In order to protect and preserve the beauty of nature and its valuable resources so that they can be passed on to future generations, Fujifilm is committed to the ongoing escalation of its involvement in resolving environmental issues.
Editorial Guidelines for the Environmental Report 2002

This Environmental Report focuses on Fujifilm’s environmental activities and achievements during the 2001 business year (April 2001 to March 2002). The report clearly evaluates the environmental impact of Fujifilm’s business activities and products, and looks at the ways we have worked in the past to achieve the key goal of “sustainable development” as well as that the sorts of activities the Fujifilm group as a whole must pursue in the future. Accordingly, the editorial guidelines for this document were drawn up with reference to the Environment Ministry’s “Environmental Reporting Guidelines (2000)” and the “Sustainability Reporting Guidelines” published by the GRI (Global Reporting Initiative). It is our hope that this report will provide readers both inside and outside the Fujifilm Group with a better understanding of our environmental policies and procedures. We will also use the views contributed by all our readers in the questionnaire attached to this report to help find ways to continue improving this report and Fujifilm’s environmental policies.

Consolidated Data

The consolidated data used in this report refers to Fujifilm’s 6 operating locations inside Japan and to the 19 companies in the Fujifilm group listed below, and was totaled to allow for the different characteristics of the production companies and other companies.

<table>
<thead>
<tr>
<th>Production Companies</th>
<th>Fuji Xerox Co., Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fuji Photo Optical Co., Ltd.</td>
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<tr>
<td></td>
<td>Fuji Photo Equipment Co., Ltd.</td>
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<td></td>
<td>Fujifilm Microdevices Co., Ltd.</td>
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<td>Fujifilm Arch Co., Ltd.</td>
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<td></td>
<td>Fujifilm Photonix Co., Ltd.</td>
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<td></td>
<td>Fuji Magnetics GmbH</td>
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<tr>
<td></td>
<td>Fujifilm Microdisks U.S.A., Inc.</td>
</tr>
<tr>
<td></td>
<td>Fuji Hunt Photographic Chemicals, N.V.</td>
</tr>
<tr>
<td></td>
<td>Fujifilm Imaging Systems (Suzhou) Co., Ltd.</td>
</tr>
<tr>
<td>Other Companies</td>
<td>Fucicolor Service Co., Ltd.</td>
</tr>
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<td></td>
<td>Fucicolor Trading Co., Ltd.</td>
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<tr>
<td></td>
<td>Fujifilm Logistics Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Fujimi Magne-Disk Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Fujifilm Medical Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Fujifilm Battery Co., Ltd.</td>
</tr>
<tr>
<td></td>
<td>Fuji Photo Film Canada Inc.</td>
</tr>
</tbody>
</table>

* Includes companies where data was totaled for the year from January to December 2001.

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Fujifilm and the Environment (data for 6 facilities in Japan and Fujifilm Logistics Co., Ltd.)

Resources Used

- Energy: 328 (kilotons of CO₂/year)
- Water for industrial use: 49 (million tons)
- Silver: 1.0 (thousand tons)
- Gelatin: 3.9 (thousand tons)
- TAC: 11.8 (thousand tons)
- Aluminum: 48.5 (thousand tons)
- Paper containers and packaging materials: 8,304 (tons)
- Plastic containers and packaging materials: 3,637 (tons)

Research • Development • Manufacturing

- Waste materials (thousand tons/year): 28
- CO₂ emissions (thousand tons of CO₂/year): 663
- SO₂ emissions (tons/year): 466
- NOₓ emissions (tons/year): 688
- Particulate matter (soot) emissions (tons/year): 20
- COD emissions (tons/year): 160

Environmental impact reduction measures
- Reduction in CO₂ emissions (compared with previous year) (tons of CO₂/year): 116
- Reduction in NOₓ emissions (compared with previous year) (tons/year): 1
- Reduction in PM emissions (compared with previous year) (tons/year): 0.1
- NOₓ emissions (tons/year): 156
- PM emissions (tons/year): 12

Distribution

(distribution data supplied by Fujifilm Logistics)

- Total CO₂ emissions (kilotons of CO₂/year): 20

Environmental Impact Reduction Measures

- Proportion recycled: 97.9%

Management/Communication

Product

Customer
Overview of the Fujifilm Group Business for 2001
In the imaging, information and documentation fields, significant progress was made in the provision of total solutions using digital and network technology. Specifically, this was achieved through measures such as increasing our production capacity for liquid-crystal electronic display materials, entering the market for compact digital minilabs, expanding our digital camera production and sales facilities in the China market, and strengthening our sales structure in the U.S. print-related markets.

With the acquisition of Fuji-Xerox as a consolidated subsidiary company and the weakening yen, consolidated sales for the year rose to 2,401.1 billion yen, a rise of 73.6% on the previous year. Of this, domestic sales comprised 1,355.2 billion yen (up 106.6% on the previous year), with overseas sales totaling 145.9 billion yen (up 43.8% on the previous year). Pre-tax profits for the year totaled 159.5 billion yen (down 20.1% on the previous year) and net profit for the year was 81.3 billion yen (down 31.0% on the previous year).

* The reason for the marked decline in pre-tax profit and net profit from the previous year is that the previous year’s figures included a temporary retirement benefit trust settlement profit.

Imaging Solutions Division
- Color film: Increased sales of the “SUPERIA” 35mm film and the “nexia” APS film
- Single-use cameras: Release of the “QuickSnap Excellent” featuring the best picture quality ever and the “QuickSnap Special Eye800” equipped with a sensor-controlled flash.
- APS compact cameras: Release of the compact and stylish “nexiaQ1”
- Digital cameras: Release of the FinePix50i, featuring high-quality images and sound, and the FinePix F601 equipped with the 3rd-generation Super CCD Honeycom
- Photo finishing: Addition of the “Frontier 330” to our line of digital minilabs
- Other: Installation of infrastructure for services such as the FDI Net Service aimed at widening the scope of photo print use

Document Solutions Division
- Office copiers
- Printers
- Fax machines and consumables, etc. for document services
- Imaging Solutions
- Color film
- QuickSnap single-use cameras
- Film cameras
- Digital cameras
- Film laboratory equipment
- Color paper, chemicals, etc. for developing and printing

Information Solutions
- System components for use in printing, medical diagnosis and information systems
- Materials for liquid-crystal displays
- Recording media, etc.

Sales Breakdown (period ending March 31, 2002; consolidated)

- Document Solutions: 39% of 931.1 billion yen
- Imaging Solutions: 33% of 784.6 billion yen
- Information Solutions: 28% of 685.3 billion yen

Company Profile
Company name: Fuji Photo Film Co., Ltd.
Established: 20 January 1934
Head office: 210, Nakanuma, Minamiashigara-shi, Kanagawa 250-0193, Japan
Tokyo head office: 26-30, Nishiazabu 2-chome, Minato-ku, Tokyo 106-8620, Japan
Capital: 40,363 million yen (as of March 31, 2002)
Employees: 9,736 (company only), 72,569 (consolidated) (as of March 31, 2002)
Total sales: 847.7 billion yen (company only), 2,401.1 billion yen (consolidated) (period ending March 31, 2002)
Annual net profit: 57.1 billion yen (company only), 81.3 billion yen (consolidated) (period ending March 31, 2002)
Affiliated companies: 173 (as of March 31, 2002)

Company Name: Fuji Photo Film Co., Ltd.
Established: 20 January 1934
Head Office: 210, Nakanuma, Minamiashigara-shi, Kanagawa 250-0193, Japan
Tokyo Office: 26-30, Nishiazabu 2-chome, Minato-ku, Tokyo 106-8620, Japan
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Employees: 9,736 (company only), 72,569 (consolidated) (as of March 31, 2002)
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Annual Net Profit: 57.1 billion yen (company only), 81.3 billion yen (consolidated) (period ending March 31, 2002)
Affiliated Companies: 173 (as of March 31, 2002)
We are now in the second year of the new millennium and once again we must face the fact that this is a difficult era, in which we are presented with new and significant changes in business and the environment, unlike those we have faced in the past. In these times, industry is being asked for "sustainable development" — appropriate development that can be sustained and expanded in the future without jeopardizing our precious planet.

At Fujifilm we have always taken protection of the environment as one of our key management focuses, and we have worked continuously with an environmental strategy based on the following 3 principles:

• Consideration of the natural environment (harmony between people and nature)
• Assurance of safety with regard to chemical substances
• Source reduction (preventing the waste of limited natural resources)

Accordingly, in all our processes, from product development through to manufacturing, distribution, product use and disposal, we have proceeded according to an environmental policy, guidelines for corporate behavior and an allocation of priorities that is based the “Responsible Care” policy, by which companies voluntarily implement their own environmental protection and safety assurance measures. Specific activities we have undertaken in this regard in 2001 include ongoing improvements to the chemical substances management system and extension of this system to other group companies, the formulation of basic rules for Design for Environment, the promotion of green purchasing and supply, the use of an environmental accounting system to calculate environmental costs and effects and to present that information, a 35% reduction in atmospheric emissions of volatile organic compounds (VOCs) over 1996 levels, and the achievement of zero emissions through 100% recycling of all waste products at 6 production sites and research facilities.

In addition, we are working to improve our environmental performance and reduce environmental impacts through such measures as reduced energy consumption and reduced CO₂ emissions, reductions in the amounts of hazardous chemicals used and produced as waste products, environmental monitoring at production sites, and environmental education, particularly at management level.

Environmental reports and factory site reports have also been issued as a means of establishing closer communications ties with local communities and with society generally. In 2002, we have further developed our Responsible Care program and drawn up new medium-term strategies in our “Fujifilm Group Green Policy”. The basic tenet of this policy is that "the Fujifilm group companies shall provide customer satisfaction by focusing on sustainable development at the global, personal and corporate levels and by providing highly environmentally sound services, products and corporate constitution." All companies in the group will initiate activities aimed at achieving these goals.

Fujifilm has adopted the ISO14001 standard as the benchmark for its environmental management systems and already obtained certifications at 70 Fujifilm group sites in Japan and overseas. We plan to further expand this effort.

At the highest level of the company, we will continue to strive to provide strong leadership and work hard to implement the “Fujifilm Group Green Policy” by providing management that increases customer satisfaction while continuing to provide environmental, economic and social benefits.

June 2002
**Fujifilm’s Vision for the Environment**

**Fujifilm and TRUST**

The quality of Fujifilm photographic film — Fujifilm’s main product — cannot be discerned until it is used. Once it has been exposed, it cannot be reused as film. Photographic film is purchased on the basis of trust, and the unshakable foundation that supports us is the popularity and strength of the belief among our customers that “Fujifilm products can always be relied upon to be good quality products.”

Along with quality, another vital factor in maintaining trust is the environmental credentials of our products. We rely upon the generosity of the natural environment for many essential materials, including the clean water required in the manufacture of film and scarce resources such as the silver used in the production of color film. Ever since Fujifilm was founded, the protection of the environment has been our highest priority in corporate management. Seen from the current global perspective, the importance of environmental issues is increasing daily, so that measures to protect the environment are indispensable to the “trust” that is so essential for us at Fujifilm.

**Recycled Production of the Fujicolor QuickSnap**

An illustration of the environmental protection measures implemented by Fujifilm are the “3 Rs”: Reduce (fewer resources, less energy and fewer waste products) Reuse Recycle

While we pursue to reduce energy and resource consumption, product quality assurance has taken precedence over the recovery and recycling of resources. So we have adopted the concept of reusing components as our primary focus by working to develop products that allow the “reuse rate” to be maximized. A typical example of this is the cyclical production system used to manufacture the QuickSnap single-use cameras. Rather than the “Design → Production → Use → Disposal” cycle that applies to ordinary products, the cycle in the QuickSnap production system is “Design → Production → Use → Recovery → Disassembly and Inspection → Reuse and Recycling → Production” (inverse manufacturing).

In 1998, we constructed the Fujicolor “QuickSnap” inverse manufacturing factory, in which production, reuse and recycling were all housed under the same roof. This groundbreaking facility has attracted high praise in the academic and industrial arenas as a world’s leading example of the practical implementation of inverse manufacturing.

**The Fujifilm Approach to Sustainable Development**

While continuing to view the trust of our customers as being our fundamental priority, we will achieve excellent environmental product quality by continuing to conduct business based on the following 3 principles:

1) **[Triple Bottom Line]**: Comprehensive consideration of the environmental concerns (conservation of the Earth’s environment as a corporate citizen and economic concerns (corporate growth and development)

2) **[Eco-efficiency]**: Increasing our environmental efficiency, which can be calculated by dividing the price of products and services by the environmental impact

3) **[Life Cycle Thinking]**: Considering the environment over the entire life cycle of the product

Based on these principles, in 2002 Fujifilm formulated the “Fujifilm Group Green Policy” as a new set of medium-term environmental guidelines. By tackling environmental issues in a unified and consistent way, the Fujifilm Group as a whole will attain high levels of “environmental product quality” in its products, services and corporate constitution as well as sustainable development.
## History of Fujifilm’s Environmental Activities

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan and Overseas</th>
<th>Fujifilm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>Establishment of Environment and Safety divisions at factories</td>
<td>Creation of Environment and Safety divisions at factories</td>
</tr>
<tr>
<td>1971</td>
<td>Establishment of Environmental Management Department at Head Office</td>
<td>Creation of Environmental Management Department at Head Office</td>
</tr>
<tr>
<td>1975</td>
<td>Establishment of Fujifilm Material Safety Test Center</td>
<td>Establishment of Fujifilm Material Safety Test Center</td>
</tr>
<tr>
<td>1983</td>
<td>Establishment of Fujifilm Green Fund Public Trust</td>
<td>Launch of Fujicolor QuickSnap single-use camera</td>
</tr>
<tr>
<td>1986</td>
<td>Environmental Management Division renamed as the Environment and Safety Promotion Division</td>
<td>Environmental Management Division renamed as the Environment and Safety Promotion Division</td>
</tr>
<tr>
<td>1989</td>
<td>ISO14001 certification awarded to the Yoshida-Minami Factory.</td>
<td>ISO14001 certification awarded to Fujifilm's Fujinomiya, Odawara and Ashigara factories</td>
</tr>
<tr>
<td>1990</td>
<td>Fujicolor QuickSnap recycling center comes onstream</td>
<td>Compilation of guidelines for safety, hygiene, and environmental protection at Fujifilm factories</td>
</tr>
<tr>
<td>1991</td>
<td>Action plan for combating global warming</td>
<td>Action plan for combating global warming</td>
</tr>
<tr>
<td>1992</td>
<td>Compilation of environmental action plan</td>
<td>Compilaion of guidelines for safety, hygiene, and environmental protection at Fujifilm factories</td>
</tr>
<tr>
<td>1993</td>
<td>Complete end to the use of CFCs of any kind in manufacturing</td>
<td>Complete end to the use of CFCs of any kind in manufacturing</td>
</tr>
<tr>
<td>1994</td>
<td>Establishment of Fujifilm environmental management system standards</td>
<td>Establishment of Fujifilm environmental management system standards</td>
</tr>
<tr>
<td>1995</td>
<td>Entry into Japan Responsible Care Council</td>
<td>Entry into Japan Responsible Care Council</td>
</tr>
<tr>
<td>1996</td>
<td>ISO14001 certification awarded to Fujifilm’s Fujinomiya, Odawara and Ashigara factories</td>
<td>ISO14001 certification awarded to Fujifilm’s Fujinomiya, Odawara and Ashigara factories</td>
</tr>
<tr>
<td>1997</td>
<td>Fujifilm wins the “17th “Superior Trendsetting Factories and Offices Special Award”, sponsored by the Nihon Keizai Shimbun Inc., for its inverse manufacturing system for Fujicolor QuickSnap cameras.</td>
<td>Fujifilm wins the “17th “Superior Trendsetting Factories and Offices Special Award”, sponsored by the Nihon Keizai Shimbun Inc., for its inverse manufacturing system for Fujicolor QuickSnap cameras.</td>
</tr>
<tr>
<td>1999</td>
<td>Construction of the Fujicolor “QuickSnap” inverse manufacturing factory</td>
<td>Construction of the Fujicolor “QuickSnap” inverse manufacturing factory</td>
</tr>
<tr>
<td>2000</td>
<td>Fujifilm wins the “Earth Environment Committee Award for Corporate Excellence” in the 8th “Global Environment Award” sponsored by the Japan Industrial Journal.</td>
<td>Fujifilm wins the “Earth Environment Committee Award for Corporate Excellence” in the 8th “Global Environment Award” sponsored by the Japan Industrial Journal.</td>
</tr>
<tr>
<td>2001</td>
<td>Fujifilm wins the 47th Okouchi Memorial Technology Prize, sponsored by the Okouchi Memorial Committee, for its development of the inverse manufacturing system for Fujicolor QuickSnap cameras.</td>
<td>Fujifilm wins the 47th Okouchi Memorial Technology Prize, sponsored by the Okouchi Memorial Committee, for its development of the inverse manufacturing system for Fujicolor QuickSnap cameras.</td>
</tr>
<tr>
<td>2002</td>
<td>Fujifilm Group Green Policy established to take the place of the Fujifilm Responsible Care Program.</td>
<td>Fujifilm Group Green Policy established to take the place of the Fujifilm Responsible Care Program.</td>
</tr>
</tbody>
</table>

* Bold text indicates measures implemented from 2001 onwards.

* Black text denotes activities in Japan while blue text indicates major overseas events.
### Main Activities and Achievements in Fujifilm’s RC Policy in 2001

<table>
<thead>
<tr>
<th>Main Responsible Care Priorities in Fiscal 2001</th>
<th>Achievements in Fiscal 2001</th>
<th>Self-rating</th>
<th>See page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing risk management systems for chemical substances</td>
<td>To enable more effective implementation of environmental safety management at Fujifilm, we began work on the integration of 3 databases comprising a proprietary in-house MSDS (MDS) database, a database containing information on Japanese and overseas legal requirements for more than 70% of chemical substances, and a third database containing environmental safety data for the roughly 3,800 chemical substances developed, manufactured and used by Fujifilm. In June 2001, operation of the Chemical and Environmental Safety Information Database for chemical substances was also begun in our factories in the U.S. and Holland. We also broadened the scope of application of the “Basic Provisions for the Environmental and Safety Management of Chemical Substances” so that a single unified standard for the management of chemical substances would apply to Fujifilm-Group companies both in Japan and overseas.</td>
<td><img src="image" alt="Target exceeded" /></td>
<td>11, 32</td>
</tr>
</tbody>
</table>
| Enhancing the Green Purchasing and Green Procurement systems of raw materials, components, equipment and parts, etc. | In each category, results exceeded their targets:  
- Green Procurement: Green procurement rate for parts and raw materials: 87% (target for the end of 2001: 70%), up 17% on the previous year.  
- Green procurement rate for packaging material: 74% (target for the end of 2001: 70%), up 19% on the previous year  
- Green Purchasing: Green purchasing rate at the end of 2001: 87% (target for the end of 2001: 70%), up 35% on the previous year | ![Target exceeded](image) | 22 |
| Establishing environmental accounting systems | Using the guidelines set out by the Ministry of the Environment, we revised the totaling methods used in the aggregated environmental accounting system we had established in 2000 so that the effects of investment could be evaluated separately with regard to its internal corporate effects, its effects on customers and its effects on society. | ![Target exceeded](image) | 20, 21 |
| Setting up systems for reducing the environmental impact of packaging | To aid in the design of packaging that would reduce environmental impact levels in each division, we compiled a packaging database (operation to commence from 2002) that lists data on the types and weights of packaging materials used by product, along with the aggregate consignment fees for product reuse in the Container and Packaging Recycling Law. In fiscal 2001, we reduced paper packaging used in domestic sales by 102 tons and plastic containers and packaging by 206 tons compared with fiscal 2000 (as defined in the Container and Packaging Recycling Law). | ![Target exceeded](image) | 22 |
| Setting up management systems for Design for Environment | We implemented our “Basic rules for Design for Environment” on a trial basis at the Miyazaki Technology Development Center and the Ashigara Research Center. To evaluate the trial, we used LCA-method standardized trials conducted on photosensitive material equipment. QuickSnap single-use cameras, color negative film and color papers. Full-scale implementation of the “Basic rules for Design for Environment” is starting up during 2002. | ![Target exceeded](image) | 12 |
| Setting up management systems to put in place Responsible Care educational programs | We set up the 3 sets of courses below as our educational curriculum for 2001. These courses were used to implement far-reaching education throughout the Fujifilm Group companies.  
1. Introductory courses: New employee education, Education for new section and department heads  
2. Manager courses: Ordinary course, Chemical and Environment course  
3. Specialist courses: Dealing with new chemical substances laws, Life Cycle Assessment (LCA), Design for Environment | ![Target exceeded](image) | 10 |
| Reducing emissions of VOCs into the atmosphere (Fujifilm target: 50% reduction in atmospheric VOC emissions by the end of fiscal 2002 (based on 1996 levels)) | In 2001 we reduced our atmospheric emissions of VOCs to 2,777 tons, a 35% reduction on 1996 levels. In fact, production increased by 15% in the 5 years from 1996 to 2001, giving an actual reduction in emissions of 44% when this is taken into account. | ![Target exceeded](image) | 24, 25 |
| Reduction of waste volumes and promotion of reuse, and regeneration to attain Zero Emission goals (Fujifilm target: To reduce waste product volumes to zero during 2002 at sites where waste incineration is buried) | We have made good progress with our zero emissions program, working towards our target of “reusing 100% of all waste products generated by our business operations to completely eliminate incineration and burial”. In other words, to recycle all waste products, even waste such as fresh foodstuffs and ordinary garbage, not merely industrial waste. As a result, we achieve zero emissions at all our Japanese factories and research facilities in March 2002, one year ahead of schedule. | ![Target exceeded](image) | 28 |
| Promote energy conservation and carbon dioxide emission reduction measures (Fujifilm target: To implement measures by 2010 that will have the effect of reducing CO2 emissions by at least 51,000 tons (carbon conversion values/year)) | • Energy conservation: Due to factors such as increased production levels and changes to the items produced, actual figures for 2001 for Fujifilm’s 6 Japanese facilities show an increase in energy consumption of 2.5% over the previous year. From now on, we will be working hard to reduce energy consumption by further rationalizing production processes and improving our production techniques.  
• CO2 emissions: We have set the following new CO2 emission reduction targets for 2010, based on 1990 levels:  
  - Fujifilm itself will reduce emissions by at least 9%  
  - The Fujifilm Group in Japan will reduce emissions by 4% in total.  
Due to factors such as increased production levels and changes to the items produced, actual figures for 2001 for Fujifilm’s 6 Japanese facilities show an increase in CO2 emissions of 2.7% over the previous year. However, preparations have been made for the piping of city gas into 3 factories in Japan, which will begin sequentially during 2002. | ![Target exceeded](image) | 23 |
| Enhanced environmental monitoring at production sites | To prevent emissions into the environment, we are stringently applying our own strict standards that exceed those required by law. We are monitoring the quality of waste water and underground water, as well as the make-up of boiler emissions gas to check that no pollutants are present. We have also completed soil testing at all 6 Fujifilm facilities in Japan, and at the Ashigara and Odawara sites where pollution were confirmed, we immediately informed the relevant local government bodies, explained the situation to local citizens and undertook cleanup measures. (The cleanup is now completed.) | ![Target exceeded](image) | 26, 27 |
| Setting up systems to provide necessary environmental and safety information to people outside Fujifilm through complete MSDS disclosure, etc. | We have completely revised the content and format of all our Material Safety Data Sheets (MSDS) based on the PRTR law enacted in January 2001 and the amendments to the labor safety and hygiene legislation and the processes for high-hazard chemicals. | ![Target met](image) | 19 |
| Publicizing Fujifilm’s Responsible Care activities through a more detailed environmental report, the issuing of site reports and via the Fujifilm web site | In June 2001, we published the Fujifilm Environmental Report (2001 edition). The report outlined our environmental protection measures and activities in fiscal 2000 with reference to the GRI guidelines and was independently reviewed. Site reports were also issued from all 4 Fujifilm factories in Japan, (With the release of site reports by the Miyazaki Technology Development Center and the Ashikaga Research Laboratories in June 2002, site reports have now been issued by all 6 Fujifilm factories in Japan.) | ![Target met](image) | 18 |
| Cooperating in government and industry activities and engaging positively in regional initiatives | We have cooperated effectively and positively in both public and private sector initiatives, including sending lecturers to help with research into environmental protection measures in the ASEAN chemicals industry and to provide guidance with the Responsible Care movement in Thailand. We have also conducted public lectures for citizen’s groups. | ![Target not met](image) | 35 |

* Self-ratings: ![Target exceeded](image) : Targets exceeded; ![Target met](image) : Targets met; ![Target not met](image) : Targets not met.
Environmental Management Systems

ISO14001 and RC
Fujifilm is committed to positively and effectively implementing its Responsible Care (RC) program throughout the total business process, from product development through production, distribution, and use to waste disposal. Fujifilm is also actively working towards acquiring ISO14001 certification as a way of promoting environmental safety through RC. We are continually improving our performance in this regard by repeatedly implementing the Plan-Do-Check-Act (PDCA) cycle shown at right, and the ISO14001 standards are a key tool in reducing our environmental impact.

Organizational Structure
Fujifilm set up environmental and safety management divisions in its factories in 1970, and at its headquarters in 1971. Currently, the Company has environment and safety officers deployed in each of its business and research facilities who are responsible for key line organizations.

Furthermore, in 1989 the Environment and Safety committee (renamed as the Fujifilm Responsible Care Committee in 1995) was established as a cross-organization executive-level body to promote environmental and safety issues across the entire Group.
Fujifilm has long regarded the acquisition of ISO14001 certification as a key part of its Responsible Care program. By January 1997, all four Fujifilm factories in Japan had been certified, and now at the end of May 2002, certification has been granted to a total of 53 sites in Japan, including group member sites, and 17 overseas sites. Certification has also been acquired by Fujifilm affiliates and partners. Fujifilm is currently working towards the acquisition of ISO14001 “combined certification” through the construction and implementation of single environmental management system (EMS) for the whole Group, including related divisions such as sales and distribution. We plan to complete combined certification within Japan by the end of 2003 (2004 for part of head office) and for overseas production companies in the Group by the end of 2004.

53 Certified Sites in Japan

- Fuji Photo Film Co., Ltd. Ashigara Factory (December 1996) Research, development, and manufacture of clinical examination systems utilizing the medical diagnostic film format
- Fuji Photo Film Co., Ltd. Myianodai Technology Development Center (March 1998) Equipment R and D for medical imaging diagnosis, color photos, and printing systems
- Fuji Photo Film Co., Ltd. Yoshida-Minami Factory (January 1997) Research, development, and manufacture of the platemaking materials (PS plates) used in offset printing
- Fuji Photo Film Co., Ltd. Asaka Research Laboratories (March 1999) Research, development, and manufacture of clinical examination systems utilizing the medical diagnostic film format

17 Certified Sites Overseas

- Fuji Photo Optical Co., Ltd. January 1998
- Mito Fuji Koki Co., Ltd. January 1998
- Okaya Fuji Koki Co., Ltd. March 1998
- Sato Fuji Koki Co., Ltd. March 1998
- Fuji Photo Equipment Co., Ltd. March 1998
- Fujifilm Photonics Co., Ltd. April 1999
- Fujifilm Arch Co., Ltd. June 1998
- Fujifilm Microdevices Co., Ltd. March 2000
- Fuji Technics Co., Ltd. April 2000
- Fujicolor Disk Co., Ltd. June 2001
- Fujifilm Medical Co., Ltd. April 2002
- Fujicolor Trading Co., Ltd. May 2002
- Fujicolor Service Co., Ltd. Tokyo Office May 2002
- Fuji Xerox Co., Ltd. Takematsu Center - March 1997
- Suzuka Fuji Xerox Co., Ltd. May 1997
- Fuji Xerox Co., Ltd. Ebina Center - June 1999
- Fujicolor Service Co., Ltd. Tokyo Office May 2002
- Fuji Xerox Co., Ltd. Nakai Laboratory - May 2001
- Osaka Fuji Xerox Co., Ltd. June 2001
- Hyogo Fuji Xerox Co., Ltd. June 2001
- Hiroshima Fuji Xerox Co., Ltd. June 2001
- Ibaragi Fuji Xerox Co., Ltd. June 2001
- Gifu Fuji Xerox Co., Ltd. July 2001
- Saitama Fuji Xerox Co., Ltd. July 2001
- Niigata Fuji Xerox Co., Ltd. July 2001
- Fuji Xerox System Services Co., Ltd. November 2001
- Tokyo Fuji Xerox Co., Ltd. December 2001
- Hokkaido Fuji Xerox Co., Ltd. December 2001
- Chiba Fuji Xerox Co., Ltd. December 2001
- Tama Fuji Xerox Co., Ltd. December 2001
- Nagano Fuji Xerox Co., Ltd. December 2001
- Hokuriku Fuji Xerox Co., Ltd. December 2001
- Fujikura Fuji Xerox Co., Ltd. December 2001
- Fuji Xerox Co., Ltd. November 2001
- Kyoto Fuji Xerox Co., Ltd. December 2001
- Okayama Fuji Xerox Co., Ltd. December 2001
- Shikoku Fuji Xerox Co., Ltd. December 2001
- Yamaguchi Fuji Xerox Co., Ltd. January 2001
- Kitakyushu Fuji Xerox Co., Ltd. December 2001
- Fuji Xerox Co., Ltd. General Office Marketing Company December 2001
- Fuji Xerox Co., Ltd. Industrial Solutions Company December 2001
- Fuji Xerox Co., Ltd. Customer Service Support Company December 2001

* As of May 31, 2002.
Environmental Management Systems

Environmental Education
Progress in educational curriculum implementation
The Fujifilm Curriculum Development Committee for Responsible Care Education Programs plans and promotes environmental educational activities throughout the Fujifilm Group in line with employee positions and their type of work.
The details of the 2001 curriculum are as follows:
1. Introductory courses: New employee education,
   Education for new section and department heads
2. Manager courses: Ordinary course, Chemical substances course
3. Specialist courses: Dealing with new chemical substances laws,
   Life Cycle Assessment (LCA), Design for Environment
Over 1600 employees at Fujifilm and in the Fujifilm Group attended classes under this curriculum during 2001.
In the past, these classes have covered the specific environmental and safety issues faced by each workplace where tasks such as production or research are undertaken in accordance with ISO14001. However, we are now expanding the scope of these courses to provide the target students with a broader understanding of the issues involved.
We are continuing to expand and develop our environmental education program as an effective way of improving environmental and safety practices throughout the Fujifilm Group.

RC Monitoring
JRCC (Japan Responsible Care Council) RC Pilot Certification Received
To ensure the transparency and reliability of the Responsible Care (RC) program, which is self-administered, the JRCC formulated the Responsible Care Code and started an RC certification system in 2002.
The aims of this certification are as follows:
① To “improve the quality of corporate RC practices” through objective evaluation in accordance with the codes
② To play a useful role in “improving levels of trust in the community” by publicizing the details of the certification system and the progress of certification decisions.
As a member of the JRCC, Fujifilm, in conjunction with Group member Fujifilm Logistics, received pilot JRCC certification in March 2002 at the final stages immediately prior to operational implementation, independently of the activities of Fujifilm’s own in-house RC monitoring committee. The certification was implemented with regard to the Distribution Safety and Chemical Product Safety RC codes shown below.

Certification teams made up of industry experts and JRCC officers checked the information provided in questionnaires on chemicals and product safety and distribution safety issues along with the content of the attached data. They then conducted interviews with the relevant supervisors, starting with the General Manager of the Environmental Protection & Products Safety Div., and inspected the relevant documents. They concluded that the Fujifilm management practices system was extremely well organized. Their specific findings were as follows:
① The system for the reflection of risk assessment results, the setting of policy and targets, and the formulation of plans was extremely well constructed and administered.
② As could be seen from the reduction in VOC emissions, setting of targets and the follow-up system needed to ensure those targets are met was firmly administered with remarkable improvements in performance targets.
As items to be addressed in the future, the JRCC proposed the following:
① The feedback function providing the results of testing and monitoring to cooperating companies should be perfected.
② With regard to education and training, the checking system should be enhanced to ensure that the CA part of the PDCA cycle operates properly to improve the effectiveness of the education and training programs.
We are enhancing the points noted in the pilot certification and will continue to ramp up the standard of our environmental practices in the future.
Visit the following web page for announcements on the start of the JRCC Responsible Care Certification System:
http://www.nikkakyo.org/organizations/jrcc/info/pdfs/RCV_RF-1.pdf

Responsible Care Codes

|--------------------------------|---------------------------|--------------------|---------------------------------|-------------------|--------------------------|-----------------------------------------------|

- The Responsible Care codes stipulate what is currently regarded as the ideal form that should be taken by Responsible Care activities. The codes are made up of the 7 individual codes in the table above. The 6 codes from the Pollution Prevention Code to the Community Awareness and Emergency Response Code set out specific activities, while the Codes of Management Practices provide a set of requirements for the operation and management under a single management system of all the responsible care activities in the 6 areas.
Chemical Substance Management

The distinctive feature of Fujifilm’s chemical substances management program is that substances are divided into 4 ranks, from “prohibited” through to “managed normally”, based on independent standards and managed accordingly.

Also, as the figure below shows, chemical substances management covers every step of the life cycle of raw materials, from purchasing through to research, development, manufacturing, distribution, product use and, finally, disposal.

Overview of Chemical Substances Management

Three chemical substance databases and global chemical substance management

Fujifilm has developed 3 databases to allow more efficient management of chemical substances. The 3 databases are each interrelated so that any modification to one database is automatically reflected in the others.

In June 2001, operation of the Chemical and Environmental Safety Information Database for chemical substances was also begun in our factories in the U.S. and Holland. This has been further expanded to include production Group factories in Japan and overseas, with operations based on linkage of the Legislative Regulations and Chemical and Environmental Safety Information databases scheduled to begin in 2002.
Design for Environment

How Design for Environment Works

As set out in the various recycling laws relating to the Law Promoting the Formation of Recycling-based Society, consideration of the environmental impact of any product is an indispensable part of building a society based on recycling, and must be of prime importance to any company. At Fujifilm, we have always devoted considerable thought and effort to the development of environmentally friendly products. To further spur these efforts, we have reviewed our framework for Design for Environment so that it can be applied to all our products. The diagram below shows the processes performed in each stage of a product life cycle, as stipulated in the Fujifilm basic rules for Design for Environment.

The “Basic rules for Design for Environment” clearly set out the environmental concerns for products, along with the items to be evaluated in each stage of a product’s life cycle. Fujifilm’s Design for Environment targets the entire product life cycle and incorporates LCA (Life Cycle Assessment) evaluation. Accordingly, these rules also formulate a standard LCA procedure. Reducing the environmental impact of containers and packaging is also specifically addressed with the aim of providing comprehensive Design for Environment.

We have been using Design for Environment on a trial basis since January 2001 at the Miyanodai Technology Development Center and the Ashigara Research Center. To evaluate the trial, we used LCA-method standardized trials conducted on photosensitive material equipment, QuickSnap single-use cameras, color negative film and color papers. Full-scale implementation of the “Basic rules for Design for Environment” is starting up during 2002.
Environmental Product Assessment

From the start of the design process for a new Fujicolor QuickSnap product, an independent environmental product assessment is carried out to ensure that environmental awareness, reuse, and recycling are all part of the development process. The first step in carrying out an environmental assessment of a product is the creation of a cyclical production process flowchart for the life cycle of each part and unit that makes up the Fujicolor QuickSnap camera. This allows us to determine the ease of disassembly as well as where the reuse of units can be incorporated in the production process. We also carry out an assessment based on seven evaluation indexes and use this to select the design specifications.

By virtue of these Design for Environment, we are able to reuse or recycle 99% of the components of the Fujicolor QuickSnap Simple Ace Flash, by weight, within the manufacturing cycle of this product. A 100% recycling rate can be achieved if we include the recycling of remaining components such as packaging in uses outside the Fujicolor QuickSnap Simple Ace Flash manufacturing cycle.

Environmental Friendly Fujifilm Products

Single-use Cameras

Fujicolor QuickSnap Series

Ecomark Certification for the Fujicolor QuickSnap in 2001

Since it was first released in 1986 as the world’s first single-use camera, we have worked to apply the principles of Reduce, Reuse and Recycle (“the 3 Rs”) to reduce its environmental impact. As a result, in 2001 the new QuickSnap Simple Eye 800 Flash 27, QuickSnap Super Eye 800 series and QuickSnap Simple Ace Flash models were the first single-use cameras to be awarded Ecomark certification in the “Plastic product using recycled materials” product category. This was due to the fact that the rate of plastic reuse from recycled QuickSnap cameras exceeded 40%, resulting in the acknowledgement of the QuickSnap as an environmentally friendly product.

Reduction of the Fujicolor QuickSnap’s Environmental Impact

Since recycling of the Fujicolor QuickSnap began in 1990, the introduction of lighter and more compact models has led to reductions in resource use, while the use of modular construction and parts standardization along with greater uniformity in materials have raised the level of reuse and recycling. These, coupled with factors such as improved manufacturing processes (body forming methods, etc.) have resulted in steady reductions in the product’s environmental impact.

Progress in Fujicolor QuickSnap Environmental Impact Reduction

The total environmental impact through the product life cycle was reduced by 63% after recycling began. This was due to the development of a compact and lightweight model with modular construction using common components and the rate of recycled plastic use exceeding 40%.

Exploded Diagram of the Fujicolor QuickSnap Simple Ace

Evaluation Indices for Environmental Product Assessment

1. Compliance with laws and regulations
2. Reduction
3. Reuse
4. Recycling
5. Revised design standardization of parts
6. Proper life cycle process
7. LCA
Fully Digital Minilab
Frontier 330

The Frontier 330 Digital Minilab not only provides improved performance through the use of solid-state laser exposure to give ultra-high image quality, it is also very environmentally friendly.

- **Resource savings**: More compact than the Frontier 370 with a 30% reduction in volume.
- **Recycling**: Uses an easy-to-disassemble product design. Limited use of compound components and parts selection that improves the reuse ratio, such as the use of SUS locking screws for the outer casing.
- **Energy savings**: Designed for easy disassembly and 100% recyclable.

**Energy savings**: Energy consumption is 40% lower than the Frontier 370.

Once installed, a minilab is used for 6-7 years on average. Consequently, the reduction of its environmental impact when used by the customer is a major consideration. Research and development for minilabs is conducted and the Miyanodai Technology Development Center, where a program of Design for Environment over the entire product life cycle has been under way since 1993, setting down evaluation systems for factors such as containers and packaging and the reduction of resource and energy use.

In the Frontier 330 Minilab released in October 2001, we succeeded in reducing power consumption by 40% over its predecessor, the Frontier 370. A major factor in this was the use of an LED in place of the incandescent bulb that had previously been used for film scanning. We were also able to make significant reductions in power consumption by limiting the current used to raise the heater used for drying the photographic paper to the required temperature from the standby state.

**Effects of minilab energy use reductions**

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**New Medical Film Imaging System
CEPROS Series**

The CEPROS Series medical film imaging system aims at and achieves reductions in environmental impact by taking the processor, developer and film as a system, based on a “kind to people and the environment” concept.

- **Energy savings**: Achieves long-term stable developing performance coupled with major reductions in the amounts of developing replenisher and developer waste fluid.
  - Even with low replenisher rates, the developer has excellent developer activation and prevention of silver contamination.
  - Fujifilm’s proprietary direct-mix replenishing system suppresses oxidation fatigue in the replenisher.
  - Rack construction in the developing tank to reduce airing.

- **Reuse**: Used developer fluid cartridges can be recovered and reused, earning them the Ecomark award in the “Returnable containers” category.

**Reductions in replenisher due to conversion to CEPROS**

- **Developer Fixer**
  - Large CEPROS models:
    - Fujifilm existing large-size models
    - Large CEPROS models
    - CEPROS M
    - CEPROS M2
  - Medium-sized CEPROS models:
    - Fujifilm existing medium-size models
    - Medium-sized CEPROS models
    - CEPROS S
    - CEPROS SV
  - CEPROS desktop compact models:
    - Fujifilm existing compact models
    - CEPROS P

- **Replenisher**
  - (ml/quarter)
  - Fujifilm existing large-size models
  - Approx. 1/2
  - Large CEPROS models
  - Approx. 1/4
  - CEPROS M
  - Approx. 1/4
  - Approx. 1/6
  - Fujifilm existing medium-size models
  - Approx. 20
  - Medium-sized CEPROS models
  - Approx. 30
  - CEPROS S
  - Approx. 16
  - CEPROS SV
  - Approx. 14

The recovery rate for 2001 was almost 100% (excluding developer containers for the CEPROS P).
Fujicolor “nexia 400” and “nexia 200”

APS Color Film

APS film marks real progress towards reducing environmental impact since it does away with the use of plastic film container, switching to aluminum-coated film packaging instead. APS film is also extremely convenient due to its ultra-compact size and ease of portability, and as well as reducing the packaging weight by at least 50%, it uses only very small amounts of aluminum.

Reduction of CO₂ emissions for 1 pack

<table>
<thead>
<tr>
<th>Previous product</th>
<th>Plastic packed product</th>
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<tr>
<td>100</td>
<td>59</td>
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</table>

41% reduction

Instant Peel-Apart Color Film

FP-100C / FP-100C SILK / FP-100C45
FP-100B / FP-3000B / FP3000B45

This instant peel-apart, high-resolution film uses a plastic pack and has a wide range of commercial uses, such as for passport-type identification photographs and for electron microscope photography. When assessed using the life-cycle assessment (LCA) method, the use of plastic packaging results in a positive environmental effect, with carbon dioxide emissions reduced by 41% per pack compared with products that use metallic plates. Also, because used packs do not need to be separated into metal and plastic components, they are safer and easier to use.

- **Resource savings**
  - Elimination of metal plates due to the use of plastic packaging

Digital Camera

FinePix A101

The power conservation technology designed into the FinePix A101 digital camera allows increased battery life. Under the same conditions\(^1\), the FinePix A101 reduces the environmental impact by the equivalent of 36 batteries when compared with the FinePix 1200. When this is added to the reductions in environmental impact gained from the lower number of parts used, the net reduction is equivalent to 8 kg of CO₂.

\(^1\) When used for 8 years at an average of 7.4 shots per month.

- **Resource savings**
  - Elimination of plastic film containers

  Plastic containers for APS film were completely phased out in May 2001.

- **Energy savings**
  - Improved recyclability for Photorama packs

<table>
<thead>
<tr>
<th>Previous pack</th>
<th>Improved pack</th>
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<tr>
<td>Separation required</td>
<td>No separation required</td>
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<th>Previous product</th>
<th>Plastic packed product</th>
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<tr>
<td>100</td>
<td>59</td>
<td>41% reduction</td>
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</table>

Fewer parts due to the smaller PCB area and the successful use of only one PCB (Printed Circuit Board)

- PCB size reduced by around 40%.
- Designed for low power consumption to allow large numbers of pictures to be taken (up to roughly 5,000 shots or 150 minutes of continuous shooting\(^2\)) with the 2 AA-size alkaline batteries provided.

- **Energy savings**
  - Improved recyclability for Photorama packs

<table>
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<td>41% reduction</td>
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</tbody>
</table>

  \(^2\) Photography conditions: Normal temperature, 640×480 pixels, LCD monitor switched off, flash not used. The approximate number of available shots in standard photography is 80 with the LCD monitor switched on or 150 with the LCD monitor switched off. (Conditions for standard photography: normal temperature, 1280×960 pixels, one shot every 30 seconds, flash used for every second shot.)
Environmental Technology

ATOMM (Advanced Super Thin Layer and High Output Metal Media) Technology

ATOMM technology is used in the Fujifilm magnetic recording media for applications such as computer backup tapes and video tapes for broadcasting. ATOMM is a proprietary technology developed by Fujifilm in which an ultra-high density recording media is created by applying a non-magnetic layer to an ultra-thin film made up of minute metal particles. This technology not only provides a dramatic improvement in recording density, but also significantly reduces the amount of magnetic material used, thereby yielding large savings in energy and resources.

For example, the magnetic DDS (Digital Data Storage) tape used in computers consists of a single layer of magnetic coating applied to a base film. By comparison, tape made using ATOMM technology yields a 96% reduction in CO₂ emissions for the same recording capacity. Also, due to the higher recording density allowed by ATOMM technology, fewer reels of tape are needed to save the same amount of data. If we compare ATOMM tape with DDS tape in terms of the quantities of ABS resin used, the use of ATOMM technology results in a reduction in CO₂ emissions of around 1,000 tons compared with the levels if ATOMM technology were not used.

Green Chemistry in Manufacturing Processes

A wide variety of chemical substances play a part in the production of Fujifilm products. The doctrine of “Green chemistry” (chemistry in which chemical substances such as raw materials are as far as possible not used or generated in the design, synthesis and application of substances) underpins our environmental considerations in the chemical substance development and manufacturing stages, but at Fujifilm we are also using this approach in our development of the technology used in chemical substance manufacturing processes. Two examples of the many substances we have developed are described below.

● Couplers for color film

At least 10 types of coupler are used to form the color images on Fujifilm color negative film. Of these, those posing the most difficult problems in manufacturing and for which the yield rates are lowest are the couplers that release development controlling agents during color production. The significance of the low yield rates is that precious raw materials are not being used effectively. We looked carefully at this process and succeeded in reducing raw material use by around 30% by developing a new peroxide-type catalyst.

● Liquid-crystal compound for WV film

The WV film used to widen the viewing angle of liquid-crystal screens uses a chemical substance known as discotic liquid-crystal compound. The manufacturing process for discotic liquid-crystal compounds involves the use of an extremely large number of organic solvents to eliminate minute amounts of impurities that impair performance, and the reduction of the environmental impact of this process has proven to be very problematic. Based on an analysis of the structure of these impurities, we developed impurity reduction technology, the introduction of which allowed us to set up a new manufacturing procedure with fewer processes. As a result, we were able to reduce the amounts of solvent used by almost half.
Photothermographic Film Coated with Water-based Solvents
FUJI MEDICAL Dry Imaging Film DI-AL

With the “graying” of society, there has been an increase in the use of medical imaging technology. Advances in IT have brought about rapid progress in the digitization of medical imaging diagnosis, but hard copy produced by exposing a photo-sensitive materials is still vital to diagnosis by medical practitioners. Complete and accurate reproduction of detailed digital information requires extremely high-quality photosensitive material, and ideally the developing of these images should be performed using dry silver-halogen compounds that can be developed using heat without creating waste fluids. The techniques based on organic solvent coatings used in the past not only generate large amounts of organic solvent waste during manufacturing, they are also volatile and pose risks in terms of explosions, etc. When these materials were used in manufacturing, small amounts of solvent residues generated fumes when heated, which had harmful effects not only on the technicians involved in the developing, but on the medical staff and patients also. The solution to this problem is FUJI MEDICAL Dry Imaging Film DI-AL. In place of organic solvents such as methyl-ethyl-ketone and toluene, which were previously used in large quantities, we developed and produced a high-quality dry photothermographic material that uses a water-based coating of naturally hydrophobic organic silver salts. In the manufacturing process, we used a new aqueous latex binder, ultrafine particle distribution and coating production technology to greatly reduce the amount of organic solvent waste. As well as reducing the environmental impact of the manufacturing process, this also improved the level of workplace safety for workers involved in the production process since the risk of explosion and exposure to organic solvents was also reduced. And because the coating is hydrophilic, the backing material (PET) can easily be recovered and reused when the images are no longer needed. By using this technology, we expect to be able to reduce emissions of organic solvents by 10,000 tons per year in the near future.

In May 2001, this technology was awarded the 33rd JCIA Technology Award (Special Technology Award) by the Japan Chemical Industry Association, and in April 2002 received the first “Green and Sustainable Chemistry (GSC) Award”, sponsored by the Green and Sustainable Chemistry Network (GSCN).

About the GSC Awards
The Green and Sustainable Chemistry initiative acknowledges the social responsibilities of those involved in the chemicals industry, and addresses “human and environmental health and safety” through technological innovation. The goal of this global movement is to contribute to the realization of a society where advances in chemistry can be linked to social and environmental improvements. The Green and Sustainable Chemistry Network (GSCN) was formally established in March 2000 by a national research institute together with academic societies and other groups involved in chemistry in Japan, with the aim of more effectively and forcefully promoting GSC in Japan. The GSCN presents the Green and Sustainable Chemistry (GSC) Awards to individuals, groups and organizations who have contributed to the promotion of GSC in Japan, and Fujifilm’s dry imaging technology was selected to receive one of the first awards given.

“Environment Forum 2002” Held to Promote Environmental Awareness and Activities Throughout the Fujifilm Group Companies
To provide for environmentally-focused technological exchange throughout the Fujifilm Group, Fujifilm held the “Environment Forum 2002” in March 2002 at the Ashigara factory. Some 40 poster sessions provided an overview of our environmental activities through such illustrations as examples of zero emission targets achieved, examples of energy savings, environmentally friendly products such as medical dry imaging film, automatic print developers and the QuickSnap Simple Ace, and examples of major reductions in packaging resource use.

The forum also summarized the progress of activities carried out by the sales division, the Material Safety Test Center and the Fujifilm RC Committee.

The latest examples of leading-edge technology, environmentally friendly products and environmental improvement measures in other divisions in the company were also exhibited and discussed.
Approach to Environmental Communication

Fujifilm’s basic position on environmental communication is one of active disclosure of information. Because environmental issues affect people both inside and outside the company, we believe it is important to use a range of methods and media to distribute information.

Beginning with the Environmental Reports, the first of which was issued in 1996, we have worked to publicize our environmental information through a variety of media, as shown in the table below. In addition to these, our work on environmental issues is also summarized in the “FUJIFILM NEWS” (For Fujifilm shareholders) and the “FG Hiroba” (for print-related customers).

<table>
<thead>
<tr>
<th>Media</th>
<th>Main Audience</th>
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<tbody>
<tr>
<td>Environmental Report</td>
<td>Primarily environmental NGOs, and all relevant people inside and outside Fujifilm</td>
</tr>
<tr>
<td>Site reports</td>
<td>Residents close to factories</td>
</tr>
<tr>
<td>“Environment” pages on the Fujifilm web site</td>
<td>Customers and others</td>
</tr>
<tr>
<td>News releases</td>
<td>Mass media, customers and others</td>
</tr>
<tr>
<td>MSDS</td>
<td>Customers</td>
</tr>
<tr>
<td>AIS <em>(Article Information Sheet)</em></td>
<td>Customers</td>
</tr>
<tr>
<td>Yellow cards</td>
<td>People involved in shipping</td>
</tr>
<tr>
<td>Notices issued in accordance with legal obligations</td>
<td>Government</td>
</tr>
</tbody>
</table>

* Refer to the Glossary on page 39.

Site Reports Issued by 6 Facilities in Japan

Site reports are issued by the Ashigara, Odawara, Yoshida-Minami and Fujinomiya factories and by the Miyano-dai Technology Development Center and the Asaka Research Laboratories to keep the local community and the local governments abreast of the environmental protection measures being undertaken by Fujifilm.

The reports are clear and easy to read, with separate sections devoted to the main issues and achievements in terms of environmental protection by the respective facilities, as well as sections on progress towards zero emissions, trends in environmental impact reduction, and information on environmental accounting.

The site reports can be viewed at the following page on Fujifilm’s web site: http://www.fujifilm.co.jp/kankyoreport/index.html

Tours of the Fujicolor “QuickSnap” inverse manufacturing factory

The Fujicolor “QuickSnap” inverse manufacturing factory, opened in November 1998 at our Ashigara Factory, is the world’s first inverse manufacturing factory. This facility has a program that allows observers from the general public to view the Fujicolor “QuickSnap” actually being manufactured. The Fujicolor “QuickSnap” inverse manufacturing factory has been selected as part of the environmental study curriculum for primary school children and as a stop on school tours by junior high school students. The factory entertained 10,072 visitors in 2001, and has been visited by 37,780 people since it first opened. Comments include “a wonderful example of recycling” and “this process taught me about recycling and made me look again at the environment”.

* Can be downloaded from the Fujifilm web site.
Material Safety Data Sheets (MSDS)

MSDSs are issued to provide information that will help to prevent accidents involving chemical substances and ensure safety in the handling of chemical substances with regard both to peoples’ health and the environment.

Since July 1997, Fujifilm has provided this information by publishing the MSDSs for the chemicals used in photographic processing and development on its web site (http://www.fujifilm.co.jp/msds). However, with the January 2001 updating of the provisions in the Chemical Substances Management Promotion Law (PRTR Law), the Labor Safety and Hygiene Law and the Poisonous and Deleterious Substances Control Law, the content and format of MSDSs was completely revised. The specific content is now as follows:

1. The names of chemical substances covered by the PRTR Law are followed by their classification (Type 1 or Type 2) and the number, indicating that they fall under the PRTR Law.
2. The names of chemical substances covered by the Labor Safety and Hygiene Law are followed by a note to that effect.
   E.g. 2-amino-ethanol (PRTR1:16, Labor Safety and Hygiene Law)
   Methanol (Labor Safety and Hygiene Law)
3. The included amounts of the chemical substances subject to these laws are stated in accordance with the standards stated in the relevant law

Exhibition at “Ecoproducts 2001”

The “Ecoproducts 2001” exhibition was held at Tokyo Big Sight in December 2001. Ecoproducts of course refers to products and services that reduce environmental impact, and over 350 companies were present to publicize their contributions to the building of a recycling-based society. Fujifilm’s exhibit consisted of 4 theme-based booths called “Fujifilm and environmental protection”, “The QuickSnap Inverse Manufacturing System”, “Imaging Systems” and “Containers and Packaging”, showing the diversity of Fujifilm’s environmental practices. The QuickSnap Inverse Manufacturing System booth summarized the progress from setting up the recycling system through to obtaining the Ecomark award, while there was also considerable interest in exhibits such as the resource savings and reuse strategies in the “Frontier” digital minilabs and the demonstrations of the “Princiao” print system that does not require ink and produces no plastic waste.

Responses to Complaints

A total of 7 complaints were received during fiscal 2001, as shown in the table at right.

The complaints regarding noise were a result of noise generated by ventilation fans, exhaust fans and hammer drills used in building extension construction work, and all claims were dealt with promptly, successfully gaining the understanding of local residents. The complaints regarding radio interference resulted from radio waves being reflected by a new roof ridge being constructed at the Asaka Research Laboratories. This was quickly resolved by the installation of a broadband antenna and the carrying out of connection work for cable TV.

We are endeavoring to prevent the recurrence of such complaints by carrying out thorough anticipatory management. There were no environment-related lawsuits against Fujifilm in fiscal 2001.

<table>
<thead>
<tr>
<th>Nature</th>
<th>Facility</th>
<th>(No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>Ashigara factory</td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>Fujinomiya factory</td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>Myiordai Technology Development Center</td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>Asaka Research Laboratories</td>
<td>(1)</td>
</tr>
<tr>
<td>Radio interference</td>
<td>Asaka Research Laboratories</td>
<td>(2)</td>
</tr>
</tbody>
</table>
### Environmental Accounting for Fiscal 2001

Environmental protection is one of the highest priority issues for Fujifilm, and it is extremely important that we maintain a good balance between these practices and economic feasibility to ensure that we can continue to make progress. At Fujifilm, the implementation of environmental accounting has allowed us to perform calculation and analysis that takes environmental protection issues into account in a way that could not adequately be accomplished using the conventional corporate financial accounting framework. By numerically quantifying the relationship between environmental protection and economic feasibility, we have been able to devote more energy to promoting appropriate investment in environmental protection measures. This is now the 4th year since Fujifilm began calculations for environmental accounting in fiscal 1998, and as our aggregation methods become more comprehensive with each year, we are pleased to say that they have become more and more useful in environmental management. In fiscal 2001, we reviewed our environmental accounting practices to make the resulting aggregation more detailed. In particular, we totaled the reduction in environmental impact originating in the customers as the "economic effect on the customer". Using measures of this sort, we are continually reviewing and improving our accounting practices, using multi-faceted analysis to gain a firmer and more comprehensive grasp on how the results of corporate activities impact on the environment.

### Consideration

When we look at the aggregated results for fiscal 2001, 31.1 billion yen was spent on environmental protection, with 10.7 billion yen going to investment in equipment used for environmental protection. In addition, the in-house economic effects of environmental protection totaled 28.7 billion yen, with economic affects to the customer of 5 billion yen and a benefit accruing to the community equivalent to 14.6 billion yen in monetary terms. It is important to note that the total value of the economic benefit to the customer, which was calculated for the first time this year, does not necessarily include all the benefits, but is nominally put at 5 billion yen. This clearly reflects the priority Fujifilm has long placed on reducing the amount of resources used by the customer and the benefits it has made in this regard. Fujifilm will continue working to provide more precise evaluation of its environmental protection activities and of the benefits gained from those activities. The result of this will be that everyone reading this report will gain a deeper understanding of Fujifilm’s environmental protection activities and the benefits gained, and will also contribute to improving the quality of Fujifilm’s environmental management.

### Environmental accounting principles

- **Purpose of environmental accounting**
  - To provide environmental information expressed in terms of quantitative values that can assist decision making by the management.
  - To provide accurate statistical and financial data to the relevant parties (stakeholders) both inside and outside Fujifilm.

### Basic guidelines for environmental accounting

- Scope of aggregation: Fujifilm Co., Ltd. and its groups.
- Period covered: Fiscal 2001 (April 1, 2001 to March 31, 2002)

### Aggregation method

- Calculations for depreciation are made using the straight-line method over a three-year period.
- Environmental costs contained in comprehensive costs are aggregated by a proportional calculation as determined by the purpose of the expenditures. Comprehensive costs incorporate capital investment and other necessary expenses for purposes other than environmental protection.

### Environmental Accounting Aggregation Chart for Fiscal 2001

<table>
<thead>
<tr>
<th>Environment protection items</th>
<th>Amount Invested</th>
<th>Benefits to Fujifilm</th>
<th>Benefits to customers</th>
<th>Benefits outside Fujifilm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental costs</td>
<td>7,648 M yen</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Area costs within business operations</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Pollution prevention</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1. Air emission costs</td>
<td>191 K yen</td>
<td>1,944 K yen</td>
<td>--</td>
<td>254 K yen</td>
</tr>
<tr>
<td>2. Water emission costs</td>
<td>2,954 M yen</td>
<td>4,479 M yen</td>
<td>792 M yen</td>
<td>508 K yen</td>
</tr>
<tr>
<td>3. Noise emission costs</td>
<td>321 M yen</td>
<td>1,080 M yen</td>
<td>--</td>
<td>3.3 M yen</td>
</tr>
<tr>
<td>Reduced SOx emissions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>25.4 tons</td>
</tr>
<tr>
<td>Reduced NOx emissions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>9 tons</td>
</tr>
<tr>
<td>Reduced VOC emissions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>267 tons</td>
</tr>
<tr>
<td>Reduced CrO3 emissions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>3.3 tons</td>
</tr>
<tr>
<td>Reduced CO2 emissions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>111 tons</td>
</tr>
<tr>
<td>Reduced lead emissions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.11 M tons</td>
</tr>
<tr>
<td>Reduced CO emissions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>144,800 tons</td>
</tr>
<tr>
<td>Reduced ash emissions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>14,400 tons</td>
</tr>
</tbody>
</table>

---

### Workplace Safety and Social Accounting

In addition to promoting environmental accounting, Fujifilm has also started up accounting for the achievements resulting from its contributions to society and the costs involved in those contributions. The table below shows the figures for fiscal 2001:

### Workplace Safety and Social Accounting

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount Invested</th>
<th>Benefits to Fujifilm</th>
<th>Benefits to customers</th>
<th>Benefits outside Fujifilm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace safety</td>
<td>5 M yen</td>
<td>31 M yen</td>
<td>--</td>
<td>4,998 M yen</td>
</tr>
<tr>
<td>Social accounting</td>
<td>99 M yen</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>10,750 M yen</td>
<td>31,124 M yen</td>
<td>--</td>
<td>14,647 M yen</td>
</tr>
</tbody>
</table>

**Note:** Categories with 0 yen do not include monetary values because these are non-mandatory presenting a no monetary impact.
Improving Environmental Performance

Reducing Resource Use
At Fujifilm, we believe that sustainable development is the most important issue facing our world and its people in the 21st century. This is why we are so committed to promoting the “3 Rs”:

- Reduce (fewer resources, less energy and fewer waste products)
- Reuse
- Recycle

as a way of making good use and preventing the waste of our limited resources.

Reducing resource input
At Fujifilm, we are devoting considerable effort to reducing our input of the resources required for production. The input amounts for our primary goods at our manufacturing facilities in fiscal 2001 were as shown below.

<table>
<thead>
<tr>
<th>Input of primary goods</th>
<th>Actual Results</th>
<th>Compared with previous year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver (thousand tons)</td>
<td>1.0 (down 0.1%)</td>
<td></td>
</tr>
<tr>
<td>Gelatin (thousand tons)</td>
<td>3.9 (down 0.4%)</td>
<td></td>
</tr>
<tr>
<td>TAC (thousand tons)</td>
<td>11.8 (down 0.1%)</td>
<td></td>
</tr>
<tr>
<td>Paper containers and packaging (tons)</td>
<td>8,304 (down 1.2%)</td>
<td></td>
</tr>
<tr>
<td>Plastic containers and packaging (tons)</td>
<td>3,637 (down 5.4%)</td>
<td></td>
</tr>
</tbody>
</table>

* Values as defined in the Container and Packaging Recycling Law. Figures in parentheses are relative to the totals for fiscal 2000.

Examples of the way we have successfully reduced resource consumption can be found in the amount of silver we use. Silver is used in the production of photosensitive materials, which are Fujifilm’s principal product, and the amount of silver we use in color negative film has halved over the last 20 years, while the amount used in color paper has fallen by roughly one third. TAC is used to make products such as the polarizing plates used on liquid-crystal displays.

Technical innovations such as the development of thinner films have made it possible for us to reduce the amount of loss in the production process by 100 tons compared with the previous year. We have also performed well in terms of reducing packaging materials, which protect the product and are an important element in the image projected by the product. In fiscal 2001, we constructed and brought online our “Packaging database”, which is designed with the following aims in mind:

- To help in designing packaging that reduces the environmental impact of each Fujifilm department
- To allow faster calculation of the recycling consignment fees under the Container and Packaging Recycling Law
- To allow material types and quantities to be listed by product.

In fiscal 2001, we reduced our paper containers and packaging by 102 tons and our plastic containers and packaging by 206 tons from the previous year.

Green Procurement and Green Purchasing
Among the economic activities of any company, the purchasing and procurement of materials, equipment and goods also have environmental aspects that have to be taken into account. For example, the raw material used to produce Fujifilm’s photographic papers consists entirely of wood chips taken from plantation wood stocks where felling and replanting is planned so as to protect forestry resources and prevent global warming.

At Fujifilm, the active promotion of green procurement practices is spearheaded by the Green Purchasing Promotion Committee.

Fujifilm Green Procurement Criteria
To do business with Fujifilm, companies must meet the following criteria:

1. They must already have ISO14001 certification or plan to receive certification within 3 years.
2. Companies with no plans to obtain certification:
   1. Must comply with any environment-related legal requirements
   2. Must not handle any of the chemical substances specified by Fujifilm, and must also meet at least 70% of the 12 environmental protection and chemical substances management requirements stipulated by Fujifilm.

In fiscal 2001, we conducted a survey of a total of 390 companies supplying raw materials and packaging materials to check their environmental protection practices. The results are shown in the table in the bottom left corner of this page.

We are now promoting practices aimed at achieving a green procurement rate of 100% for parts, materials and packaging by the end of fiscal 2003.

Also, to improve the accuracy of our investigation of chemical substances, we have actively participated in discussions with other companies on the comprehensive implementation of green procurement practices and cooperated in the creation of the “Guidelines for the Study and Universal Application of Green Procurement”.

Green Purchasing
Fujifilm is aggressively pursuing a policy of green purchasing through measures such as setting targets, writing information pamphlets and setting up systems for information exchange.

Our green purchasing rate for fiscal 2001 was 87% (target rate: 70%), a 35% rise on the previous year. We are now working to achieve a green purchasing rate of 100% in fiscal 2003.

<table>
<thead>
<tr>
<th>Green purchasing rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is the proportion of funds spent on environmentally friendly (“green”) products as a proportion of total purchasing expenditures. The green purchasing rate applied to products such as office paper, printing paper, copiers, printers, fax machines, PCs, stationery, office equipment, and general supplies.</td>
</tr>
</tbody>
</table>
Energy Conservation

Because energy conservation and the reduction of CO₂ emission are closely interrelated, Fujifilm established the “Committee for the Promotion of Energy Conservation and the Reduction of CO₂ Emissions” to promote these issues. Due to factors such as increased production and changes in the items produced, the 2001 figures for Fujifilm’s 6 facilities in Japan show a 2.5% increase in energy consumption over the previous year. In the future, we will be working hard to reduce energy consumption by further rationalizing production processes and improving our production techniques.

Using energy effectively and introducing new forms of energy

The effective use of energy through cogeneration has, together with new types of energy such as solar power generation and fuel cells, attracted a great deal of attention recently as means of conserving energy and preventing global warming. Fujifilm first introduced energy conservation technology with the installation of cogeneration-type generators at the Ashigara Factory in 1990, followed by the Fujinomiya Factory in 1991 and the Yoshida-Minami Factory in 2000. Then, in 1998, we installed solar power generators at the Fujicolor “QuickSnap” inverse manufacturing factory. Positive measures of this type resulted in solar power generation in excess of 200 million kilojoules in fiscal 2001.

Reducing CO₂ emissions

In fiscal 2001, Fujifilm’s Committee for the Promotion of Energy Conservation and the Reduction of CO₂ Emissions reviewed its targets with the following in mind:

• Matching the national targets for reductions in CO₂ emissions
• Setting targets valid for the entire Fujifilm Group
• They then resolved that the CO₂ emissions for fiscal 2010, relative to the figures for fiscal 1990, should be as follows:
  • A reduction of at least 9% for Fujifilm itself
  • Total reduction of 6% for the Fujifilm Group companies in Japan

The 2001 figures for Fujifilm’s 6 facilities in Japan show a 2.7% increase in energy consumption over the previous year due to factors such as increased production and changes in the items produced. As way of reducing CO₂ emissions, Fujifilm has targeted natural gas, which is a clean energy source, and plans to pipe natural gas to the Fujinomiya Factory in February 2003, to the Odawara Factory in July 2003, and to the Ashigara Factory in May 2004. During 2001, the boiler specifications were changed and pipelines were laid in the factories in preparation for the introduction of natural gas.

Reducing water use

For Fujifilm, the purpose of environmental protection is to keep our air and water clean, and a plentiful supply of clean, fresh water is also essential to the production of photosensitive materials. Production processes at Fujifilm are carried out with a keen awareness of the quantities of water used and the fact that it is a limited resource. Despite the fact that production volumes increased in fiscal 2001, the promotion of measures such as water recycling resulted in a reduction in the amount of water used in comparison with the previous year.

Trends in energy consumption

<table>
<thead>
<tr>
<th>Year</th>
<th>Kilowatt-hours</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>500</td>
<td>100</td>
</tr>
<tr>
<td>1991</td>
<td>550</td>
<td>110</td>
</tr>
<tr>
<td>1992</td>
<td>600</td>
<td>120</td>
</tr>
<tr>
<td>1993</td>
<td>650</td>
<td>130</td>
</tr>
<tr>
<td>1994</td>
<td>700</td>
<td>140</td>
</tr>
<tr>
<td>1995</td>
<td>750</td>
<td>150</td>
</tr>
<tr>
<td>1996</td>
<td>800</td>
<td>160</td>
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<tr>
<td>1997</td>
<td>850</td>
<td>170</td>
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<tr>
<td>1998</td>
<td>900</td>
<td>180</td>
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<td>1999</td>
<td>950</td>
<td>190</td>
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<tr>
<td>2000</td>
<td>1000</td>
<td>200</td>
</tr>
<tr>
<td>2001</td>
<td>1050</td>
<td>210</td>
</tr>
</tbody>
</table>

Trends in CO₂ emissions

<table>
<thead>
<tr>
<th>Year</th>
<th>Thousand tons of CO₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>100</td>
</tr>
<tr>
<td>1991</td>
<td>105</td>
</tr>
<tr>
<td>1992</td>
<td>110</td>
</tr>
<tr>
<td>1993</td>
<td>115</td>
</tr>
<tr>
<td>1994</td>
<td>120</td>
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</tr>
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<td>1996</td>
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<td>1997</td>
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<td>1998</td>
<td>140</td>
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<td>1999</td>
<td>145</td>
</tr>
<tr>
<td>2000</td>
<td>150</td>
</tr>
<tr>
<td>2001</td>
<td>155</td>
</tr>
</tbody>
</table>

Amounts of water used in production

<table>
<thead>
<tr>
<th>Year</th>
<th>Million tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>50</td>
</tr>
<tr>
<td>1991</td>
<td>55</td>
</tr>
<tr>
<td>1992</td>
<td>60</td>
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<td>1993</td>
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<td>1999</td>
<td>95</td>
</tr>
<tr>
<td>2000</td>
<td>100</td>
</tr>
<tr>
<td>2001</td>
<td>105</td>
</tr>
</tbody>
</table>

Images: Cogeneration-type generator at the Yoshida-Minami Factory, Natural gas facilities at the Fujinomiya Factory.
Improving Environmental Performance

Preventing Pollution

Reducing Emissions of Volatile Organic Compounds (VOCs)
As a key implementation category under its Responsible Care policy, Fujifilm is working to reduce VOC emissions and has established a target of “achieving a 50% reduction in atmospheric VOC emissions by fiscal 2002 (relative to fiscal 1996 levels).” The substances targeted under this initiative are the 7 chemicals, including dichloromethane and toluene, that are classified as type 1 substances under the PRTR law, to which Fujifilm is voluntarily adding another 11 substances including methanol and ethyl acetate, making a total of 18 controlled substances. Atmospheric VOC emissions in 2001 totaled 2,777 tons, which is a 35% reduction on the 1996 levels. In fact, production increased by 15% in the 5 years from 1996 to 2001, giving an actual reduction in emissions of 44% when this is taken into account.

To reach our targets for reductions in VOC emissions in the manufacturing processes, we are focusing on the 2 measures described below.

1. Reducing the amount used (improved formulations)
   Cooperation between the research and manufacturing divisions to bring about a switch from formulations that use organic solvents to those that do not or that use smaller amounts.

2. Preventing atmospheric emissions (equipment-based solutions)
   The recovery and reuse of organic solvents contained in waste fluids and exhaust gases produced by the manufacturing process, and the installation of equipment such as waste-heat boilers and regenerative combustion furnaces.

Fujifilm has already spent around 4 billion yen on VOC reduction and plans to invest another 1.9 billion, installing equipment to reduce atmospheric emissions of its voluntary reduction target substances methanol and ethyl acetate at the Ashigara and Fujinomiya factories.

One of the most challenging and important implementation targets in the Fujifilm Group Green Policy is “achieving a 50% reduction in atmospheric VOC emissions by fiscal 2004 compared with fiscal 2000 levels,” and Fujifilm will be introducing a range of new measures aimed at meeting this new target.

PRTR Survey Results
In March 2000, the Chemical Substance Emission Management Promotion Law (PRTR Law) was enacted in Japan. This law requires mandatory reporting to the government of information such as the total volume of emissions into the environment of chemical substances thought to adversely influence human health and the ecosystem. Since 1995, Fujifilm has been a participant in the PRTR self management program run by the Japan Chemical Industry Association, conducting surveys and reporting the results of its efforts to reduce emissions of the substances concerned.

The table on the right-hand page shows the results of the 2001 survey of substances covered by the PRTR Law and the substances subject to voluntary controls by Fujifilm. The measures taken in 2001 led to steady reductions in atmospheric emissions of substances such as dichloromethane and propyl alcohol.

PCB Controls
The “Special Law Regarding the Proper Treatment of Polychlorinated Biphenyl (PCB) Waste” was drafted on June 15, 2001 and was enacted on July 15. Under this law, a plan is formulated for the processing of PCB waste at a national and regional level, with measures introduced to ensure that proper treatment systems, including treatment facilities, are put in place. At the same time, companies storing PCB waste products are required to dispose of those waste products within 15 years of the enactment of the law and must report annually to the local city or prefectural governor (or to the mayor administering the local public health center) on the progress of PCB waste storage and disposal.

As well as maintaining the strictest control on stored PCBs, Fujifilm has established proper treatment procedures and is gradually disposing of its PCB waste. Fujifilm products that contain PCBs and its progress in terms of PCB storage and control is summarized below.

Fujifilm has already spent around 4 billion yen on VOC reduction and plans to invest another 1.9 billion, installing equipment to reduce atmospheric emissions of its voluntary reduction target substances methanol and ethyl acetate at the Ashigara and Fujinomiya factories.

One of the most challenging and important implementation targets in the Fujifilm Group Green Policy is “achieving a 50% reduction in atmospheric VOC emissions by fiscal 2004 compared with fiscal 2000 levels,” and Fujifilm will be introducing a range of new measures aimed at meeting this new target.

Data from Fujifilm Head Office and the 6 Fujifilm facilities in Japan

<table>
<thead>
<tr>
<th>Storage/Control Status</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>High-voltage transformers and capacitors</td>
<td>219</td>
</tr>
<tr>
<td>Waste PCB oils, etc.</td>
<td>1.5 tons</td>
</tr>
<tr>
<td>Stabilizers for fluorescent lamps</td>
<td>7,017</td>
</tr>
<tr>
<td>Low-voltage capacitors not used in fluorescent lamps</td>
<td>198</td>
</tr>
</tbody>
</table>

PCB storage at the Asaka Research Laboratories
Data on Substances Covered by PRTR and Substances Subject to Voluntary Controls (fiscal 2001, from 6 Fujifilm facilities in Japan) (Unit: ton)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Amount used</th>
<th>Amount emitted</th>
<th>Amount taken to consumed</th>
<th>Amount treated</th>
<th>Amount transferred to ground water</th>
<th>Amount recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone</td>
<td>203.9</td>
<td>7.6 (+0.6)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.6</td>
<td>0.4</td>
</tr>
<tr>
<td>n-Butylbenzenesulfonic acid and its salts</td>
<td>23.8</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>23.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Anilinom and its compounds</td>
<td>7.9</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>4,4-Isopropylidenediphenol</td>
<td>0.6</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>14163.5</td>
<td>1.1 (+0.4)</td>
<td>16.9</td>
<td>0.0</td>
<td>1.3931.1</td>
<td>21.1</td>
</tr>
<tr>
<td>Ethylenediamine</td>
<td>1.1</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>1.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Ethylenediamine tetra-acetic acid</td>
<td>8.2</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>8.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Xylene</td>
<td>25.6</td>
<td>2.3 (-0.1)</td>
<td>0.0</td>
<td>0.0</td>
<td>2.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Silver and its compounds (water-soluble)</td>
<td>1919.1</td>
<td>0.0 (0)</td>
<td>0.1</td>
<td>0.0</td>
<td>1752.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Glyoxal</td>
<td>2.3</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>2.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Glutaraldehyde</td>
<td>2.5</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>2.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Chloroform</td>
<td>5.6</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>5.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Vinyl acetate</td>
<td>1.4</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.4</td>
</tr>
<tr>
<td>1,3-Dichloro-2-propanol</td>
<td>13.7</td>
<td>0.0 (-0.5)</td>
<td>2.1</td>
<td>0.0</td>
<td>0.4</td>
<td>11.2</td>
</tr>
<tr>
<td>Dichloromethane</td>
<td>301.6</td>
<td>288.1 (-0.3)</td>
<td>0.0</td>
<td>0.0</td>
<td>30.8</td>
<td>0.3</td>
</tr>
<tr>
<td>N,N-Dimethylformamide</td>
<td>47.0</td>
<td>2.7 (+0.2)</td>
<td>0.0</td>
<td>0.0</td>
<td>2.5</td>
<td>0.2</td>
</tr>
<tr>
<td>Styrene</td>
<td>6.9</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>6.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Diethers (unit: mg TEC)</td>
<td>—</td>
<td>0.4 (-)</td>
<td>25.4</td>
<td>0.0</td>
<td>0.7</td>
<td>0.0</td>
</tr>
<tr>
<td>Terephthalic acid</td>
<td>34723.3</td>
<td>0.0 (+0.0)</td>
<td>0.0</td>
<td>0.0</td>
<td>34723.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Toluenes</td>
<td>781.4</td>
<td>15.3 (+19.0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
<td>278.0</td>
</tr>
<tr>
<td>Barium and its water-soluble compounds</td>
<td>14.5</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>11.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Hydrazine</td>
<td>1.0</td>
<td>0.0 (0)</td>
<td>0.4</td>
<td>0.0</td>
<td>0.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Hydroquinone</td>
<td>165.5</td>
<td>0.0 (0)</td>
<td>0.4</td>
<td>0.0</td>
<td>158.5</td>
<td>4.2</td>
</tr>
<tr>
<td>Pyridine</td>
<td>4.2</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>4.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Di- n-buty l phthalate</td>
<td>60.8</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>56.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Boron and its compounds</td>
<td>1.8</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>1.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Poly(oxyethylene) nonylphenol ether</td>
<td>2.9</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>1.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>1.0</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Maleic anhydride</td>
<td>3.8</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>3.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Methacrylic acid</td>
<td>9.6</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>5.4</td>
<td>4.2</td>
</tr>
<tr>
<td>Methyl methacrylate</td>
<td>6.9</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>6.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Tris(dimethylphenyl) phosphate</td>
<td>1.9</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>1.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Butyl acrylate</td>
<td>9.1</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>9.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Acetone</td>
<td>920.5</td>
<td>129.8 (+1.1)</td>
<td>7.4</td>
<td>0.0</td>
<td>44.4</td>
<td>303.0</td>
</tr>
<tr>
<td>Butyl acetate</td>
<td>307.9</td>
<td>1.9 (+4.1)</td>
<td>0.0</td>
<td>0.0</td>
<td>78.4</td>
<td>182.5</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>1870.2</td>
<td>316.7 (+68.4)</td>
<td>0.1</td>
<td>0.0</td>
<td>338.0</td>
<td>646.1</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>2.2</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Tetrahydrofuran</td>
<td>55.3</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>55.3</td>
</tr>
<tr>
<td>Tritylamine</td>
<td>21.9</td>
<td>0.5 (+0.9)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>21.4</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>304.3</td>
<td>6.5 (+5.5)</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>30.9</td>
</tr>
<tr>
<td>Butyl alcohol</td>
<td>196.1</td>
<td>29.6 (+2.0)</td>
<td>0.1</td>
<td>0.0</td>
<td>140.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Propyl alcohol</td>
<td>252.3</td>
<td>56.4 (+94.4)</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
<td>59.1</td>
</tr>
<tr>
<td>Methyl alcohol</td>
<td>4581.0</td>
<td>1745.2 (+10.9)</td>
<td>51.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1375.7</td>
</tr>
<tr>
<td>Methyl butyl ketone</td>
<td>5.0</td>
<td>0.1 (+0.1)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.4</td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td>5911.9</td>
<td>162.4 (-4.0)</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>2095.3</td>
</tr>
<tr>
<td>Ammonia</td>
<td>1215.5</td>
<td>1.9 (+0.5)</td>
<td>0.0</td>
<td>0.0</td>
<td>3.3</td>
<td>48.9</td>
</tr>
<tr>
<td>Nitric acid</td>
<td>2575.6</td>
<td>0.4 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>574.2</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>1962.3</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>4.9</td>
</tr>
<tr>
<td>Hydrogen bromide</td>
<td>1.6</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.6</td>
</tr>
<tr>
<td>N-Methyl pyrrolidone</td>
<td>41.2</td>
<td>0.4 (+0.2)</td>
<td>3.7</td>
<td>0.0</td>
<td>0.0</td>
<td>24.2</td>
</tr>
<tr>
<td>Hydrogen iodide</td>
<td>10.9</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>10.9</td>
</tr>
<tr>
<td>Aluminum and its compounds (water-soluble)</td>
<td>3.3</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>3.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Trithiocyanate</td>
<td>19.8</td>
<td>0.0 (0)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>19.7</td>
</tr>
</tbody>
</table>

VOC substance subject to measurement of total atmospheric emissions. Under the PRTR law, substances of which 5 tons or more are used per year (initially per two years) at a given factory must be reported to the Ministry of the Environment. However, in this table, we have listed substances handled in an amount of at least one ton per year.

1 Amount consumed" refers to the amounts contained in or associated with products and the amounts decontaminated.

Refers to disins emitted by equipment used to incinerate sludge that contains silver. The measured amounts are well within the legally permitted range.
Improving Environmental Performance

Strict Self-imposed Controls to Limit Emissions

Environmental monitoring
To prevent emissions into the environment, Fujifilm imposes its own voluntary controls by setting reference values that are more stringent than the legal limits. We monitor the quality of waste water and underground water, as well as the make-up of boiler exhaust gases to check that no pollutants are present. To further enhance our environmental monitoring, we augment the directives issued by the Environment ministry by performing conducts detailed soil surveys to detect the presence of materials for which there is no record of use in the area.
In addition, in areas surrounding factories that use substances subject to PRTR reporting standards, we monitor the atmospheric concentrations of those substances.

On-site Measures to Reduce Atmospheric Emissions from Factories
A range of strategies is implemented at all Fujifilm’s facilities to deal with atmospheric pollution, with good results. The major strategies used in recent years are listed below, along with future initiatives.

- **1995**
  - Boiler fuel used at the Odawara Factory changed from A-type oil to Special A-type. Atmospheric emissions of SOx reduced.
  - At the Ashigara Factory, we installed a high collection-efficiency dust collector in the chimney as a measure to prevent soot emissions.

- **1998**
  - We installed a wet-type electrical dust collector in the exhaust gas desulfurizer at the Fujinomiya Factory. Atmospheric emissions of SOx reduced.

- **2000**
  - Solvent incinerator at the Odawara Factory closed down. Atmospheric emissions of SOx reduced.

- **2002**
  - Introduction of natural gas planned at the Fujinomiya Factory as a way of reducing CO2 and SOx emissions.

- **2003**
  - Introduction of natural gas planned at the Odawara Factory as a way of reducing CO2 and SOx emissions.

- **2004**
  - Introduction of natural gas planned at the Ashigara Factory as a way of reducing CO2 and SOx emissions.

---

**Trends in SOx emissions (data from Fujifilm’s 6 facilities in Japan)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>739</td>
</tr>
<tr>
<td>1997</td>
<td>684</td>
</tr>
<tr>
<td>1998</td>
<td>647</td>
</tr>
<tr>
<td>1999</td>
<td>646</td>
</tr>
<tr>
<td>2000</td>
<td>467</td>
</tr>
<tr>
<td>2001</td>
<td>467</td>
</tr>
</tbody>
</table>

**Trends in COD emissions (data from Fujifilm’s 6 facilities in Japan)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>301</td>
</tr>
<tr>
<td>1997</td>
<td>320</td>
</tr>
<tr>
<td>1998</td>
<td>296</td>
</tr>
<tr>
<td>1999</td>
<td>216</td>
</tr>
<tr>
<td>2000</td>
<td>235</td>
</tr>
<tr>
<td>2001</td>
<td>219</td>
</tr>
</tbody>
</table>

**Trends in NOx emissions (data from Fujifilm’s 6 facilities in Japan)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>479</td>
</tr>
<tr>
<td>1997</td>
<td>416</td>
</tr>
<tr>
<td>1998</td>
<td>322</td>
</tr>
<tr>
<td>1999</td>
<td>160</td>
</tr>
<tr>
<td>2000</td>
<td>231</td>
</tr>
<tr>
<td>2001</td>
<td>231</td>
</tr>
</tbody>
</table>

**Trends in soot emissions (data from Fujifilm’s 6 facilities in Japan)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Emissions (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>52</td>
</tr>
<tr>
<td>1997</td>
<td>28</td>
</tr>
<tr>
<td>1998</td>
<td>31</td>
</tr>
<tr>
<td>1999</td>
<td>28</td>
</tr>
<tr>
<td>2000</td>
<td>28</td>
</tr>
<tr>
<td>2001</td>
<td>20</td>
</tr>
</tbody>
</table>
Preventing and Treating Soil Contamination

Implementation of exhaustive surveys and complete treatment

At Fujifilm, we have responded quickly to the increasing concerns regarding soil and groundwater pollution by performing our own voluntary environmental testing. These tests showed levels of chemical in the soil at the Ashigara and Odawara factories that exceeded the environmental standards. In both cases, we immediately reported our findings to the local authorities, contacted the media and held a meeting to explain the situation to the local residents, while undertaking soil treatment measures.

Levels of fluorine, mercury and lead that exceeded the environmental standards were found in 5 locations in the surface soil at the Ashigara factory. We concluded that this was caused by the leakage of some adhesives used in facility construction and solvents used in the past. Investigations by prefectural and municipal governments revealed no adverse effects on the surrounding area, with no pollution detected outside the facilities. The cleanup was completed at the end of March 2002 by digging out the contaminated soil (totaling 51 m³), transporting it away and replacing it with clean soil.

At the Odawara Factory, lead levels in excess of the environmental standards were found in the soil on the premises. We think this was caused by the leaking of lead compounds that were used in an optical glass factory that was previously situated on that site. In January 2002, soil replacement (totaling 458 m³) was completed in the area where the high lead levels were detected and in the areas adjacent to the site of the original optical glass factory.

In the future also, Fujifilm will continue regular monitoring of groundwater quality using observation wells, while at the same time implementing strict management of wastewater and of the use and storage of substances for which environmental standards have been set.

Refer to the relevant factory site reports for further details.

Survey Results

<table>
<thead>
<tr>
<th>Substance Studied</th>
<th>Effluent Levels Found (Environmental Standards)</th>
<th>Proportion of Environmental Standard</th>
<th>Progress of Cleanup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorine</td>
<td>8.6 mg/l (0.8 mg/l)</td>
<td>21.3 x</td>
<td>Completed</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.00072 mg/l (0.0005 mg/l)</td>
<td>4.8 x</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>0.011 mg/l (0.01 mg/l)</td>
<td>1.1 x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.025 mg/l (0.01 mg/l)</td>
<td>2.5 x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.016 mg/l (0.01 mg/l)</td>
<td>1.6 x</td>
<td></td>
</tr>
<tr>
<td>Ashigara Factory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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</tr>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>0.15 mg/l (0.01 mg/l)</td>
<td>15.0 x</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>0.029 mg/l (0.01 mg/l)</td>
<td>2.9 x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.021 mg/l (0.01 mg/l)</td>
<td>2.1 x</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.02 mg/l (0.01 mg/l)</td>
<td>2.0 x</td>
<td></td>
</tr>
<tr>
<td>Odawara Factory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Groundwater Contamination at Fuji Photo Optical

Voluntary monitoring by Fuji Photo Optical Co., Ltd. in Saitama City in October 2000 detected levels of tetrachloro-ethylene and trichloro-ethylene in groundwater on the site that exceeded the environmental standards. Subsequently, cleanup measures were carried out and continuous monitoring of local residential well water was undertaken. The current status of the cleanup operation is that water is being pumped from 11 wells on the site and being treated by 3 purification units to recover the substances concerned, prevent dispersal, and reduce the concentrations. To provide an even more thorough cleanup, work was also undertaken on the direct removal of soil and groundwater in locations where the contaminant levels in the groundwater were particularly high. However, contamination levels have still not dropped below the environmental standards, so we are now researching and applying more effective treatment methods to provide a speedy solution to the problem.

The 2 types of substances detected had been used since 1960 for the cleaning of metals and glass, but have not been used at all since 1976.

More information on the progress of groundwater purification at Fuji Photo Optical can be found at the Fuji Photo Optical web site:

URL: http://www.fujinon.co.jp/news.repo.htm
Improving Environmental Performance

To Reduce Waste Products

Achieving zero emissions at Fujifilm’s 6 facilities in Japan

As a step towards the achievement of a recycling-based society, Fujifilm has set itself a target of “recycling 100% of all waste material generated by its business activities, and the reduction of waste materials disposal through incineration and landfill to zero.” In other words, Fujifilm aims to recycle all waste products, even waste such as fresh foodstuffs and ordinary garbage, not merely industrial waste. This, along with the establishment of the “Zero Emissions Promotion Committee”, forms the core of Fujifilm’s waste reduction program. As a result, we will achieve zero emissions at all our Japanese factories and research facilities in March 2002, one year ahead of schedule. The table below lists the main recycling methods used at Fujifilm.

<table>
<thead>
<tr>
<th>Waste Product</th>
<th>Recycling Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastics (discrete)</td>
<td>Pallets, extruding, thermal insulating material, etc.</td>
</tr>
<tr>
<td>Plastics (mixed)</td>
<td>Blast furnace agents</td>
</tr>
<tr>
<td>Magnetic tape</td>
<td>Blast furnace agents</td>
</tr>
<tr>
<td>Filters</td>
<td>Blast furnace agents</td>
</tr>
<tr>
<td>Aluminum hydroxide</td>
<td>Alumina</td>
</tr>
<tr>
<td>Inorganic sludge/greasing fluid</td>
<td>Cement, paving material, construction material</td>
</tr>
<tr>
<td>Organic solvents</td>
<td>Paint thinners</td>
</tr>
<tr>
<td>Acids/Alkalis</td>
<td>Neutralizers</td>
</tr>
<tr>
<td>Mixed flammable waste</td>
<td>Glass wool, mercury</td>
</tr>
<tr>
<td>Batteries</td>
<td>Zinc, steel refining</td>
</tr>
<tr>
<td>Latticed fiber, fruit garbage, organic sludge</td>
<td>Fertilizers, fodder</td>
</tr>
<tr>
<td>Scrap metal</td>
<td>Metal refining</td>
</tr>
</tbody>
</table>

Zero emission figures for Fujifilm facilities

<table>
<thead>
<tr>
<th>Facility</th>
<th>Recycling of all waste products generated from materials used in production</th>
<th>Recycling of all waste products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoshida-Minami Factory</td>
<td>September 2000</td>
<td>March 2001</td>
</tr>
<tr>
<td>Fujinomiya Factory</td>
<td>September 2000</td>
<td>December 2001</td>
</tr>
<tr>
<td>Miyano Technology Development Center</td>
<td>September 2000</td>
<td>January 2002</td>
</tr>
<tr>
<td>Odawara Factory</td>
<td>September 2001</td>
<td>March 2002</td>
</tr>
<tr>
<td>Asaka Research Laboratories</td>
<td>March 2001</td>
<td>March 2001</td>
</tr>
<tr>
<td>Ashigara Factory</td>
<td>March 2002</td>
<td>March 2002</td>
</tr>
</tbody>
</table>

* Due to the priority given to safety by Fujifilm, some and infectious waste and waste reagents used in research are excluded from the zero emissions targets.

* The dates given are for when systems used to attain zero emissions were put in place.

Fujifilm will continue to push towards zero emissions, and by the end of fiscal 2002, we intend to reach our zero emission targets at all domestic sites, including marketing offices. We also plan to achieve zero emissions at all Fujifilm Group companies in Japan by the end of fiscal 2003.

Changes in the amounts of waste material disposed of in incinerators and landfills (data from Fujifilm’s 6 facilities in Japan)

<table>
<thead>
<tr>
<th>Year</th>
<th>Waste materials generated (thousand tons)</th>
<th>Incinerator/landfill waste disposal at zero (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>51.7</td>
<td>97.9</td>
</tr>
<tr>
<td>1996</td>
<td>53.5</td>
<td>97.9</td>
</tr>
<tr>
<td>1997</td>
<td>53.9</td>
<td>97.9</td>
</tr>
<tr>
<td>1998</td>
<td>58.4</td>
<td>97.9</td>
</tr>
<tr>
<td>1999</td>
<td>93.2</td>
<td>97.9</td>
</tr>
<tr>
<td>2000</td>
<td>84.3</td>
<td>97.9</td>
</tr>
<tr>
<td>2001</td>
<td>74.0</td>
<td>100.0</td>
</tr>
<tr>
<td>2002</td>
<td>74.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* Valuable products for fiscal 1999 and earlier are also included as waste materials, but the data from fiscal 2001 onwards is only aggregated for valueless products discharged outside Fujifilm.
Reducing Environmental Impact in Distribution

Reducing environmental impact in distribution (as addressed by Fujifilm Logistics)

Fujifilm Logistics Co., Ltd., which is responsible for distribution in the Fujifilm Group, is taking positive steps to reduce exhaust gas emissions, with environmental issues a key concern for the third-party shipping agents to which distribution is entrusted.

In fiscal 2001, we improved the accuracy of the accounting system constructed the previous year to determine the exhaust gas emission levels so that the figures for CO\textsubscript{2}, NO\textsubscript{x} and PM (particulate matter) could be calculated.

<table>
<thead>
<tr>
<th>Environmental Impact</th>
<th>Previous Year</th>
<th>Improved Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total CO\textsubscript{2} emissions (thousand tons of CO\textsubscript{2}/year)</td>
<td>20</td>
<td>116</td>
</tr>
<tr>
<td>NO\textsubscript{x} emissions (tons/year)</td>
<td>156</td>
<td>1</td>
</tr>
<tr>
<td>PM emissions (tons/year)</td>
<td>12</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Reductions in CO\textsubscript{2} emissions resulting from improved transportation efficiency were brought about by measures such as the following:
- The introduction of natural gas-powered vehicles
- Reduced vehicle numbers due to improved loading efficiency
- Reduced vehicle numbers due to concentration of delivery routes

International reuse of shipping packaging for color paper stock (bulk rolls) for overseas factories

The photographic paper used for color prints (color paper) that is sent to India and Australia is shipped in bulk rolls. The paper is then slit and machined into the final product at the overseas site. The bulk rolls are transported from the Fujifilm Ashigara Factory to the Fujifilm Logistics packaging center (in Minami Ashigara) where they are secured on specially designed pallets and loaded into containers for shipment overseas. At this point, the bulk rolls are stacked vertically, as shown below, and special round pallets are used. This is Fujifilm’s own shipping system developed to increase loading efficiency in the on-board containers.

When the rolls reach the destination factory, before the paper is machined, the removed pallets and bolts are returned to Japan for reuse. Shipping packaging for products other than color paper is also reused, such as bulk rolls of ordinary color film and film for plate making. Practices such as these not only make effective use of limited resources, but also yield great benefits in terms of cost reductions.
Improving Environmental Performance

Product Recycling
Inverse manufacturing implemented at the Fujicolor “QuickSnap” Inverse Manufacturing Factory

In 1986, Fujifilm introduced the world’s first single-use camera, the Fujicolor “QuickSnap”, and we have been pushing ahead with technology to reuse and recycle these products in response to the rapid growth in the market for single-use cameras. In 1998, Fujifilm began operation of the inverse manufacturing factory of the Fujicolor “QuickSnap” based on the principles of inverse manufacturing.

Reuse and recycling from the design stage
- Modular design predicated on reuse
At the design stage, the flash-related components and the mechanical components of the Fujicolor QuickSnap, such as the shutter and lens, were designed as separate units to make them easier to disassemble and reuse.

Greater efficiency using pelletizing-free plastic recycling
In the past, parts of the QuickSnap that could not be reused, such as the front cover, were crushed, melted and formed into pellets before being reshaped into new components. To reduce the environmental impact of this pelletizing process, Fujifilm developed a “pelletizing-free” process whereby the crushed plastic is directly molded into new components. To prepare the crushed plastic for direct use as molding material, any foreign matter is removed and it is then cleaned in boiling water.

Fully automated reuse and recycling
At the inverse manufacturing factory, revolutionary new technology has been adopted at each step in the fully automated production line, from sorting and disassembly through to inspection and manufacturing. This allows us to keep QuickSnap product quality as our first and foremost priority without compromising the reuse of resources.

Closed-loop Recycling
When Fujicolor QuickSnap users return their exposed films to camera stores for developing, the returned cameras are collected in central photo labs in each region. They are then brought back to the Fujicolor “QuickSnap” inverse manufacturing factory using the same trucks that make the deliveries of manufactured products, thereby providing a truly cyclic recovery system.

Identifying packaging labels in accordance with the Law Promoting the Effective Use of Resources
In April 2000, the Container and Packaging Recycling Law was fully enacted. Under this law, product packaging that might generate waste from ordinary households must carry identifying labels showing whether the containers and packaging are paper or plastic. Accordingly, Fujifilm initiated identification labeling on the containers and packaging for the products covered by the law. These labels conform with the industry standards set down by organizations such as the Photo-sensitized Materials Manufacturers’ Association and are based on the directives issued by the Ministry of Economy, Trade and Industry requiring uniform labeling across all industries that is easy for consumers to understand.

Designing minilabs for 100% recycling
There are currently some 26,000 color film processing minilabs in operation all over Japan, and these are generally replaced by new models featuring technological innovations every 6 or 7 years on average. Fujifilm promotes the concepts of reduced resource use and resource reuse in these minilabs at the design stage, and is striving to raise the recyclability in the design from its current level of 98% to 100%.

Recovery and recycling of used Pictro toner
Fujifilm digital printers and color copiers are referred to generically as “Pictro” devices, and used Pictro toner is equivalent to the negatives used in conventional photography. Fujifilm has set up a recovery and recycling system that collects used Pictro toner, which is a silver-based photosensitive material, recovers the silver and then recycles the recovered silver in new manufactured products.
Product Safety Management

With the enactment in 1995 of Japan’s Product Liability (PL) law, Fujifilm shifted its approach to product safety measures from one where issues were handled by individual organizations to a company-wide response. Fujifilm is now focusing its energies on determining its key product safety obligations and producing safe products based on the Basic Product Safety Policy outlined below.

Basic Product Safety Policy (formulated on June 15, 1995)

Fujifilm acknowledges that it has a responsibility to the community to produce safe products, and will make safety measures a part of every stage of the lives of its products, from development through to manufacturing, marketing, use, servicing and disposal.

Key safety obligations

1. To comply with all laws and regulations relating to product safety.
2. To promote product safety measures in every stage of product life, including development, manufacturing, marketing, use, servicing and disposal.
3. To ensure that consumers are fully aware of the safety information relevant to product use and disposal.
4. To set up a response system for emergencies such as product faults.
5. To continuously accumulate and establish methods for improving product safety.
6. To implement comprehensive employee education and training regarding product safety.

Promotion system

The PL committee was established in April 1995 to consider items relating to the promotion of the measures and activities stipulated in Fujifilm’s company-wide guidelines for product safety management.

Three systems

Fujifilm has 3 product safety systems in place, as shown in the figure. Firstly, the “Product safety checking system” checks product safety at the trial production stage. Then, once a product is shipped, the “PL-related information processing system” collects and analyzes information that might be related to product safety, and this information is incorporated into measures taken by the manufacturing and development divisions and into further safety improvements. Finally, the “Internal product safety management system” checks that the first 2 systems are each functioning effectively.

Determines product safety at the trial production stage based on the product safety standards.

Collects and analyzes information such as product-related complaints from customers and incorporates this data into product safety measures and increased product safety.
Social Performance

Employee Health and Safety

On-the-job safety is a fundamental precondition to Fujifilm’s production practices. We strive on a daily basis to assure that employees in all Fujifilm Group companies use safe work practices and that they work in a healthy environment.

FMSDS

For environmental safety management to be implemented properly when chemical substances are handled, information on the relevant legal restrictions and chemical toxicity must be obtained. As well as providing customers with material safety data sheets (MSDSs), Fujifilm has also compiled its own database of in-house data sheets (Fuji Material Safety Data Sheets (FMSDSs)) which can be accessed at any time on site. This database provides even more effective management of environmental safety and employee workplace safety. The Fuji Material Safety Data Sheets provide the necessary information for environmental protection and safety management during the use and manufacturing of chemical substances at Fujifilm. FMSDSs cover the chemical substances purchased, developed and manufactured by Fujifilm and include information on the applicable legal restrictions, toxicity, notes on chemical substance handling and storage, exposure prevention measures, emergency measures, and notes on disposal and transportation. The information provided on chemicals purchased from third parties is not restricted solely to that provided by the manufacturer. Where necessary, Fujifilm includes its own verified data.
Establishment of basic safety guidelines for employee health at the Yohida-Minami Factory

At each facility, Fujifilm sets out organizational systems and safety guidelines tailored to the facility when implementing safety measures. The example of the Yohida-Minami Factory is described below.

(1) Basic safety guidelines

1. Set up bright, healthy factories where safety always comes first.
2. Avoid injuries to yourself and to others.
3. Zero accidents both inside and outside the factory
   (Zero injuries, zero sickness and zero traffic accidents at work)

(2) Organization

(3) Measures implemented in fiscal 2001

[Zero injuries] [Zero sickness] [Zero traffic accidents]

- On-the-job health and safety rally — Points competition based on voluntary workplace safety activities, etc. (points awarded following inspections by committee members)

- Health first with “Healthy Nav.” Employee health and safety practices at the Yohida-Minami Factory

A “Healthy Menu Navigator” (“Healthy Nav” for short) was installed in the Yohida-Minami Factory canteen in June 2001 and is now playing its part in managing the health of employees. The Yohida-Minami Factory canteen is a cafeteria-style canteen that allows workers to select their own meals. However, certain meals tended to be more popular, and it was decided that some sort of instruction in nutritional awareness was required. This prompted the introduction of “Healthy Nav”, which allows employees to check their own health regime at their own volition.

If a user types his or her age, gender, height and lifestyle indices into “Healthy Nav”, it immediately calculates the nutritional value of their lunch on a computer. Specific numbers and graphs are displayed on the screen so that the user can see not only the nutritional balance of his or her meal, but also past data. “Healthy Nav” runs rather like a game and it is hoped that it will act as a trigger for employees to review their eating habits. In addition, health consultants can call up the data on eating habits during nutritional advice sessions and use it to give more detailed advice.

Using “Healthy Nav” is easy. The nutritional balance of meals can be seen at a glance on the computer screen.
Contributing to Society

Fujifilm Greenery Fund Assistance (Fiscal 2001)

In 1983, to commemorate the 50th anniversary of its establishment, Fujifilm contributed ¥1 billion to establish the Fujifilm Greenery Fund (FGF). This organization is the first public trust established by a private company in Japan to have the preservation of nature as its theme. Every year, the fund contributes to activities and research that support the preservation and improvement of the environment. The fund had contributed to a total of 73 projects by fiscal 2001.

Uehara biotope establishment using Ohmachi groundwork (Wappa Land Society, Nagano Prefecture)

In the Uehara district of Ohmachi in Japan’s mountainous Nagano Prefecture, there is a warm water channel owned by the municipal government. This channel is used to warm up the cold water taken from the river before it flows into the rice fields. The “Wappa Land” Society was formed 2 years ago with the aim of setting up the woodlands that grow along this agricultural warm water channel as a biotope. In the past, government and citizens groups had cooperated in setting up biotopes, conducting studies into how they should be used, performing plant studies and undertaking maintenance and management work. In the future, studies of the vegetation and the water quality in the channel will be conducted, and the local people will restore the area to a green belt where the rural villages and nature meet. Regular environmental education events will also be held and there are plans to promote rural environment preservation facilities in the area.

Plan to provide a mountain reserve around the designated area for the Ehime iris (Nishiura Ehime Iris Preservation Society, Shizuoka Prefecture)

The Ehime iris grows in Japanese red pine woods and meadows from Aichi Prefecture southwards. However, in recent years this species has declined rapidly and is in danger of dying out entirely. To save the 15 remaining plants in Hofu City in Yamaguchi Prefecture, the “Nishiura Ehime Iris Preservation Society” has been carrying out activities such as weeding and pine tree thinning since the 1940s. The number of individual plants has now risen to 400. Not content with simply increasing plant numbers, the Preservation Society is lobbying the government for the environmental protection of the entire mountain where the plants are growing. They are undertaking a range of other activities to raise the awareness among local residents of the need to set aside land, including conducting studies together with university researchers.

Research into the functions for preserving and supplying types of urban green area (Yasaka-Higashi Prefectural High School, Kanagawa Prefecture)

Despite the urbanization of Sagamihara City, there are still large unspoiled areas, including many areas of mixed woodland. The aim of this study is to study the survival rates of the butterflies and dragonflies that are dependent on plants to live and to clarify the functions for the preservation and supply of the types of green area remaining in Sagamihara. The survey method is to select 11 green areas with different environments and then capture and record sample butterflies and dragonflies before releasing them again. Yasaka-Higashi High School has conducted ongoing studies of the same type before, publishing the results at regional symposia, as well as lobbying the city to use their findings in environmental protection measures.
Lecture Tours

Fujifilm actively contributes to external seminars and training by dispatching speakers.

Chemical Society of Japan Sponsorship (Public Lectures)

In March 2002, the Chemical Society of Japan held a series of public lectures at Tokyo’s Waseda University. These lectures included specific discussions of the environment and recycled materials from a scientific perspective and were aimed at deepening the discussion of the issues involved in formulation of practices and strategies for the industry, government and education sectors. The head of Fujifilm’s Environmental Protection & Products Safety Div. attended as one of the speakers, talking on the topic of “Fujifilm’s Progress Towards the Attainment of a Recycling-based Society” and discussing the promotion of the “3 Rs” (Reduce, Reuse and Recycle) as a way to conserve resources.

Study of environmental measures in the ASEAN chemicals industry

At the “Study of environmental measures in the ASEAN chemicals industry”, held in September 2001 by the Ministry of Economy, Trade and Industry, a discussion took place on the topic of “The current status of and problems facing Fujifilm’s activities relating to environmental protection and recycling measures.” This study was intended for government officials responsible for environmental issues from ASEAN countries such as Myanmar and the Philippines and for corporate officials in environment-related positions in the chemical industry. Its aim was to improve, through this study, the future performance of the ASEAN nations with regard to environmental protection measures. Each of the countries showed a lively interest in the topic, asking questions concerning Ashigara; Fujicolor “QuickSnap” inverse manufacturing factory, such as “What is happening in other parts of the world?” and “How much does it cost?”

Guidance in Responsible Care (RC) activities in Thailand

As part of our support for the RC activities in the Asia region by the Japan Responsible Care Council (JRRC), we posted instructors to Thailand from February 25 to March 8 2002. At workshops given to convey the methods and a basic understanding of how to build an RC management system, managers from Fujifilm provided guidance to RC promotion officers from Thai public companies and government bodies.

Tree Planting

As one of their environment-related social contribution activities, the Fujifilm labor unions have established the “Green Smile Fund” to promote and support a variety of activities. One of these is the Chinese tree-planting volunteers movement, and the Green Smile group has participated each year since 1998 in the “Green Cooperation Group” NGO activity undertaken by the Japan Association for Desert Re-vegetation, continuing to plant poplar trees in China’s deserts. At the end of April 2001, 21 members of the Green Smile group left for China and worked for 2 days planting 920 trees (43 trees per person) in the Kubuchi desert of Inner Mongolia. On this trip, they also spent some time pruning the branches of trees planted previously, giving them hope that China’s vast deserts can one day be transformed into green areas by the poplars planted by the Green Smile Group.

Examples of Local Campaigns in Regional Offices

Ashigara Factory
- The Ashigara Factory has been the pioneer, working with the 6 signatory companies to the environmental protection agreement with the Minami-Ashigara City government (Fujixerox (Takematsu Office), Fuji Photo Equipment Co., Ltd., Panac Industries, Inc., Nankai Co., Ltd., Nakaya Shokai and Fujifilm Ashigara Factory) to set up the “Minami-Ashigara Municipal Committee for Promoting Environmental Information Disclosure” in October 2001 and organizing an environment fair.

Odawara Factory
- As a measure to protect the water in Kanagawa, the Odawara Factory co-operated in and exhibited at the Odawara Water Festival held in September 2001 and the “All-Japan Children’s Eco-Club Festival in Odawara” held in March 2002, introducing its environmental protection measures.

Fujinomiya Factory
- Some 500 employees worked on road cleaning and beautification around the factory to mark Environment Month in June 2001. The Fujinomiya Factory participates in the cleaning and beautification every year, and 2001 marks their 7th time.

Yoshida-Minami Factory
- In September 2001, the factory implemented the “Green Aid Strategy”, a participatory volunteer activity jointly sponsored by management and workers, during which they cleaned the area around the factory and the banks of the river that flows past the factory.

Miyanoai Technology Development Center
- In May 2001, the Center held the “5th Walking Green Day”, with some 150 employees participating in an activity that builds health while at the same time removing rubbish around the Center.

Asaka Research Laboratories
- In May 2001, the Asaka Research Laboratories implemented the “Green Aid Strategy”, a participatory volunteer activity jointly sponsored by management and workers that removes rubbish from around the Laboratories and the housing.
The Fujifilm Group Green Policy

From the Responsible Care Program to the Green Policy

Due to the expansion of Fujifilm businesses into new areas and its increasingly global outlook, in 2002 we formulated the "Fujifilm Group Green Policy" as our new medium-term environmental strategy. While continuing to maintain our previous approach to responsible care, Group companies both in Japan and overseas will work through their corporate activities to tackle an even wider range of environmental issues to ensure that our development is sustainable with regard to people and the planet.

Basic Policy

“Sustainable development” is the most important issue facing people and the planet in the 21st century. Maintaining and improving our environment is fundamental to sustainable development and should be the byword for management in the company. The companies in the worldwide Fujifilm Group will focus on management that makes progress on all three fronts — environmental, economic and social — and also satisfies customer demands by achieving high “environmental product quality” in their corporate structures, products and services using measures that ensure real and steady progress in addressing environmental issues.

Guidelines for Action

1. Promote the reduction of environmental impact and environmental safety while noting the following 3 points:
   1. Implementation should cover all aspects of corporate activity.
   2. Implementation should cover the entire life cycle of each product.
   3. Consider the overall economic and social effects.

2. Increase the level of control on chemical substances and reduce the risk.

3. Observe all laws, standards, voluntary rules for group companies, and individually agreed requirements.

4. Strengthen partnerships with cooperating companies and cooperation in government and industry initiatives, and participate actively in regional activities.

5. Make information on the handling of environmental concerns and the outcomes readily available to concerned people inside and outside Fujifilm, such as the local community and government.

6. Improve environmental awareness among employees through thorough education and provide firmer foundations for dealing with environmental issues.
## Priority Implementation Items and Targets

| 1. Improved environmental efficiency | Formulate indicators by the end of 2002. |
| 2. Design for Environment | Fix Design for Environment (DfE) activities by the end of 2002 and expand those activities to apply to all new and revised products from 2003. |
- Zero emissions: To be achieved by the end of 2002. To be achieved for all Group companies in Japan by the end of 2003. Targets for overseas companies to be set separately. |
| 4. Reduced environmental impact and prevention of pollution | - CO₂ reductions: Reduction of at least 9% over 1990 levels by 2010. Reduction of 6% for all the Fujifilm Group companies in Japan. Targets for overseas companies to be set separately in accordance with local national targets.  
- VOC reductions: Reduction of at least 50% over 2000 levels by 2004. Targets for Group companies to be set separately.  
- Environmental monitoring measures: Regular checking for VOCs (volatile organic compounds) in soil and groundwater.  
- Measures for leaks from pipes, pits and tanks: Priority to be placed on installation above ground, duplication and other measures that allow ready visual inspection. To be incorporated in medium-term planning. |
| 5. More stringent chemical substances management | Implementation of measures such as broadening the scope of the chemical substances management system, investigation of the handling of substances that are banned under the European RoHS directive (proposal for a directive of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment) and the complete phasing out of PVC, and our handling of substances thought to have endocrinal effects. |
| 6. Green Purchasing and Green Procurement | - Green Purchasing: 100% achieved in 5 product groups by 2003. For Group companies in Japan, 100% achieved for the same product groups by the end of 2004.  
- Green Procurement: Ongoing implementation of the surveys of the green-ness of delivered goods to enable the use of Design for Environment, and surveys of the green-ness of suppliers as a guide to supplier selection. Also, the development of an inspection method for ensuring green-ness in delivered goods. |
| 7. Information disclosure and provision | Improvement and expansion of the Environmental Report. Continued issuing of site reports from the 4 Japanese factories. Reports to be issued from the Asaka Research Laboratories and the Miyanodai Technology Development Center for fiscal 2002. Information disclosure to be possible for all production group companies inside and outside Japan by the end of 2004. |
| 8. Construction and ongoing improvement of an ISO14001 management system | Acquisition of ISO14001 “combined certification” in Japan by the end of 2003 and for overseas production companies in the Group by the end of 2004. Certification to be obtained for Head Office and the Environmental Protection & Products Safety Div. by the end of 2003 and by the end of 2004 for the other divisions. Environmental issues in the group as a whole to be managed in accordance with ISO14001. |
INDEPENDENT VERIFICATION REPORT
ON "THE FUJIFILM ENVIRONMENTAL REPORT/2002 EDITION"

June 4, 2002

To. Shigetaka Komori
President
Fuji Photo Film Co., Ltd.

INDEPENDENT VERIFICATION REPORT
ON "THE FUJIFILM ENVIRONMENTAL REPORT/2002 EDITION"

June 4, 2002

1. Scope and Objectives of Verification
We have been asked to verify the "Fujifilm Environmental Report 2002 Edition" ("the Report") of Fuji Photo Film Co., Ltd. ("the Company"). The preparation of the Report is the responsibility of the Company.

The objective of this verification is to express our independent opinion on:
1. The reliability of processes used to identify, collect and report significant environmental information included in the Report; and
2. The consistency of information included in the Report with supporting documents obtained during the course of our verification on a sampling basis.

This independent verification report, however, does not provide any assurance on the completeness of the information contained in the Report.

2. Basis of Opinion
Currently, there are no generally accepted environmental reporting or verification standards. Therefore, we have referred to emerging practices and guidance.

In order to reach our opinion, we conducted the following procedures at the Headquarters, the Odawara Factory, the Mianodai Technology Development Center and the Asaka Research Laboratories.

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 relevant documents.

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, as well as collection and reporting of information; and
• Inspection and comparison of relevant 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 environmental information included in the Report were appropriate and reliable. We did not find any significant matters that need to be addressed.
2. The information included in the Report is consistent with the supporting documents obtained during the course of our verification. We did not find any significant matters that need to be addressed.

Chuo Sustainability Research Institute Corporation

(Comments)
We have visited the Headquarters and the 6 sites in Japan for the last 3 years, and in addition to the opinion expressed above, have made a number of comments and suggestions to the Company including ones to improve environmental management. During this verification, we focused on environmental accounting, information related to volatile organic compounds (VOCs), zero emissions and inspections of soil and groundwater contamination. A summary of our comments is as follows.

(1) The "Fujifilm Group Green Policy"
For some time the Company has been making efforts to implement and execute measures for environmental protection and safety, by utilizing the environmental management system. In fiscal 2002, the Responsible Care Program was expanded and the Company established the "Fujifilm Group Green Policy", (which includes the concepts of environmental efficiency and product lifecycles), and began various activities aimed at the entire Group being able to fulfill its corporate social responsibility. In the future, the Company hopes to further strengthen its cooperation with other group companies in order to carry out these measures more effectively.

(2) Environmental Accounting
As a result of this verification, we confirmed that reporting processes for environmental accounting have been established at the Company. Since fiscal 2001, the benefit to the customer from products ("customer benefit") has been reported by the environmental accounting section. Although the scope of the data collection is still limited, for specific products, the Company reports on their environmental performance and the economic benefits derived from these during their use.

Also, the Company has started to use environmental accounting methods to measure social costs, such as the costs of employee safety. We hope that the Company expands its ability to measure social capital and improves the accuracy of its data, so that the Company will be able to incorporate social cost accounting, as well as environmental accounting, into its corporate management.

(3) Reduction of atmospheric volatile organic compound (VOCs) emissions.
At the sites we visited, other than the Headquarters, we compared the reported handled amounts of materials covered by the PRTR law with supporting data and the documents used for calculation, and assessed the reliability of the information process and the accuracy of the data.

With respect to emissions of VOCs into the atmosphere, we inspected the treatment equipment used to reduce VOC emissions and examined the process flow and the device specifications. Through these procedures, we confirmed that the Company has been making efforts to reduce VOC emissions.

(4) Progress in achieving zero emission at the 6 sites in Japan
During this verification, we confirmed that systems capable of recycling all the waste generated are in place, in both the manufacturing and office administration divisions at all the sites we visited, excluding the Headquarters. In the case of the Fujinomiya and Ashigara factories, which we did not visit this year, we confirmed the above status by inspecting data that was reported to the Headquarters and interviewing the person in charge of the data collection. For the Yoshida-Minami Factory, we were able to confirm the above status as a result of our visit last year.

In the future, we would like to see this system set up in offshore production facilities. At the 6 domestic sites, we also hope to see improvements in the method, used to achieve zero emission, such as a switch from thermal recycling to material recycling.

(5) Soil and groundwater pollution information disclosure
At the Odawara Factory, the voluntary investigation team in 2001 detected lead levels in excess of environmental standards in the premise soil. However we were able to confirm that the clean-up work has now been completed on the report filed with the local government. We were also able to confirm that the Company has implemented measures to attempt to prevent any further leakage into the groundwater, such as by increasing the number of observation wells and the frequency of monitoring activities. We confirmed that there was no existing groundwater contamination in the monitored area, by inspecting the relevant documents and the certificate of environmental measurement. At the Ashigara factory, which we did not visit this year, the same sort of soil contamination had been found in the past. We, therefore, confirmed that the clean-up work had been completed there too by inspecting the report filed with the local authority and interviewing the person in charge. At 2 other sites we visited, additional tests of groundwater and soil pollution were being voluntarily conducted in addition to regular tests. We confirmed that there was no soil or groundwater contamination in the monitored area by inspecting the relevant documents and the certificate of environmental measurement.

We noted during the above work that the Company positively disclosed all negative information, relating to the groundwater contamination and actively took measures to clean-up the polluted areas as soon as was practically possible. In the future, we hope that the Company will strive to make the environmental management system even stronger.

Chuo Sustainability Research Institute Corporation

Sites visited by Chuo Sustainability Research Institute Corporation

<table>
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<th>Date visited</th>
<th>Site</th>
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<tr>
<td>16-17/Sept/2000</td>
<td>Ashigara Factory</td>
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<tr>
<td>11-14/Sept/2000</td>
<td>Head Office</td>
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<tr>
<td>15/May/2002</td>
<td>Asaka Research Laboratories</td>
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<tr>
<td>20-21/May/2002</td>
<td>Odawara Factory</td>
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<tr>
<td>22/May/2002</td>
<td>Mianodai Technology Development Center</td>
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<tr>
<td>3-4/June/2002 and 30-31/June/2002</td>
<td>Head Office</td>
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Glossary

Ecomark
A mark awarded to products by the Japan Environment Association in recognition of the fact that the products play a role in protecting the environment through measures such as reducing the impact on the environment of everyday life.

Endocrine
A term referring to secretions and hormones produced by an endocrine gland. Chemical substances that alter the endocrine system in a human or animal and lead to harmful effects in its body or in its offspring are called “endocrine-disrupting hormones” (or “environmental hormones”). It is suspected that some chemical substances have this effect, and these chemicals are referred to by Fujifilm as suspected endocrine effect substances.

Environmental Accounting
Environmental accounting is a system that measures and indicates the investment and expenditures made by companies and other organizations to protect the environment as well as the effect of these contributions. The Environmental Agency released its environmental accounting guidelines in March 1999 and issued its environmental accounting guidelines for 2000 in May 2000.

Green Purchasing/Green Procurement
When products and services are purchased and procured, priority is given to the reduction of impact on the environment to the lowest level possible, in addition to such considerations as need, price, and quality. Green Purchasing encompasses office consumables, office materials, and products for everyday living, while Green Procurement includes raw materials and items used for production.

Zero Emissions
To realize a society in which resources are conserved, organizations take various measures to eliminate the generation of waste. These measures include the use of waste products as new raw materials and the generation of energy from refuse. At Fujifilm, Zero Emissions is defined as the 100% recycling of waste generated from business operations as well as the elimination of the incineration or landfill disposal of waste.

Source Reduction
Source reduction is defined as the measures taken to reduce the generation of waste by reducing the amount of raw materials used. At Fujifilm, this has included the reduction of silver used through the use of new photosensitive materials, the reduction of the amount of developing solution necessary for color prints, and the employment of Fujicolor QuickSnap resource conservation measures.

Independent Verification Report
To assure the reliability of environmental reports, the independent verification statement is attached to the documentation. An independent verifier will assess the reasonableness of methods used to collect and aggregate information to compile a report, and the accuracy of information included in the report. An independent verifier will express the result of the assessment in the independent verification statement.

The Container and Packaging Recycling Law
The full title of this law is the Law Concerning the Separated Collection of Containers and Packaging and the Promotion of Reuse. The law was promulgated in April 1997 to promote the recycling of container and packaging waste. The law encompasses recycling by consumers, local governments, and businesses. In April 2000, the range of applicable materials covered by the law was expanded to include paper containers and plastic products.

Recycle
Waste products are not disposed of (neither incinerated nor taken to landfill sites) but are reused as resources. Material recycling involves reusing materials in their original form. Chemical recycling involves the return of plastics back to their original form through liquefaction, and thermal recycling involves reuse as fuels.

Reduce
The reduction to the minimum amount possible of the resources (materials) input into the manufacturing process and the minimization of waste created.

Reuse
Through the reuse of materials, the generation of waste is reduced and the conservation of resources is achieved.

AIS (Article Information Sheet)
Photo-developing solutions and related products are referred to as non-article products, while photographic film and related products are called article products. Article Information Sheets (AISs) provide the information necessary for the safe handling of article products, as well as listing the name and manufacturer of each product, its handling methods, and environmental safety information relating to product characteristics such as hazardousness and toxicity. These information sheets are provided to users by the supplier together with the product.

BOD (Biological Oxygen Demand)
BOD is used as an indicator of the degree of pollution in water as measured by the degree of oxygen consumed by microbes, mostly through the consumption or breakdown of organic substances.

COD (Chemical Oxygen Demand)
COD is an indicator that helps determine water pollution levels. It is the measure of the amount of oxygen consumed by oxidants in wastewater.

GRI (Global Reporting Initiative) Guidelines
The GRI Guidelines are the global standards used for compiling sustainability reports encompassing the areas of the economy, society, and the environment. Reports are evaluated by the GRI under the auspices of the UNEP (United Nations Environmental Project), in accordance with performance indicators released in June 2000.

ISO14001
This is the global standard, established in September 1996 by the International Standards Organization (ISO), pertaining to environmental management systems. Certifying organizations (Japan’s organization is the Japan Accreditation Board for Conformity Assessment (JAB)) strive for constant improvement by registering and evaluating corporations on the degree of their compliance with environmental management system standards. ISO14001 stipulates the requirements for such environmental management systems.

MSDS
Material Safety Data Sheets (MSDS) refer to the safety instructions for non-articles, such as processing chemicals, which are distributed for each product to all parties, from suppliers to end users, to prevent accidents involving the handling of chemical substances.

PRTR Law
This refers to a law promulgated in July 1997 (the Pollutant Release and Transfer Register Law). The law is aimed at reducing the amount of dangerous chemicals released into the environment and helping to assist efforts to eliminate the endangerment of the environment through the improvement of self-management by businesses that manufacture and use chemical substances. From April 2001, it became mandatory for businesses that handle chemical substances to reduce the emission of applicable chemical substances. Starting in April 2002, it will become compulsory to submit activity reports to the government.
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