands the scope of information to additional environmental benefits for the customers, such as conservation of resources and reduction of hazardous substances.

Fuji Xerox Co., Ltd.

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The entire contents of this report are available on the Internet.
www.fujixerox.co.jp/eng/ecology/

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