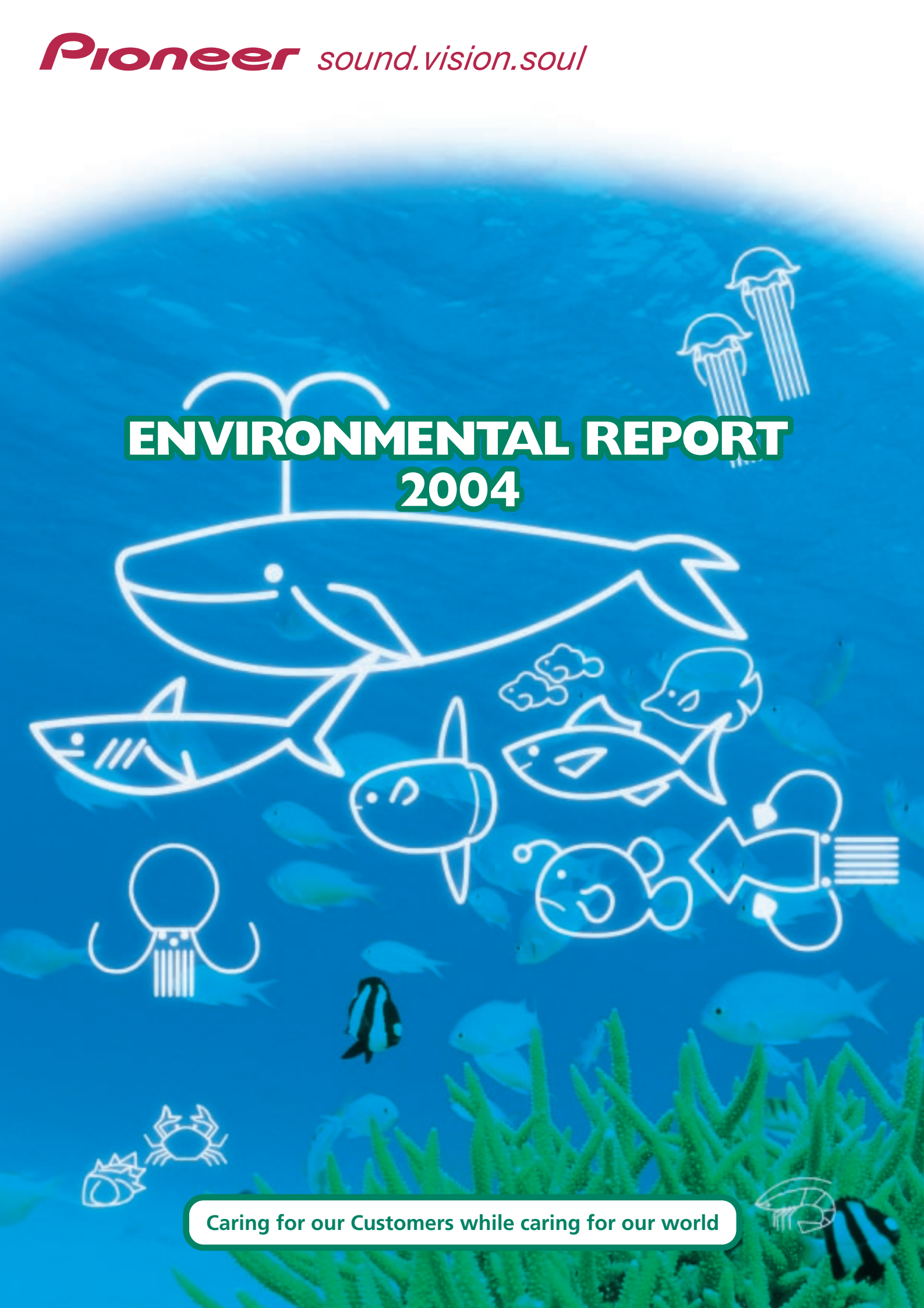


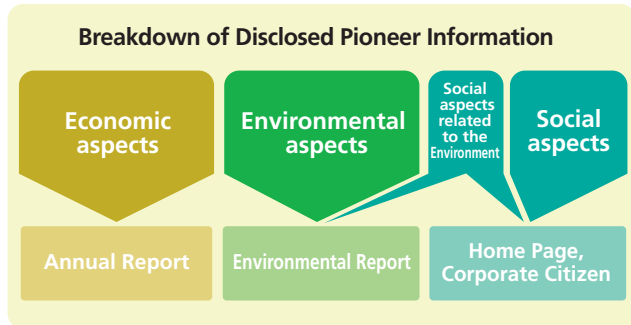
ENVIRONMENTAL REPORT 2004

Caring for our Customers while caring for our world



Editorial Policy

- This report has been created for a general audience in the interest of spreading the word as far and wide as possible about Pioneer's environmental conservation efforts. We seek to fulfill our role as a responsible company as we solicit and take on public opinion and criticisms.
- During the production of the report, we referred to both the GRI Guidelines and the Guidelines for environmental reporting, 2003 Edition from the Ministry of the Environment. Even as we take on the guidelines as our guiding principle, we continue to strive to be even more precise.
- The GRI Guidelines require that disclosure of corporate information be reported from three aspects, economic, environmental and social. In this report we have only taken up those efforts related to the environment from the social aspects. More specifically, these are in the realm of efforts to make social contributions to the environment, environmental education and so on. As is indicated in the figure below, our social activities apart from those related to the environment are reported in detail on our home page under Corporate Citizen, and the economic aspects appears in our Annual Report and on our home page under IR.



- In consideration of the environment, we have used recycled paper and kept the number of pages to as small a number of pages as possible while still adequately reporting the content to the general public, based on the results of our questionnaire.
- Information broken down by regional site and special, detailed documents are posted on our Web site, so please refer to them there.



This mark indicates that more detailed information is available on our Web site. <http://www.pioneer.co.jp/environment/e/>

*The GRI (Global Reporting Initiative) is an international organization that, while pursuing sustainable development, aims to improve the quality of communication required of corporations. <http://www.globalreporting.org/>

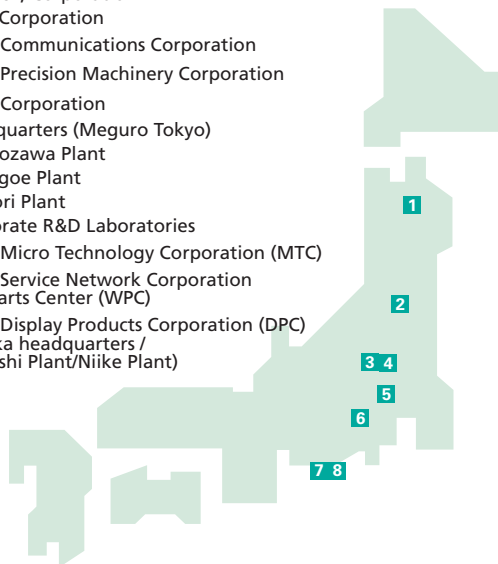
It is extremely important to hear your opinion. We would be very happy if you would fill out the questionnaire at the end of this report.

Range of Environmental Data Gathered

- Period: FY2004 (April 2003-March 2004)
- Data collected is as in the diagram below unless otherwise noted
 - For data related to environmental impact, all the companies/facilities premises listed in the figure below were subject.
 - For environmental accounting, all the companies/facilities premises except SPS were subject.
- Please note that due to the expansion of the data gathered and close scrutiny of the values for both domestic and overseas subjects, some figures are different from those released last year.

Japan

- Towada Electronics Corporation**
 - Towada Pioneer Corporation
 - Towada Tech Corporation
 - Kamikita Seimitsu Corporation
- Tohoku Pioneer Corporation (Headquarters/Yonezawa Plant/Tendo Minami Plant)**
 - Mogami Electric Corporation
 - T.P.A. Corporation
 - Pio Tech, Corporation
 - T.S.E. Corporation
- Pioneer Communications Corporation**
- Pioneer Precision Machinery Corporation**
- Pioneer Corporation**
 - Headquarters (Meguro Tokyo)
 - Tokorozawa Plant
 - Kawagoe Plant
 - Ohmori Plant
 - Corporate R&D Laboratories
- Pioneer Micro Technology Corporation (MTC)**
- Pioneer Service Network Corporation World Parts Center (WPC)**
- Pioneer Display Products Corporation (DPC) (Shizuoka headquarters / Yamanashi Plant/Niike Plant)**



North America

- Pioneer North America, INC. USA (PNA)
- Pioneer Automotive Technologies, INC. USA (PAT)
- Pioneer Electronics Technology, INC. USA (PET)
- Pioneer Manufacturing de Mexico, S. A. de C. V. Mexico (PMM)
- Pioneer Speakers, S.A. DE C.V. Mexico (PSSA)

Europe

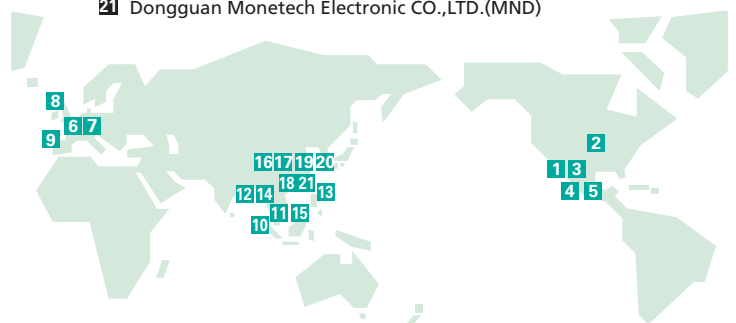
- Pioneer Europe NV Belgium (PEE)
- Pioneer Technology Belgium NV Belgium (PEM)
- Pioneer Technology UK LTD. UK (PTK)
- Pioneer Technology Portugal S. A. Portugal (PEP)

Asia

- Pioneer Electronics Asiacentre PTE. LTD. Singapore (PAC)
- Pioneer Technology (MALAYSIA) SDN.BHD. Malaysia (MPT)
- Pioneer Manufacturing (THAILAND) CO., LTD. Thailand (PTM)
- Pioneer Electronics (TAIWAN) CORP. Taiwan (PTW)
- Tohoku Pioneer (THAILAND) CO., LTD. Thailand (TPT)
- Monetech Audio SDN.BHD. Malaysia (MNC)

China

- Pioneer China Holding CO., LTD. Shanghai (PCH)
- Pioneer Electronics Manufacturing (Shanghai) CO., LTD. (PSM)
- Pioneer Technology (DONGGUAN) CO., LTD. (PTD)
- Shanghai Pioneer Speakers, CO., LTD (Shanghai) (SPS)
- Pioneer Technology (Shanghai) CO., LTD. (PSG)
- Dongguan Monetech Electronic CO., LTD. (MND)



Highlights of FY2004

Here are some of the highlights from FY2004 of the Pioneer Group's environmental Preservation activities.

Held 2nd World Environment Conference

Details on P.13

We held the 2nd Pioneer Group World Environment Conference at our Meguro Headquarters in May. Representatives from the various regions around the world gathered together in one hall and we confirmed the issues facing us as the Pioneer Group and exchanged information.



Inauguration of the Environmental Preservation Group. Strengthening Green Procurement

Details on P. 18, 19

In the interest of further reducing the burdens that products impose on the environment by manufacturing, we set up an Environmental Preservation Group and Eco Products Division in November.



Finished Obtaining ISO Certification at All European Facilities

Details on P. 12, 13

In January of 2004, our Italian sales company, Pioneer Italia S.p.a. (PEI) obtained ISO 14001 certification. In so doing, it meant all our production and sales companies in the European region had achieved certification.



Plasma TV Energy Consumption Reduces 26%

Details on P. 21

The annual energy consumption of our 50-inch plasma television reduced by approximately 20% over the previous year's model. In addition, the 43-inch model achieved a 26% reduction.



Opinion Exchange Forum with Third Parties

Details on P. 34

In November, we held an Opinion Exchange Forum and discussed the content of our Environmental Report at our Meguro Headquarters with all the students studying environmental economics in the School of Political Science and Economics of Meiji University.



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Caring for our Customers while caring for our world Integrating Environmental Preservation and Corporate Activities

I recently heard the term terra-forming. It means remodeling Mars so it becomes livable for humans, like the Earth, a sort of magnificent Planet Earthization Plan. For example, in one dreamy plan, if chlorofluorocarbons, one of the ringleaders in global warming, were used to blanket Mars in a reverse use of the greenhouse gas, the ice at its polar ice caps could be used to make water and carbon dioxide gas, allowing plants to be grown and oxygen to be produced. Upon hearing that many scientists are seriously studying this as a way to cope with the global environment, I truly felt the urgency of it. At the same time, it implies one direction we need to direct ourselves in our conservation activities, namely the reuse of our limited resources. We came to realize anew the importance of transforming the society we have developed, which until now has been a one-way street of mass production, consumption and waste, into a circulation society that reuses resources, recycles and suppresses waste. This is something that as a corporation we must also recognize as one of our most important missions. Rather than other planets, we first need to make it our urgent task to remodel the one close at hand, our Earth.

At Pioneer we took on the philosophy of environmental preservation at our company policy starting in 1992 and all our companies are committed to it. On one hand, since 1997 we have promoted corporate activities by incorporating the theme "Move the Heart and Touch the Soul" as our Group philosophy. Now we see that it is all the more important to integrate our environmental preservation efforts with our corporate activities, as it is our vision for what we should aim for in our environmental preservation activities, and we consider it an important issue facing us if we are to transform ourselves into a circulating type of society.

For this we need to change ourselves so we are conscious of the need to incorporate environmental preservation efforts into our business operations in the future. It is important that we promote future work with the reduction of environmental burden in mind, thinking of each step along the way, from product planning and design to production, sales, then to the environment our customer will use it in, and even, finally, how it will be disposed of.

There is nothing more important to a company than its customers. If we think of the Earth as another one of our customers, we will naturally be kind to the environment and it would be inevitable that we will promote environmental preservation activities into our corporate operations. Using this line of thinking, we came up with our Group unifying environmental slogan "Caring for our Customers while caring for our world" We are positive that by implementing this intent thoroughly we can realize a circulating type society. So, when we take back our unique, beautiful Earth, everyone will be touched and we can take one step closer to realizing our Group philosophy. When that happens, we expect terra-forming will no longer be necessary.

In this report we would like to summarize our achievements so far, based on the results of our past efforts, as well as our concrete goals from now on. We hope that in reading this report everyone will understand the environmental preservation activities we are thinking of and we look forward to hearing your frank opinions about them.

July 2004

Kaneo Ito
President and Representative Director

A handwritten signature in black ink, appearing to be 'Kaneo Ito', written over a horizontal line.

*Terra-forming means changing into the Earth, from "terra" Latin for earth and "forming" from English for transforming.

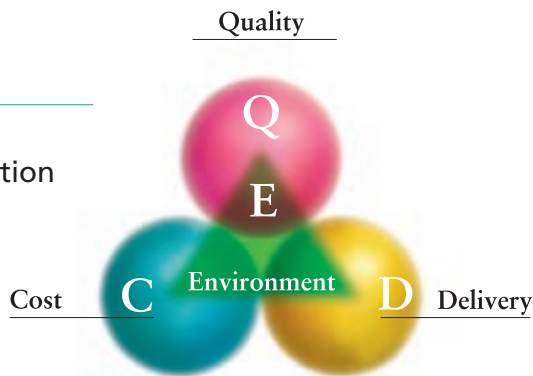
2010 Environmental Vision and Environmental Policies

Pioneer clearly indicates activities that are to be undertaken continuously in preserving the global environment in its Charter of Corporate Operations, which are rules for the activities of the group.

2010 Environmental Vision

The Pioneer Group Aims to integrate Environmental Preservation Activities and Corporate Activities.

- Q stands for Quality
- E stands for Environment
- C stands for Cost
- D stands for Delivery



Pioneer Group Charter of Corporate Operations

"Move the Heart and Touch the Soul" is the philosophy of the Pioneer Group. According to this philosophy, we, all the executives and employees of Pioneer, aim to continue our pioneering creation of new markets and conducting our business with integrity. We will operate our corporate activities based on a high standard of ethics, and aim to keep winning the confidence of our customers by contributing to society as responsible corporate citizens.

- We will provide products and services that are useful, reliable and safe.
- We will operate our corporate activities fairly.

• We will continue efforts to conserve materials and energy, and reduce impact on the Earth's environment.

- We will strive for fair disclosure of information about our corporate activities.
- We will undertake effective risk management to deal with unforeseen incidents as quickly and sincerely as possible.
- We will properly manage and protect our assets and rights.
- We will endeavor to contribute to society from a global perspective.
- We will aim to pursue our corporate activities, always with respect for humanity.



Philosophy of Environmental Preservation

The Pioneer Group will make efforts to always contribute to maintaining and realizing the rich and safe global environment through our corporate activities, based on the general understanding that it is one of our corporate missions to maintain, improve, and hand over the global environment to the next generation.



Basic Policies of Environmental Preservation

1. Compliance with Laws and Regulations

The Pioneer Group will comply with all applicable laws and regulations in connection with environmental protection, and when necessary, establish voluntary control standards to reduce the negative impact of its activities on the environment.

2. Preservation of Environment

The Pioneer Group will cease the use of, adopt substitute substances for, or restrain the discharge of, substances that are harmful to the environment such as those which contribute to the depletion of the ozone layer or global warming and other toxic chemicals, and thereby reduce the negative impact of its activities on the environment.

3. Development of Environment-Friendly Products

The Pioneer Group will examine the negative impact on the environment of the process from the procurement of materials and parts of the products to the ultimate disposal thereof, and conduct "Product Assessment" in the course of its research and development activities, and will develop new environment-friendly technologies to reduce the negative impact of such products and technologies on the environment.

4. Management by Goals

The Pioneer Group will establish goals in order to reduce the negative impact of its activities on the environment, such as natural resource saving, energy saving, recycling, reduction of waste material etc., and will make efforts to achieve those goals.

5. System Promoting Environmental Protection

An All-Pioneer system that contributes to the promotion of environmental protection will be established under the leadership of the officer in charge of the Environmental Preservation Group of Pioneer Group Headquarters. For such purpose, each division will establish corresponding organizations and optimize the environmental management system.

6. Training

The Pioneer Group will educate all its employees with regard to environmental protection, including notification of policies of environmental protection. In addition, specialized training will be given to employees when necessary.

7. Continuous Improvement

The Pioneer Group will continuously maintain and improve its environmental management system and protection activities by understanding its activities and conducting appropriate measures in accordance with the results of environmental audits.

8. Disclosure and Communications

The Pioneer Group will disclose its policies of environmental protection, goals and results of its environmental protection activities, to the public by use of its environmental reports, and thereby make efforts to facilitate communications with outside parties.



In the Quest for Sustainable Development

When I think of preserving the global environment and the development of our societies, I am struck by how hard it is to strike a balance between the ideal and reality. To date we humans, in order to enrich our own lives and to make things convenient for ourselves, have acted as if resources were limitless and deluded ourselves that no matter how we pollute the environment it will clean itself for us. We have moved forward by using capital and technology. Now, however, we have come to realize that that was a huge mistake and we are aiming to somehow achieve sustainable development while most people and corporations are working to achieve harmony with the environment.

Now the corporate activities cannot be established without a commitment to environmental conservation. At Pioneer, we also raise environmental awareness via environment management system in our normal work activities, such as production operations, in which products are manufactured, sales activities, in which products are sold as commodities, and management activities for our organizations, which integrate all of these.

In FY 2004, our Chinese holding company obtained ISO 14001 certification. This means that all our bases that function as headquarters have obtained the certificate, and thus the environmental activities are carried out with more vigor in conjunction with our primary work.

A new Environmental Preservation Headquarters was established in November 2003 at Pioneer; under this, the former Environmental Preservation Division and a new Eco products Division were set up. The Eco Products Division was set up for

thoroughly managing Green Procurement so that environmental hazardous substances will not be mixed in the process of designing and manufacturing the products, in addition to the commitment to company-wide environmental conservation, which was a responsibility of the Environmental Preservation Division. Needless to say, the division complies with the environmental laws and regulations of each region, and strengthens their activities, with the aim of achieving the complete abolishment of environmental hazardous substances in Pioneer products.

In addition, one of our main products, plasma TVs, has achieved a 26% reduction* over the previous year's model in a comparison of their annual electricity consumption. We continue to work toward further reductions in the future, but we think that the role we play in the reduction of environmental impacts becomes ever more important, even as the demands are expected to increase.

We will make contributions to the environment through business. We are convinced that sustainable development can be promoted for the first time by providing products and services that are satisfactory to our other important customer, the Earth, and we will continue our efforts wholeheartedly.

*Based on our 43V model (PDP-434HD)

Satoshi Matsumoto

Managing director
Environmental Preservation Group

Environmental Conservation Activities Timeline

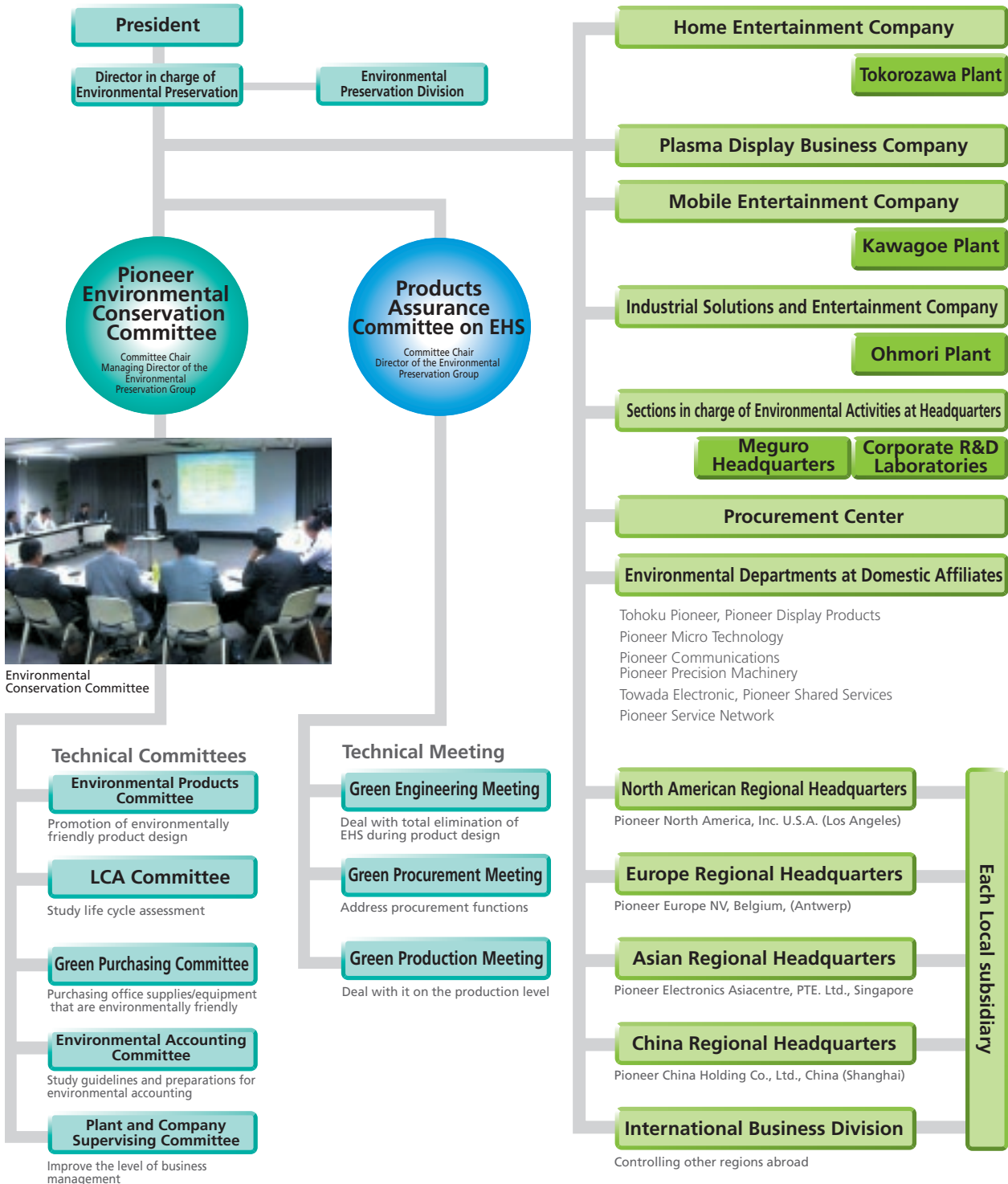
- | | | | | | |
|------|-----------|---|------|----------|--|
| 1989 | Spring | Started deliberations on alternatives to Styrofoam packaging. | 2000 | June | Started publicizing Environmental Accounting. |
| 1990 | December | Started using molded pulp for car stereo packaging (cushioning material made from recycled paper). | | July | Issued Green Procurement Standards. |
| 1991 | July | Set up Pioneer ECP Committee as a company-wide promotion organization. | | October | First commendation of a Pioneer Environmental Contribution Awards. |
| 1992 | March | Completely eliminated particular chlorofluorocarbons from the production processes of the Pioneer Group. | | December | Participated in the Eco Products exhibition. |
| | September | Started carrying out Product Assessments for all electrical appliances | 2001 | March | The Pioneer headquarters achieved ISO 14001 certification. |
| | November | Enacted Environmental Conservation Regulations, which is an environmental chapter. | | March | Finished achieving ISO 14001 certification for all the main production sites around the world. |
| 1993 | February | Began introducing assembled cardboard boxes for AV products, and the collecting and recycling of Nicad batteries. | | April | Introduced the environmental accounting management system and started rolling it out abroad. |
| 1995 | June | Appointed an Environmental Officer. | | October | Started issuing site reports. |
| 1996 | March | Achieved complete elimination of alternative chlorofluorocarbons in the production processes of Pioneer products. | 2002 | March | The European headquarters achieved ISO 14001 certification. |
| | June | The Pioneer Tokorozawa Plant obtained ISO 14001 certification (a Group first) | | March | Started introducing completely lead free solder products in Japan. |
| 1998 | June | Set up the Division of Environmental Preservation and appointed a full-time officer. | | March | Instituted an LCA (life cycle assessment) system internally. |
| | October | Established the Pioneer Environmental Label. | | May | Held the 1st Global Environmental Conference. |
| | November | Started selling products made with lead-free solder. | | June | The first product from the internal Eco Champion Model Support System, the DVD mini Rakura goes on sale. |
| 1999 | March | Finished obtaining ISO 14001 certification for all design/production offices. | | November | The newly built Chinese production corporation begins ISO 14001 certification. |
| | June | Started issuing Pioneer Environmental Reports. | 2003 | March | The North America and Asian headquarters achieved ISO 14001 certification. |
| | | | | November | Conducted an Opinion Exchange Forum for third parties about the Environmental Report. |
| | | | | November | Established the Environment Promotion Headquarters and inaugurated the Product Environment Division. |
| | | | 2004 | January | Completed achieving ISO 14001 certification for all the European region corporations. |
| | | | | March | The China regional headquarters obtained ISO 14001 certification. |

Promotion Structure

In July of 1991, Pioneer set up a Pioneer Environmental Conservation Committee, held deliberations about environmental problems facing the Group as a whole and prepared an integration structure. In addition, a division for the Product Environment was established in November of 2003 to strengthen the system structure in order to ensure that the environmental impact of our products is reduced.

Organization of the Pioneer Environmental Conservation Committee

The Pioneer Environmental Conservation Committee deliberates and integrates the responses to various environmental issues sought from the corporation. In addition, the products Assurance Committee on EHS is committed to completely eliminating the environmental impact of our products. Both committees are structured as the highest institution for Pioneer's environmental activities within the company, related companies and overseas subsidiaries. (as of April 1, 2004)



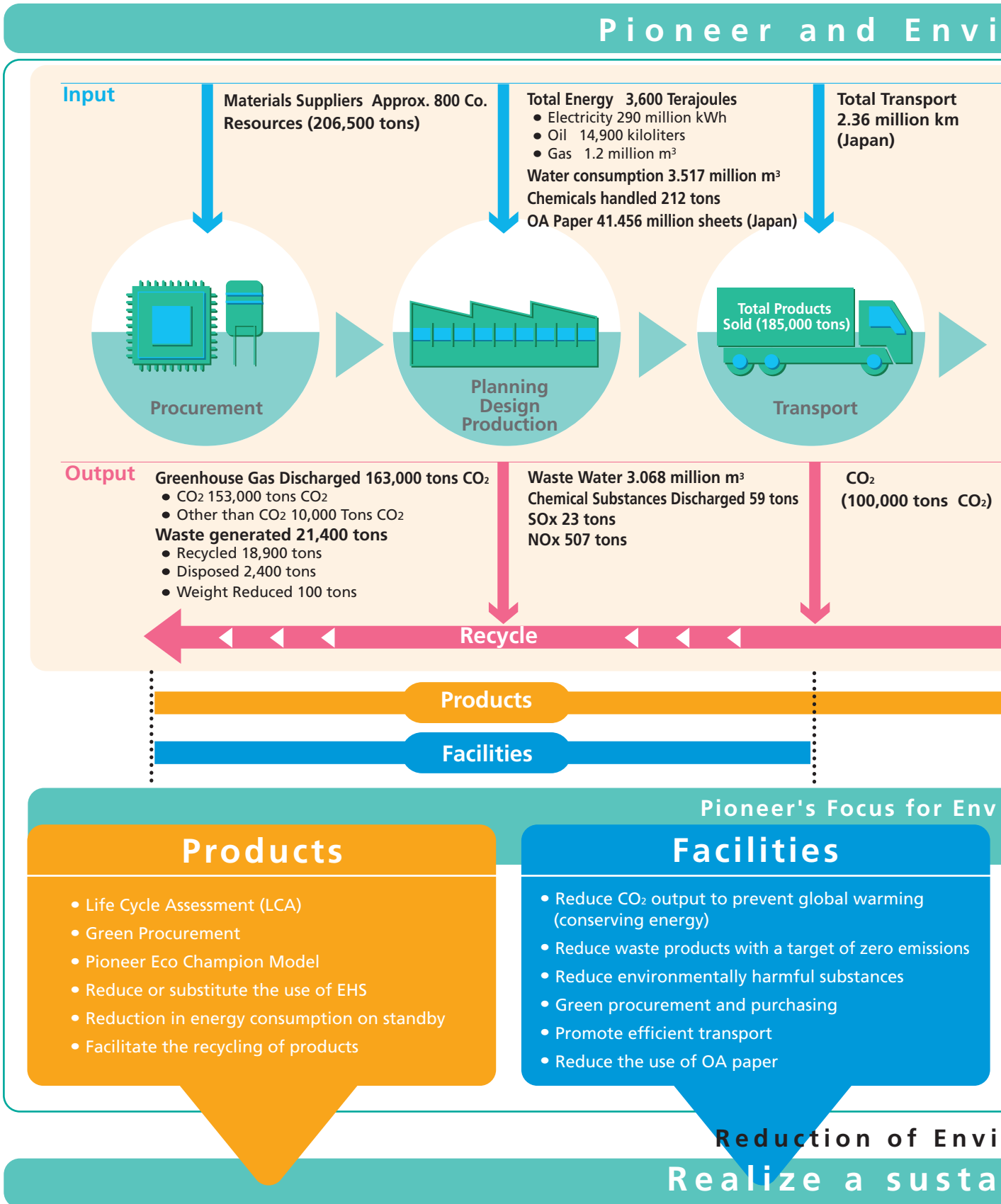
Environmental Conservation Committee

EHS: Environmental Hazardous Substances

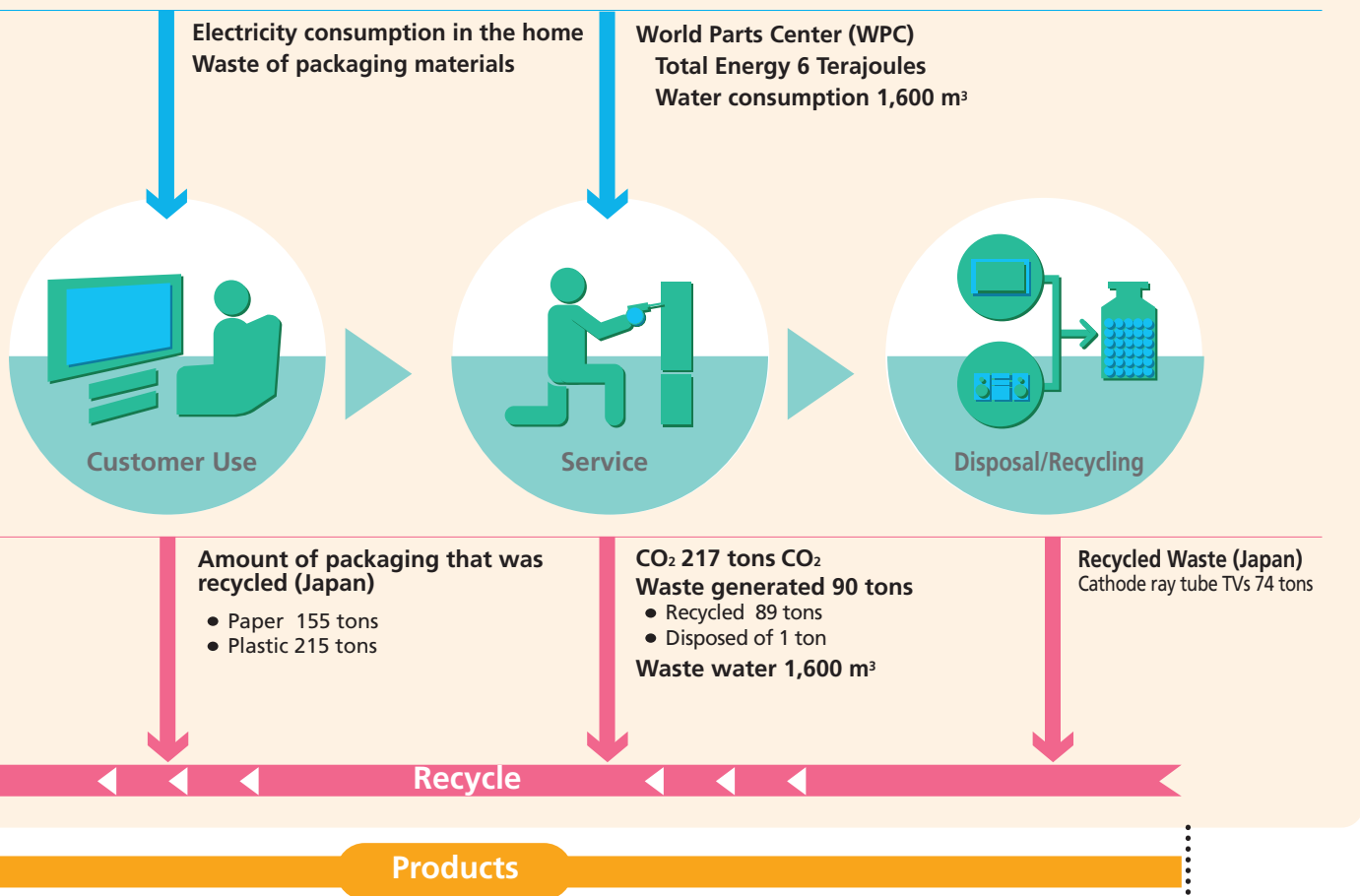
Environmental Impacts and Issues

Pioneer products are planned, made into products via manufacturing processes and then delivered to our customers; they are used and when their usefulness is over, they are disposed of and recycled. It is inevitable that various environmental loads will be generated in each process. Pioneer works hard to reduce the impact as much as possible at each stage.

Figures in parentheses are approximations, including some estimates.



Environmental Impact



Environmental Impacts and Issues

Environmental Preservation

Management Activities

- Promotion of Environmental Management System
- Environmental Accounting
- Establish Global Systems

Social Activities

- Participate Actively in Local Volunteering
- Communication with Local Communities
- Support Environmental Organizations
- Environmental Education/Enlightenment
- Public Relations Activities, etc.

Environmental Impact Sustainable society

Pioneer carries out activities with a focus from four perspectives—products, facilities, management and social—in order to efficiently reduce the environmental impacts in each of the processes above.

Environmental Targets and Performance

Pioneer is grappling with environmental conservation by defining targets and concrete objectives that need to be dealt with, while aiming to reduce environmental impacts in its products and facilities. In addition, we are making our 2010 Vision even more specific.

For FY2004 we conducted a self-evaluation and we would like to report the results in detail on the related pages.

Category	Objectives	Targets in FY 2004	FY2004 Results	Self Evaluation	
Products	Devising the Creation of an Eco Model	Life Cycle Assessment (LCA)	Introduction and trial operation in domestic and foreign facilities of product LCA (network compatible)	Confirmed the effectiveness of the Product LCA System	○
		Eco Champion models	Choose a new Eco Champion model	Confined itself to developing a large number of products that adopted the technology used in the Eco Champion products.	×
		Green Procurement	Green Procurement Ratio of 80% (Japan)	Green Procurement Ratio of 70% (Japan)	×
	Reduction in the use or substitution of environmental hazardous substances	Broaden the products in which PVC-sleeved electrolytic capacitors are completely eliminated	Achieved a substitution ratio of 98% in Japan	○	
		Use lead free solder for all models	Used lead-free solder in all models	○	
	Reduce standby power consumption (Home AV Products)	Lower than the unit average for the previous year (0.33 W)	Unit average of 0.21 W	◎	
Facilities	Prevent Global Warming (Reduce emissions of green house gases)	Reduce domestically by 1% compared to FY2002 (absolute amount)	Increase in Japan of 14% over the FY2002 level As a group, increased 8% over the FY2002 level	×	
	Reduce Waste Products (Zero Emission of Waste)	Reduce across the Group by 1% compared to FY2002 (per unit of sales)	Established at three new non-production facilities and expanded to a total of nine facilities (Japan) Reduced by 10% over the FY2002 level	○	
	Reduce Environmental Hazardous Substances	Expansion of zero emission of waste across non-production facilities (Japan)	Reduced by 10% over the FY2002 level	◎	
	Green Purchasing	Green Purchasing Ratio of 70% (Japan) Expand to 10 the targeted products for activities	Green purchasing ratio of 70%	○	
			Expanded to 10 the products subject to this activity	○	
	Reduce Use of OA Paper	Reduce OA paper usage to less than the previous year	102% compared to the previous year	×	
Improve Distribution	Understanding Foreign Distribution	Finished tabulating the figures for foreign distribution	○		
Management Activities	Obtain ISO 14001 Certification	Expand the places with certification, such as to the newly built facilities in the China region	Including the three companies in China, eight companies obtained certification worldwide	○	
	Environmental Accounting	Expand the range in the Chinese region	Finished tabulating the production sites in China	○	
	Establish Global System	Worldwide development of activities Identify 85% of the Pioneer Group's environmental impact (employee based comparison)	Held the 2nd World Environment Conference Identified 85% of the Pioneer Group's environmental impact	○	
Social Activities	Reporting Activities	Increase the frequency of information publication (renew the home page once or more)	Made 17 updates	○	
	Environmental Education/Enlightenment	Continue awarding environmental prizes Hold lectures on the environment at each facility New acquisition of national qualifications, 100 or more people Maintain the internal auditing system at 200 people	Commended 15 groups and 9 individuals with Environmental Contribution Prizes Held environmental lectures 14 times (Japan) 90 people acquired new national qualifications Had 233 internal auditors	○	
	Social Activities for the Environment	Expand the special topics in the education program Continue the activities and expand communication with each of the facilities in their regions	Conducted the No Garbage program at various sites, held environmental symposia, conducted the exchange of opinion forum on the environmental report, etc.	◎	


Self Evaluation Standards

◎ Greatly exceeded the target

○ Cleared the target

× Did not meet the target

*Per unit of sales: the environmental impact per sales of ¥100 million

Targets for FY 2005	Targets for FY 2006	2010 Environmental VISION	Reference Page(s)
Expand the number of models to which Product LCA applies	Expand the number of applicable models and develop environment friendly design	<div style="text-align: center;">  <p>QECD Integration of Corporate and Environmental Activities</p> </div> <ul style="list-style-type: none"> ● Supply products that exceed the standards for each environmentally friendly item ● Greenhouse Gas Emissions <ul style="list-style-type: none"> • Reduce 10% over FY2002 levels for the Group (Per unit of sales) • Natural (new) energy ratio of 5% ● Establish Zero Emissions of waste worldwide ● As a Corporate Citizen, be in harmony with society 	P17
Invigorate via introduction of new system	Establish guidelines for environmental design		P16
Green Procurement ratio of 80% (Japan)	Green Procurement ratio of 100% (Japan)		P19
Proceed with non-use of PVC for other parts	Completely abolish lead, mercury, hexavalent chromium, cadmium, etc. (except those for which there is no substitute technology)		P20
Completely eliminate leaded solder			P21
Lower the unit average over the previous year	Introduce products using 0.1 W or less (each category)		P24
Reduce by 1% over the FY2002 level in Japan Reduce by 1% over the FY2002 level for the Group	Reduce by 3% over the FY2002 level in Japan Reduce by 4% over the FY2002 level for the Group		P27
Establish for all facilities in Japan	Establish for all production facilities worldwide		P26
Reduce by 15% over the FY2002 level (Japan)	Reduce by 15% over the FY2001 level (Japan)		P29
Reduce by 15% over the FY2002 level (Japan) Green purchasing ratio of stationery at 75% 100% of other articles will be subject (paper, OA devices, office supplies, etc.)	Expand green purchasing to 90% of designated articles		P29
At or less than the previous year	Reduce by 15% over the FY2001 level (Japan)		P10
At or less than the previous year (Per unit of sales)	At or less than FY2004 levels (Per unit of sales)		P14.15
Expand facilities with certification	Obtain for all Group companies worldwide		P13
Expand the subject range	Tabulate the facilities that have obtained ISO certification worldwide		P30 ? P34
Continue holding World Environment Conferences Identify 87% of our environmental impact	Expand and enrich the content of World Conferences Identify 90% of our environmental impact		
Update one or more times per month Enrich the advertising aimed at children	Enrich the web site with an international focus		
Continue awarding environmental contribution prizes Hold environmental lectures at each facility New acquisition of national qualifications, 100 or more people Continue with the system of 200 internal auditors Expand the special topics for education	Continue/expand activities		
Continue and expand the activities	Strengthen the activities based on social contribution activities guidelines		

Environmental Management System

Pioneer is constructing an Environmental Management System based on the international standard, ISO 14001. Upon implementing, maintaining and refining our environmental preservation activities, we will implement this system both in Japan and abroad at each of our facilities and by March 2004 our new facilities, (see below) will obtain ISO 14001 certification.

Three-tier Environmental Auditing System

At each facility, we conduct Internal Environmental Audits to check on the status of implementation of the environmental preservation and management activities. The Pioneer Group in Japan has some 233 active internal environmental auditors.

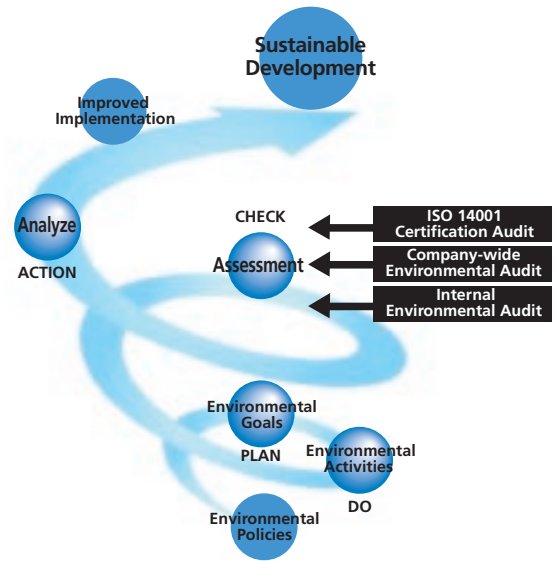
In addition, the Environmental Preservation Division carries out its group-wide environmental audit to check on the status of activities at our facilities and internal companies. When an excellent activity is discovered, it is rolled out across Group companies.

Further, we have an External Audit conducted by ISO 14001 Audit Registered Bodies. Through these three environmental audits, we quickly discover any problem areas or things that need to be improved, allowing us to implement appropriate counter measures as we strive to raise the bar on our activities.

Main Findings from External Audits

Most of the evaluations we received from the periodic audits at our various facilities in Japan were "improving the content of activities." More specifically, we were evaluated highly for things like environmental activities incorporated in our primary operations and the results of continuously improving our activities.

On the other hand, one slight deficiency and 27 items to watch were pointed out. The slight deficiency that was pointed out was a lack in



recording evaluations of indirect impacts on products. (Related companies) In addition, the items to watch were things like evaluation of impacts of environmental facilities, how plans were decided for activity programs, the content of records and their storage, etc.

Each of the facilities took prompt corrective measures and we are active in working toward further improvements.

ISO 14001 Certification Status

(Current as of April, 2004)

★ Indicates companies that received certification for first time in FY2004

- Pioneer Corporation Tokorozawa Plant
- Pioneer Corporation Kawagoe Plant
- Pioneer Corporation Ohmori Plant
- Pioneer Corporate R&D Laboratories
- Pioneer Corporation Headquarters, Meguro
 - Pioneer Service Network Corporation
 - Pioneer Shared Service Corporation
 - Pioneer Design Corporation
 - Increment P Corporation
 - Pioneer Media Creates Corporation
 - Pioneer AFM Corporation
 - Pioneer Industry Corporation
 - Pioneer Navicom Corporation
 - Fukuin Corporation
 - Pioneer HRD Corporation
 - Techno Access Corporation
 - Pioneer Welfare Service Corporation
 - Pioneer Building Management Corporation
 - Monotec Tokyo Corporation
 - Pioneer Micro Technology Corporation, Semiconductor Sales Dept., Tokyo Office
 - ED Lease Corporation
 - Pioneer Health Insurance Association
 - Pioneer Welfare Annuity Fund
 - Pioneer Workers Union
- Pioneer Micro Technology Corporation
- Pioneer Display Products Corporation (Headquarters/Niike/Yamanashi Plants)
- Pioneer Service Network Corporation World Parts Center
- Tohoku Pioneer Corporation (Headquarters/Yonezawa/Tendo Minami Plants)
 - Mogami Electric Corporation
 - T.P.A. Corporation
 - T.S.E. Corporation
 - Piotech Corporation

- Pioneer Communications Corporation
- Pioneer Precision Machinery Corporation
- Towada Electronic Corporation
 - Towada Pioneer Corporation
 - Towada Tech Corporation
- ★ Kamikita Seimitsu Corporation

Asia

- PIONEER ELECTRONICS ASIA CENTRE, PTE. LTD. (Singapore)
- PIONEER TECHNOLOGY (MALAYSIA) SDN. BHD (Malaysia)
- PIONEER ELECTRONIC (TAIWAN) CORP. (PTW) (Taiwan)
- PIONEER MANUFACTURING (THAILAND) CO. LTD. (Thailand)
- TOHOKU PIONEER (THAILAND) CO. LTD. (TPT) (Thailand)
- ★ ● MONETECH AUDIO SDN BHD (MNC) (Malaysia)

China

- ★ ● PIONEER CHINA HOLDING CO., LTD. (Shanghai)
- PIONEER LELTRONICS MANUFACTURING (SHANGHAI) CO., LTD. (Shanghai)
- SHANGHAI PIONEER SPEAKERS CO., LTD. (Shanghai)
- PIONEER TECHNOLOGY (DONGGUAN) CO., LTD. (Dongguan)
- ★ ● DONGGUAN MONETEC ELECTRONIC CO., LTD (Dongguan)
- ★ ● PIONEER TECHNOLOGY (Shanghai) CO., LTD. (Shanghai)

Europe

- PIONEER EUROPE NV (PEE) (Belgium)
- PIONEER TECHNOLOGY BELGIUM NV (PEM) (Belgium)
- PIONEER TECHNOLOGY PORTUGAL SA (PEP) (Portugal)
- PIONEER TECHNOLOGY UK LTD (England)
- PIONEER BENELUX BV (PEB) (Holland)
- PIONEER FRANCE SA (PFS) (France)
- PIONEER ELECTRONICS IBERICA S.A. (ESP) (Spain)
- PIONEER DENMARK AS (PDS) (Denmark)
- PIONEER NORGE AS (PEN) (Norway)
- PIONEER SCANDINAVIA AB (PES) (Sweden)
- ★ ● PIONEER GB LTD. (PGB) (England)
- ★ ● PIONEER ELECTRONICS DEUTSCHLAND GmbH (PED) (Germany)
- ★ ● PIONEER ITALIA S.P.A (PEI) (Italy)

North America

- PIONEER NORTH AMERICA INC. (PNA) (U.S.A.)
- PIONEER AUTOMOTIVE TECHNOLOGIES, INC. (PAT-Ohio) (U.S.A.)
- PIONEER ELECTRONICS TECHNOLOGY, INC. (PET) (U.S.A.)
- PIONEER ELECTRONICS (USA) INC. (PUSA) (U.S.A.)
- DISCOVISION ASSOCIATES (DVA) (U.S.A.)
- PIONEER DIGITAL TECHNOLOGIES, INC. (PDT) (U.S.A.)
- PIONEER ELECTRONICS OF CANADA, INC. (POC) (Canada)
- PIONEER MANUFACTURING de MEXICO S,A de C.V. (PSSA) (Mexico)

Strict Voluntary Management Standards

If an accident occurs at a facility and it results in environmental contamination to the area, restoration entails a great deal of time and expense. In order to avoid the risk of such occurrences, Pioneer has set up and operates under voluntary management standards that are even more strict than those required by law and constructed a system to prevent ever exceeding the legal and/or regulatory standards. During FY2004 we did not have any violations related to the environment, but based on our agreement, we reported one instance of exceeding our voluntary standards to the self-governing body.

Conducting Emergency Response Training

Pioneer conducts emergency response training for dealing with the foreseeable consequences of an accident, such as to a facility (like a crude oil tank, etc.) that would likely have a major impact on the environment if there were an accident.

In addition, in the unlikely event that an accident occurs, this means not only taking measures to minimize its effect as quickly as possible, but also employing a system for immediately reporting it to the local authorities with jurisdiction.



Training to minimize the impact of an accident

Examples of Responses to Complaints and Accidents (Japan)

We had one incident in FY2004 related to environmental facilities.

- Some refrigerant chlorofluorocarbon leaked out of cooling/heating equipment. (July)
Cause: Broken seal
Countermeasure: Changed our procedures so we check every day to see whether any chlorofluorocarbon has leaked.

We received 12 complaints related to the environment.

- From nearby residents
 - Related to new facility construction (6 complaints)
(Noise, 4; radio interference and dust, 1 each)
Facility noise related (2)
Bad smells, waste management, waste water related (1 each)
- Disposal contractor requested more thorough sorting of waste

We responded immediately to these concerns, confirmed the causes and are striving to prevent them from happening again.

Risk Management under PRTR

In Japan, we started reporting data from our FY2002 results based on the PRTR (Pollutant Release and Transfer Register) protocol. In accordance with this protocol, the Pioneer Group reports its environmental data for each facility to the prefectural authorities.

Using this data, we are keeping track of and managing each site in our efforts to raise the bar on our environmental risk management while lowering environmental impact.

Aboard we manage risk based on the same kind of laws, if they have been adopted in the region. In countries where the protocol has not been introduced, we are starting to collect and manage data in the same way as we do in Japan, based on Japan's PRTR protocol.

PRTR refer to page 26

Thorough Management of PCBs

PCBs used to be used as insulating oil in various items, like electrical condensers, ballasts for fluorescent lights, etc., but its manufacture was halted in order to prevent pollution. However, as there are not enough facilities to process it, it is stored so it cannot leak or go missing. By law we report its status every year to the prefectural authorities.

We are extremely careful about storing such containers at each of our sites and making the reports.



Carefully stored PCBs

Application to Products

We conduct our risk management in such a way that Green Procurement sees to it that harmful substances are not used in those products that contain chemical substances. For example, we introduced EDX (Energy Dispersive X-ray Analysis Devices) to our Pioneer Group sites. By conducting an EDX analysis for environmental hazardous substances in parts about which we had previously only had information from the parts manufacturer, we are able to increase their reliability.



Conducting our own EDX analysis at Pioneer

Green Procurement refer to page 19

Activities in Each Country

Environmental Conservation Activities in North America

Pioneer Electronics Technology, Inc. (PET) of North America rolled out its Zero the Hero campaign aimed at recycling across the whole company. Their superhero character appeared on the stage promoting zero emissions of waste and called for everyone to "When you see this hero, remember that all the solid waste generated from our business operations—paper, plastic, aluminum, bottles, etc.—is recyclable."

At the same time, PET successfully conducted a campaign to cut the wasteful use of electricity, water, etc., and to thoroughly implement energy conservation, thus raising environmental consciousness across the company.



PET Encouraged Recycling using their unique Hero Character



Everyone at PET Promoting the Campaign

Completed a ISO 14001 Certification for All Companies in Europe

In January of 2004 the Italian sales company, Pioneer Italia S.p.a. (PEI) obtained ISO 14001 certification. In so doing, it completed certification of all the sales companies and production companies in the European region.



PEI Staff Obtained ISO 14001 Certification

PTK Commended for their Environmental Conservation Work

Our British production corporation, Pioneer Technology UK Ltd. (PTK) received the Wakefield District Environmental Awards 2002–2003, which is given to a company that achieves outstanding activities and performance in environmental conservation.

This prize is awarded to a company in the Wakefield area where PTK is located and is determined by an investigation team that is sent by the environmental group; participating companies are investigated over a period of several months before the prize is given. The prize receives assistance from and is under the authority of the EU and local assemblies as well. PTK is the first company from among the 60 participating companies to receive the environmental award.

PTK was evaluated for its various efforts, such as working for energy savings by automating the control of lighting, using as much natural light as possible, etc., as well as reusing paper, commuting via car pooling, environmentally friendly design of products, and so on.



PTK's President Sakai Receives the Commendation (left)

Appreciation Award from Malaysia Prime Minister for Recycling Efforts

Malaysian production corporation Pioneer Technology SDN.BHD (MPT) received an appreciation award from the prime minister of Malaysia, Mr. Abdullah for their meritorious service in their day-to-day recycling activities. Malaysia holds a Recycling Day every year, which was on November 9, 2003 last year. On that day appreciation awards were sent to some 31 organizations, such as local governments and companies. MPT basked in the glory of being the first in the industrial category to win the honor in Malaysia.



General Affairs Manager Kawamura Representing MPT in Receiving the Thank-you Note from Prime Minister Abdullah

Chinese Regional Headquarters (PCH) Obtains ISO 14001 Certification

The Shanghai based Chinese headquarters, Pioneer China Holding Co., Ltd. (PCH) achieved ISO 14001 certification in March of 2004. This was the first time a non-production company had been awarded certification in China.

As a headquarters, PCH works tirelessly for environmental enlightenment in the companies under its umbrella via efforts like actively switching PC monitors to LCD monitors, which use less energy, and obviously its push for conserving energy in its facilities.



Ms. Gu and Mr. Zhu from PCH Receive the ISO 14001 Certificate

Chinese Production Development Site (PSG) Obtains ISO 14001 Certification

The Shanghai Pioneer Technology Co., Ltd. (PSG) received ISO 14001 certification in September.

PSG thoroughly implemented a variety of activities, based on its environmental policies and goals and centering on conserving electricity, green procurement, and lead free solder efforts; they also set up chemical storage facilities, waste collection sites, water processing facilities and promoted efforts like the renovation of food oil separation equipment, along with EHS management for its suppliers.



PSG Obtained ISO 14001 Certification

Second Pioneer Group World Environment Conference Held

In May 2003 the Second Pioneer Group World Environment Conference was held at the Meguro headquarters. Representatives gathered together from the various regional headquarters of North America and Europe, local production corporations, from various domestic facilities and from divisions related to the headquarters. They confirmed the issues facing us as the Pioneer Group and conducted an exchange of information.

The head office gave a general overview of the environmental conservation activities from the previous year and addressed the points of issues as we approach 2010. The holding companies from each area gave an overview of their region. In addition, the Tokorozawa and Tohoku facilities presented reports as representative examples of the efforts being made at facilities.

The representatives from China and Asia who could not attend due to the specter of the new strain of pneumonia, were also able to participate via teleconference, which was enabled by the cyber conference system. With all five regions (North America, Europe, Asia, China, Japan) partici-

TOPICS

pating, we achieved a really global conference.

The Pioneer Group as a whole, regardless of the country we are in, aims to promote environmental measures at the same high standard and we will hold this world conference every year.



Managing Director Matsumoto of the Environmental Preservation Group Welcomes Delegates

A truly global conference was realized by using the cyber conference system.

Environmental Accounting

In October of 1999 Pioneer established an in-house Environmental Accounting Committee and has kept environmental accounts ever since. From FY2004 almost all of the Chinese production sites were included in the range for collection. Information is collected for 15 companies in Japan and for 20 companies abroad for a total of 35 companies. We will continue to collect and disseminate information about environmental accounting as an important tool for our companies in conducting environmental conservation activities.

Defining Environmental Accounting at Pioneer

Pioneer established its own, internal Pioneer Environmental Accounting Guidelines based on the "Environmental Accounting Guidelines," 2002 Edition, issued by the Ministry of the Environment.

It stipulates fixed amortization of environmental investments over five years, and five years for economic benefits as well. We made investments made after 1999 subject to environmental accounting, as that was the first year for environmental accounting at our company.

It is possible to make comparisons in green purchasing as to when a consideration has been made for the environment or not; further, only items which show a striking difference are calculated. (low-pollution vehicles, LCD monitors, recycled toner cartridges). One hundred percent of payroll costs are accounted for in the division that deals with the environment full-time, and for other notable environmental activities, they are accounted for based on a pro rata or time multiplied by wage rate.

Economic benefits, profits on sale of recycling and cost savings (savings of electricity and waste disposal expenses, external consultation fees, environmental impact measurement fees) are accounted for, but so-called "surmised benefits" (from risk avoidance) are not calculated. In addition, the benefits derived from issuing the environmental articles have now been added up for the first time. (Estimated benefit to profit contribution)

Environmental Accounting System Linked with *Production and Sales Systems

In this accounting, the costs and benefits are tabulated using our in-house intranet Environmental Accounting System.

This system, which is connected to the production and sales systems, makes it possible to grasp the environmental costs and effects for products instantaneously.

Using this enables the unification of environmental accounting, and we realize an improved accuracy of the tabulation, its simplification, and speed.

* Product and Sales System: Systems that control production, sales, and inventory planning.

Tabulated Results By Category

The table below is a summary of our environmental accounting in FY2004, classified by the categories in this environmental report.

The categories are divided into the four fields of products, facilities, management activities, and social activities, respectively.

Product categories comprise the direct costs and research and development costs.

Direct costs were obtained from the increased cost for environmentally friendly products as expenses, cost reductions as benefits, and then multiplied by the units produced in that fiscal year.

The characteristics of Pioneer's environmental costs are such that the research and development costs (¥1.4 billion) represent a high ratio of 30% of total costs.

Tabulated Results According to Categories

(¥ million)

	Main Activities	Investment	Expense	Economic Benefit
Products	Direct (Increased and decreased cost of products due to energy conservation measures, introduction of lead-free solder, and reduction in packaging materials)	166	1,089	285 (2381)*
	Research and development costs (increased efficiency of plasma displays and organic EL)	13	1,357	
Facilities	Elimination of pollution, energy conserving activities, waste reduction activities, green purchasing, and reduction in distribution	223	898	689
Management activities	Environment management system, general management activities, advertisement activities	8	1,141	33
Social activities	Activities to contribute to the environment in the community and monetary contributions	0	22	0
Total		410	4,507	1,007 (3,388)*

* () indicates a tabulated result that includes the consumer benefit.

Consumer Benefit

Consumer benefit means the saving results garnered by the customer when they use the product. We consider this separately from the effect Pioneer obtains, but for internal management, we use this as an information resource for cost/benefit analysis, in addition to the economic benefits. Products which showed prominent savings against the established tabulated standard for every product group are accounted. As a result, gains equivalent to about ¥2.4 billion and 39,000 tons of CO₂ were realized.

Consumer Benefit

Product Line	Benefit	Energy saving	Monetary Equivalent(Million Yen)
AV Products	Reduction of standby power consumption	51,440,000 kWh	1,183
Plasma Displays	Reduction of operating and standby power consumption	4,645,000 kWh	283
Cable TV Terminal	Reduction of operating and standby power consumption	38,829,000 kWh	893
Car Electronics Products	Fuel reduction from improved fuel consumption due to lighter weight	Equivalent to gasoline 217 kl	22
Total			2,381

Calculation Formula= $\sum((FY99 \text{ reference model}-FY2004 \text{ model}) \times \text{each criteria} \times \text{coefficient} \times \text{units produced annually})$

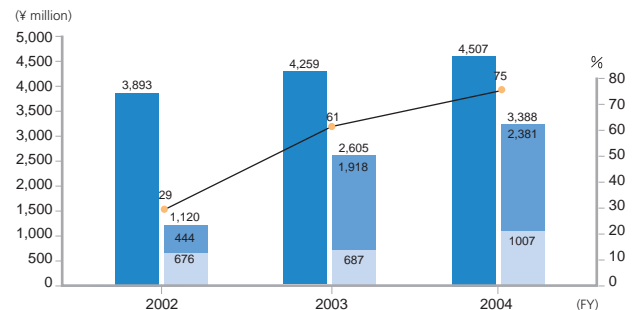
Assumptions about customers' use conditions for a year are as below.

- Standby time: 22 h/day x 365 days (AV products)
- (Operating time: 4.5 h, standby time: 19.5 h/day) x 365 days (plasma display, CATV terminal)
- Weight of normal car 1.5 t, fuel consumption 10 km/liters, mileage 10,000 km (car electronics)

Coefficient: electricity unit price (¥23/kWh) Gasoline ¥100/liter

Cost Effectiveness Including Consumer Benefit

■ Cost ■ Consumer Benefit ■ Economic Benefit ● Cost Effectiveness (%)

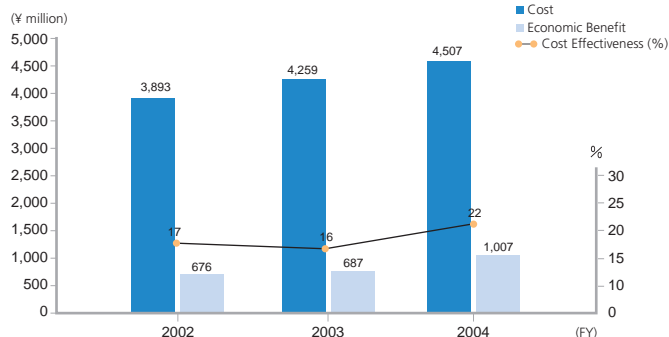


Tabulated Results based on Ministry of Environment Guidelines

The results: investment ¥400 million, expenses of ¥4.5 billion, economic benefit, ¥1 billion.

The percentage of environmental investment in the Pioneer group's facility investment total (¥58 billion) is 0.7%, and that of environmental research and development in the research and development cost total is 2.6% (¥515 billion). It is not possible to make a simple comparison over the previous years' changes, however, environmental efficiency (cost/benefit) improved some 22%, in FY2004 due to the savings from environmental impact measurement fees.

Tabulated Results based on Ministry of Environment Guidelines



Environmental Costs

	Categories Description	Investment Amount	Expense
Plant	1. Anti-pollution costs Cost necessary to prevent pollution	136	349
	2. Global environment conservation costs Cost for conserving energy, etc.	66	128
	3. Resource recycling cost Cost for reduction/disposal of wastes and its recycling	21	305
Product-related	Environment-related product costs (eliminating styrofoam, lead-free solder, conserving electricity, etc.), green procurement and green purchasing	166	1,205
Management activity	Cost for obtaining ISO 14001 certificate and maintenance, cost necessary for training and enlightenment, advertising activity	8	1,141
R&D	Cost for technology development that includes environmental factors	13	1,357
Social activity	Cost related to social commitments (volunteer work or contributions to conserving the environment)	0	22
Environmental damage	No fines or penalties	0	0
Total		410	4,507

※ The terms and categories in each item follow the Environmental Accounting Guidelines, (2002) issued by the Ministry of the Environment

Economic Benefit

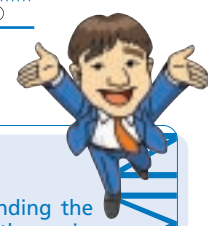
Economic Benefit Classification by Ministry of Environment	Description	Amount
a. Profit	1. Benefit value due to conserving the environment (Conserving energy, etc.)	238
Profit on sales, such as recycling wastes	2. Benefit value due to recycling (profit on sales of valuables and resource conservation effect, value of avoiding waste disposal costs, etc.)	359
b. Cost reduction	3. Product-related benefits (savings effect from procurement, production and distribution of products, and green purchasing)	377
Conserving energy and reduction in waste reduction cost	4. Other benefits (saving fees for externally consigned audits, effect of running environmental articles)	33
Total		1,007

Environmental Performance effect (Based on Volume)

	Main Activities	Environmental impact			Environment Preservation Benefit	Evaluation
		FY2003	FY2003 revised value*	FY2004	FY2003 revised value -FY2004	
Reduction Categories	INPUT					
	Energy (Terajoule)	3,168	3,278	3,612	-334	×
	Water consumption (1,000m ³)	3,620	3,746	3,519	227	○
	Chemical substances handled (ton) (Japan)	181	187	147	40	○
	CO ₂ Emissions (1,000 ton CO ₂)	152	157	163	-6	×
	Waste Water(1,000m ³)	3,186	3,297	3,069	228	○
Increased Category	OUTPUT					
	Generated waste (tons)	19,896	20,589	21,512	-923	×
	Waste (tons) (Japan)	718	743	191	552	○
	Recycling volume (tons) (Japan)	8,092	8,374	8,427	-53	○

* Revised values for FY2003=FY2003 environment impact x FY2004 sales volume (based on the definition of the Ministry of Environment)

The effect shown by volume is a factor in environmental accounting. In line with the Ministry of the Environment guidelines, we compared the changes in the past years, excluding the impact from sales volume increase/decreases.



Ask the Expert

What is environmental accounting?

Environmental accounting is for understanding the cost and benefit when something good to the environment is carried out, and for setting future goals. For example, if an incandescent bulb is replaced with an energy-efficient fluorescent light, assuming that the incandescent bulb is ¥200, the fluorescent light ¥1,000, and annual electricity savings come to ¥1,500. Then, the environmental cost would be ¥1,000 - ¥200 = ¥800, and its benefit would be calculated at ¥1,500. This means that an outlay of ¥800 produced a savings of ¥1,500.

COLUMN

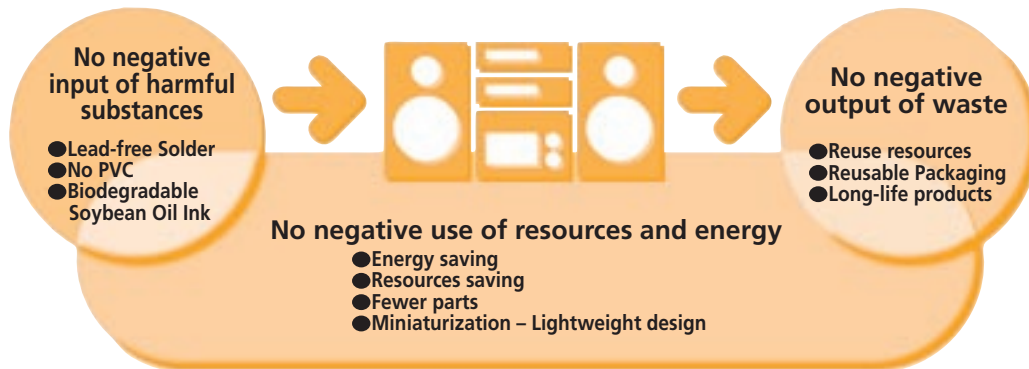
Environmental Accounting in the Future

Environmental accounting is still at a developmental stage. Pioneer continues to participate in the Business Study Group for Environmental Accounting, sponsored by the Ministry of the Environment. We will incorporate the results into our internal guidelines and utilize it as an indicator for decision making in environmental management.

Environmental Conservation in Pioneer Products

Pioneer puts its heart into its products in considering the environment, based on its operational philosophy, **No negative input, No negative output and No negative use**. In particular, we set up our Pioneer Environmental Label Display Guidelines so our products will be easy on the environment, as only those products that meet the guidelines can bear the Pioneer Environmental Label. In addition, in FY2003 we set up an internal Pioneer Eco Champion Models Support System to support the development of products that are easy on the environment. In an attempt to expand the support system even further, we are striving to establish a new system.

■ No negative input, No negative output and No negative use concept for product design



Pioneer Environmental Label Guidelines As of June 2004



The Pioneer Environmental Label reflects images of the Earth, the Environment, and Living in Harmony.

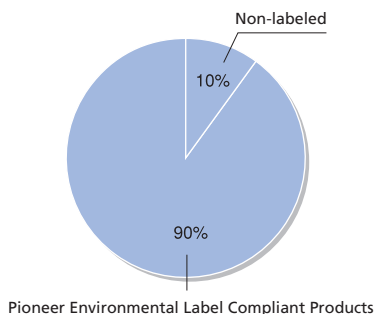
Compulsory Items (Products must meet all items)

1. Conduct the product assessment for environment
2. To facilitate recycling, parts containing 20 grams of resin or more are labeled as such in accordance with ISO standards.
3. Specific brominated flame retardants said to release dioxins during incineration are not used.
4. CFCs, HCFCs and other ozone-depleting substances are not used at all in Pioneer's products or manufacturing processes.
5. All batteries are located so that they can be easily removed.
6. The volume of packaging materials used has been reduced by more than 20% from FY1990 levels.
7. Lead-free solder is introduced.

Optional Items (Products must meet one or more of these items)

1. Standby power consumption is reduced to 0.5 W or less (however, CATV terminals are at 1 W or less).
2. Completely eliminate resinous cushioning materials, such as Styrofoam
3. Recycled materials are used substantially in the product itself.

Production Ratio of Pioneer Environmental Label Compliant Products in Domestic AV Products



Many of the non-labeled products are long-life models sold before the establishment of the environment logo (1998). Thus, most of the AV products are in compliance with the Environmental Label.

Pioneer Environmental Label Compliant Products (2004 Model)

DVD Player: The DV-474-S was able to realize a low power consumption of some 0.07 W during standby and 8 W while operating, while achieving a high quality picture. In addition, numerous considerations for the environment were implemented, such as using lead-free solder.



DVD Player DV-474-S

Digital High Vision Plasma TV: Model PDP-505HDL has incorporated numerous environmentally friendly features, even while pursuing high performance. In addition to a standby power consumption of just 0.5 W, it has reduced its power usage by 36% in comparison with the first, 1997 model (PDP-501HD), cut the number of parts used by one third and the display is about 10 Kg lighter.



PDP-505HDL

Pioneer Eco Champion Model: DVD Mini Rakura

The DVD Mini Rakura is the Environment Conservation Champion Model, as selected in the Pioneer Eco Champion Support System. The know-how in energy conservation, resource conservation and in reducing harmful substances born in the process of its development is not simply limited to the DVD player, but will be widely applied in making various environment friendly products.



DVD Player DV-U7 DVD Mini Rakura

Basic Policies at the Corporate R&D Laboratories

We are devoted to research based on recognition that research and development are at the starting point of measures taken to preserve the environment at our Corporate R&D Laboratories. With this thought in mind, we introduced our environmental management system and promote R&D activities that take the environment into account.

In order to achieve one of our research themes, environmental impact evaluation, we have taken on the techniques of Life Cycle Assessment (LCA), and with the future of the environment in mind, we are grappling with improving energy efficiency and the efficiency of resource use, as well as research that will yield a suppression in the discharge of harmful chemical substances.



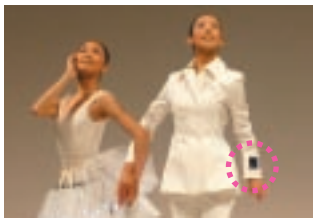
Pioneer Corporate R&D Laboratories

Environment Friendly Displays. Film Organic EL

We are accelerating the move to a thinner and lighter organic EL display that uses film. It is so thin and light, you can bend it by hand, so it can even be used in fashions. It is gaining attention as it is self-illuminating and doesn't need a backlight, as well as being an environmentally friendly display.



Bending the Film Organic EL by Hand



Fashion Incorporating the Organic EL Display into Sleeves

Next Generation Storage Favorite. Blu-ray Discs

The development of Blu-ray discs is progressing as a focus of our AV Development Center. As it will add a variety of functions and performance and will enable much greater capacity, it is fair to say it will be environment friendly as it reduces the need for most media.



Blu-ray Disc—the Favorite for Next Generation Storage

Small & Light, Resource Conserver—FeRAM Probe Memory

This memory was created to take aim at the future of storage device technology. It achieves a storage capacity 100,000 times greater than a DVD and from the perspective of being small, light and conserving renewable resources, it can be called an environmentally friendly product.



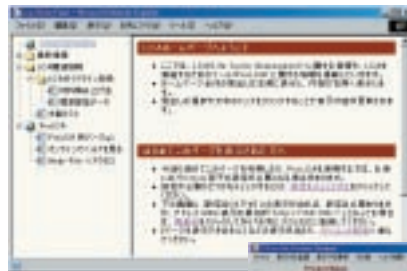
FeRAM Probe Memory with 100,000 Times the Storage Capacity of a DVD

Life Cycle Assessment (LCA)

Pioneer analyzes and evaluates the environmental impact a product will have by using Life Cycle Assessments (LCA). Our LCA Committee issued the Pioneer LCA Guidelines, under which we evaluate the environmental impact that Pioneer products lead to, as we endeavor to create products friendly to the global environment. In particular, we came to understand the large impact that energy consumption has when a product is in its standby mode from the results of an LCA, so we are redoubling our efforts to reduce standby power consumption.

Product LCA (ProLCA)

It takes quite a lot of time and labor to conduct an LCA. In order to make it more efficient, the Pioneer Corporate R&D Laboratories developed a product LCA (ProLCA). Using this, the evaluation results are accumulated into a database and shared online, which makes it easy for technicians to conduct an LCA. With this in place, we can progress from the design stage to produce products that are easy on the environment.



An Internal Home Page of an LCA Explained Above



A Product LCA Screen

Ask the Expert

What is LCA?

LCA means the Life Cycle Assessment, and it is used to evaluate the life of a product. When you take one product, including everything from mining for the raw materials, manufacturing to transporting, use and disposal, the impact on the environment is evaluated. For example, even if the energy used is slight in producing a product, if a large amount of energy is used when the consumer uses it, it doesn't reduce the environmental impact. LCA analyzes the life of product as a whole and evaluates the impact on the environment.



COLUMN

Reducing Environmental Hazardous Substances

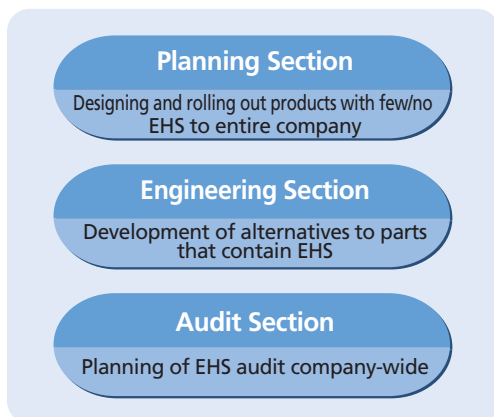
In order to ensure the reduction of environmental hazardous substances in our products, Pioneer set up the Eco Products Division as of November 2003, and had the former Green Procurement Committee change its name into the Products Assurance Committee on EHS.

In addition, the management standards for Environmental Hazardous Substances (EHS) was revised and responding to chemical substance restrictions at an early stage is being promoted worldwide, beginning with Europe.

Organization of Eco Products Division

The Eco Products Division is pursuing activities in the following three groups.

In addition, the division makes sure that instructions are given to the head of each division and we utilize the cycle of P (Plan), D (Do), C (Check), A (Action) in dealing with products.



Designating Seven Important Substances For Complete Elimination

Pioneer policy gives the highest priority to efforts in eliminating the following seven substances completely.

- Cadmium ■Mercury ■Lead ■Paraffin Chloride
- Hexavalent Chromium ■PBBs* ■PBDEs*

*PBBs, PBDEs are abbreviations for specific bromated flame retardants

Standardization across Industry and EHS Control Standards

Pioneer actively participates as an organizer company in the Japan Green Procurement Survey Standardization Initiative (JGPSSI) for the electric and electronics industries. Pioneer issued an Environmental Hazardous Substances Standard GGP-001, which is in line with the new guidelines drawn up there. In it, we also stipulated the deadline for completely abolishing EHS in the parts from our suppliers.

Aiming at Integrating Environmental Preservation and our Primary Work

Environmental Preservation Group Eco Products Division Manager
Kiyoshi Hara

In November 2003, Pioneer set up the new Eco Products Division and strengthened the structure for No negative input, No negative output, No negative use of environmental hazardous substances in our products. We asked Manager Kiyoshi Hara about his enthusiasm for further reductions in environmental hazardous substances and their basic policies.

He said, "The Eco Products Division was established in order to strengthen the commitment of the whole company, as the management executives realized once again that adapting the products for the environment is one of our important management issues. Environmental measures are positioned in the Group Charter for Corporate Operations, and the fact that management executives themselves, who regard environmental conservation highly, are committed to it is a huge driving force."

Manager Hara further stated, "it is important to homogenize the operation of Nothing In for environmental hazardous substances throughout the world and reduce the gap among regions and countries."

"We clearly state our criteria for adopting parts, and Pioneer group as a whole uses parts that apply the same standards throughout the world. In addition, we will ask our suppliers to use the same standards in managing mass production."

He also revealed that the secret for the Pioneer group to be one step ahead in the environmental measures lies in car electronics.

"The electronics industry as a whole is moving towards the goal of meeting the RoHS*¹, but in the field of car electronics, ELV*² has been already ap-

TOPICS

plied. Accordingly, it can be said that our company is promoting the reduction of environmental hazardous substances as a leader of the entire industry. The Engineering section has quickly developed alternatives for meeting RoHS."

Using these advantages for the direction for the future, he spoke of his future ambitions, "What we ultimately aim at is a form that completely unifies environmental preservation with ordinary work. In order to achieve this, we will do our best at all times."

*1 RoHS (Restriction of Certain Harmful Substances)

In the EU region, starting from July 2006, the use of lead, mercury, cadmium, hexavalent chromium, PBBs and PBDEs in electrical products is prohibited in principle.

*2 ELV (End of Life Vehicle)

In the EU region, starting July 2003, the use of lead, mercury, cadmium, hexavalent chromium, PBBs and PBDEs in car electronics products is prohibited in principle as well.



"We are aiming for the integration of environmental preservation and our work," said Manager Hara of Eco Products Division.

Green Procurement

Pioneer has rewritten its Green Procurement Standards, shifting how it judges its suppliers based on their comprehensive Green Score, which emphasizes EHS management.

Strengthening our Management of Environmental Hazardous Substances further with our Green Procurement Standards

Along with updating the previous Management Standards for Environmental Hazardous Substances, we published our Environmental Hazardous Substances Management Guidelines as a summary of specific guidelines for further strengthening our suppliers' systems for managing environmental hazardous substances.

At the same time, we have stipulated the standards even more clearly in the content in the section on Managing Environmental Hazardous Substances in our Green Procurement Standards.



Publication of our Green Procurement Standards for our Suppliers



For more information, visit our web site at:

<http://www.ebc-pioneer.com/PRC/Prddb002.nsf/pages/Green-e>

Evaluating our Suppliers' Environmental Management Systems

Pioneer conducted evaluations of all 797 facilities our suppliers use in providing us with parts. The results are as follows:

- Facilities with ISO 14001 Certification 68%
- Scheduled to gain certification within one year 10%

We will keep a watch on the status of environmental hazardous substances management, based on our Environmental Management System in the future.

Toward Judging our Suppliers on their Green Scores

The Green Score is a scheme that evaluates our suppliers not just on QCD (quality, cost, delivery), but also looks at them from the perspective of E (environment).

Pioneer takes these evaluation results as a very important instrument for judging our suppliers; the results from 2003 are as follows:

- A Rank (Acceptable): 70%**
- B Rank (Needs Improvement) : 19%**
- C Rank (Unacceptable) : 11%**

The proportion achieving an A rank is managed as the Green Procurement Ratio.

After the Eco Products Division was established, the items evaluated under the EHS Management Audit were strengthened, so we did not reach our goal for the Green Procurement Ratio, but in FY2005, we will continue to judge them by the strict standards as we move forward to meeting our goals.



Holding a Green Procurement Explanatory Conference for the four Pioneer Group Companies (PTD, PHK, MND, PSD) in Hong Kong and the Kanan Region of China.

Carrying out EHS Management Auditors Training to Environmental Auditors

As indicated in our Green Procurement Standards, we are striving to procure parts that have minimal amounts of environmental hazardous substances. By conducting a week-long training program at various facilities in Japan and around the world, we are improving the proficiency of EHS management auditors and making our suppliers work ever harder in cooperating with green procurement.



A Vignette of the EHS Environmental Audit Training for Environmental Auditors at PTK in the UK

Environmental Hazardous Substance Audits

We conducted audits of the environmental hazardous substance management systems of companies who supply Pioneer with products or parts. Depending on how they were managed, we also made suggestions for improvements.

- Subject: FY2004, 157 sites (Japan and abroad combined)
- Purpose: Check the environmental hazardous substance management system at suppliers' sites and make suggestions
- Results: 54% of sites audited were acceptable
We are committed to getting the suppliers who are found to be unacceptable to aim for becoming acceptable and even for those found to be acceptable, to have them aim for raising their level too.

From 2004 on, we will increase the number of sites audited and both check their management systems and make suggestions for improvements.

What is Green Procurement?

Pioneer defines green procurement as follows:

- Procurement of parts and materials for making our products, which gives priority to the purchase of environmentally friendly supplies from companies who are active in environmental conservation.

We also define green purchasing as:

- Giving priority to environmentally friendly products when buying products that are not directly related to production of our products, such as office supplies, vehicles, etc.

Introducing Lead-free Solders & Eliminating PVC

Introducing Lead-free Solder to all New Products

Lead is feared to have a bad influence on the environment and the human body. For that reason, the move to ban the use of lead is strong throughout the world. For example, in the European Union (EU), the use of lead or other harmful substances in home appliances is scheduled to be banned in principle by July of 2006.



A Lead-free Soldered Board

In these circumstances, Pioneer is introducing lead-free solder to all of its new products. Pioneer started using lead-free solder in 1998. Since then we have expanded its adoption to a variety of products, starting with AV products like plasma displays and DVD players, and including car electronics, CATV terminals, DVD writers, cordless answering machines, etc.



Signs Promoting Lead-free Solder



The Lead-free Solder Logo



Device Introduced to Portugal for Applying Lead-free Solder



Chinese Lead-free Solder Device

Lead-free Solder Use—97%

Plasma Display



PDP-434TX

Lead-free Solder Use—86%

Car Stereo



DEH-P055

Lead-free Solder Use—85%

Cordless Phone/ Answering Machine



EV-120

Lead-free Solder Use—100%

DVD/CD Writer



DVR-A07-J

Product Case Study DVD Recorder DVR-710H

Overall the product has adopted lead-free solder at 68%. Compared to the previous model, the size of the product has been reduced by about 30%, and further, you can select just what you need from a previously recorded hard disk and dub it at high speed to a DVD-R/RW Disc, so an unnecessary save disk is not generated—all of which lead to conservation of resources.



Committed to Eliminating PVC

When PVC is not incinerated correctly, dioxins may be produced. However, it is hard to use the appropriate process, as it is difficult to separate the PVC used in home appliances. For that reason Pioneer is striving to replace the PVC used in the cabinet and parts in its products, and is proceeding with eliminating it. In particular, we, along with several other parts manufacturers, researched and developed a way to eliminate the external sleeve on electrolytic capacitors. Nowadays, most products used in car electronics have switched to the all non-PVC type.



Example of a Switch from PVC to PET

Products and Energy Conservation

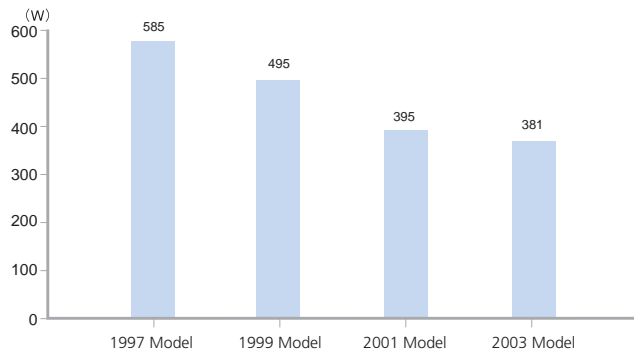
In order to reduce, even by a little, the amount of CO₂ emissions, which are a cause of global warming, Pioneer is working toward reducing the power consumption of its products.

Plasma Displays

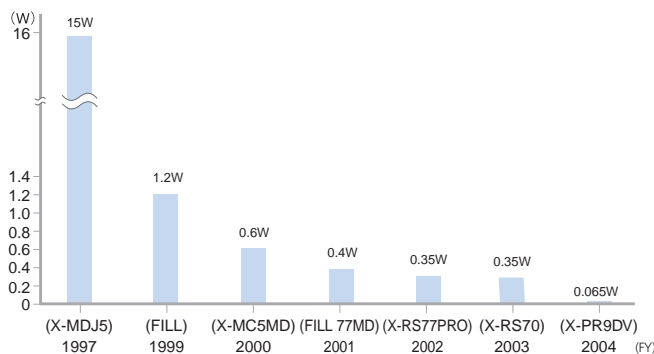
As the next generation display, plasma displays are becoming more and more popular for their visual impact, their screen resolution, brightness and how slim and light they are compared to their screen size. As the leader in plasma displays, Pioneer is also strongly committed to the environmental side as well. If you look at our 50-inch plasma TV with tuner as a set, we have achieved a 35% reduction (381 W/585 W) in power consumption from the first model, the PDP-501HD in 1997 to the 2003 model, the PDP-504HD. We reduced the annual power consumption a further 20% over the previous year's model. In addition, with the 43-inch model, (PDP-434HD) as well, we achieved a 26% drop in annual power consumption over the previous year's model.



Power Consumption of 50-inch Plasma Displays



Standby Power Consumption in Audio Systems (Japan)



Product Case Study X-FS9DV (2004 Model)

Due to its energy efficient design, this model achieves a world-class standby power consumption of just 0.065 W. In addition, this flat panel type of speaker is thin, conserving space and can be wall-mounted, so they fit into any room.



Standby Power Consumption

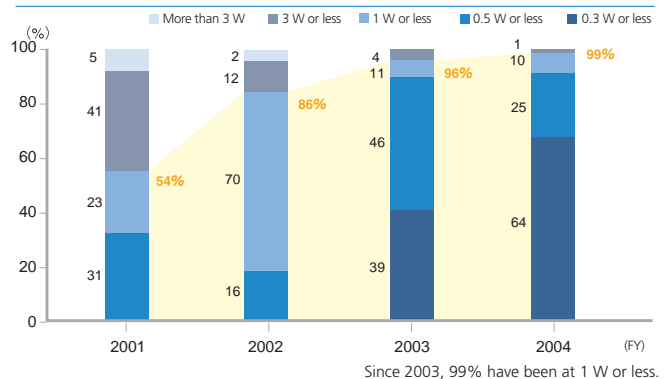
In general, standby power consumption can be called a major source of a household's power consumption.

Since 1999, Pioneer has been pushing forward in its design of all its newly developed products so they will consume 1 W or less in standby and in FY2004 we achieved an average of 0.21 W for AV products for home use.

We are striving to lead the home electrical device world with our self-imposed goals of 1 W for audio systems in FY2004 and 1 W in FY2005 for plasma displays; even more than with the audio systems, we are achieving our plasma display goals.

On top of these, we are introducing new technologies aimed at our company's FY2006 target of 0.1 W, as we pursue reductions in standby power consumption.

Breakdown of Production by Standby Power Consumption (Japan AV Products)



Energy Star Program

The US, the Environmental Protection Agency (EPA) set up the Energy Star Program as a standard for energy conservation.

Pioneer participates in the program with its AV products, such as mini-components, DVD players, etc., and displays the Energy Star Logo on our products that meet the standards. In 2003 we registered 14 models of AV products, such as our plasma displays. In addition, the same program is run in Australia, and we registered five models there.



Product Recycling

Recycling products is an important factor in environmental conservation.

Under the activity theme of Nothing Out for waste products, Pioneer is engaged in various recycling efforts.

Recycled Whiskey Barrels. A Smooth Sounding Speaker is Born.

Barrels steeped in whiskey for over 50 years. The barrels finally reach the end of their useful lives, but the wood is revived as speaker cabinets, making audiophiles, real sticklers for their music, hum with joy—a new brand-name speaker is born. This was achieved with the spirits maker Suntory Co., Ltd. in collaboration with the Hida Takayama art studio, Oak Village. We launched sales in October 1998 of the first product with the Pioneer Environmental Label, the Pure Malt Speaker. Today many fans are still in love.



First Product with the Pioneer Environmental Label



Complying with the Home Appliance Recycling Act (Japan)

Pioneer CRT TVs with built-in tuners are subject to the appliance recycling law. We collected 2,817 sets in 2003 and had a recycling rate of 85%.

FY2004 Recycling Performance

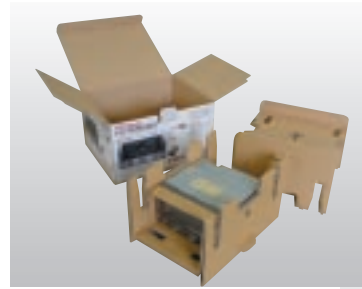
Number of TV Sets Taken in	2,817
Number of TV Sets Recycled	2,826
Weight of Recycled TV Sets	74 tons
Weight of Recycled Materials	63 tons
Recycling Rate	85%

Recycling Rechargeable Batteries (Japan)

Pioneer uses small rechargeable batteries in our products, such as cordless phones and the like. In the interest of not using limited resources carelessly, we became affiliated with the Japan Battery Recycling Center, JBRC (formerly: Small, Rechargeable Battery Resource Recycling Promotion Center). We are proactive in our commitment to collect and recycle small, rechargeable batteries.

Packaging Materials

Pioneer is proactive in adopting pulp molding and cardboard boxes that use recycled paper for protecting our products. We have adopted its use for all our new car electronics products.



Car Audio Products are packaged only in cardboard, making it easy to recycle.



Packaging using pulp molding for protection.

Increasing Recyclability

In order to promote the recycling of discarded products, we are committed to increasing their recyclability. We achieved this in FY2004 for our goal of 70% or more of CATV terminals. In addition, we improved 3.7% and 6.7 % for AV system products and DVD recorders, respectively.

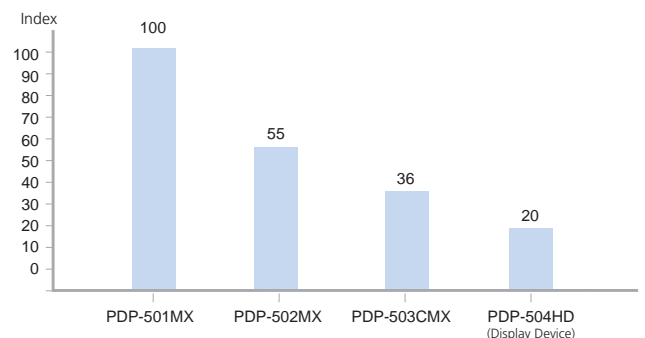


CATV Terminal BD-V170

Reducing Disassembly Time

In order to make recycling easier, we are working to reduce the amount of time it takes to disassemble a product after it is discarded. In particular, we have reduced by 20% the amount of time it takes to disassemble the large plasma displays, compared to the first models.

Time it takes to Disassemble Plasma Displays



Car Electronics

Pioneer Car Electronics—Concepts Derived from Environmental Conservation

Pioneer is continuously developing advanced technologies, even in car electronics, and we always promote energy efficiency and resource conservation through our proposals for new products.

Even minor increases in fuel efficiency are connected to reductions in CO₂, and as they build one upon another, they expand into a large conservation effort for the global environment.

Using Car Navigation to Reduce Environmental Impact

[Car Navigation and Preventing Global Warming]

If you get lost and waste gas driving around for 10 minutes, some 3,500 cc of fuel is used up and 800 grams of CO₂ is exhausted. By using Car Navigation and selecting an efficient route, this kind of waste can be avoided, which is connected to preventing global warming.



[Contributing to Resource Conservation Too—Air Navi]

The user-friendly AVIC-T1, affectionately called Air Navi, employs a server for satellite car navigation that had never before been available; it went on sale in November of 2002, and has won a favorable reception.

As it automatically updates itself all the time with information from the server, the latest maps and information on roads and services are always ready to use, allowing for a more relaxed and enjoyable drive. In addition, as it is not necessary to buy and install a DVD-ROM, there is also no call for the discs and all the packaging and transport that comes with them; that means a reduction in consumption of energy and resources and a cut in waste products.



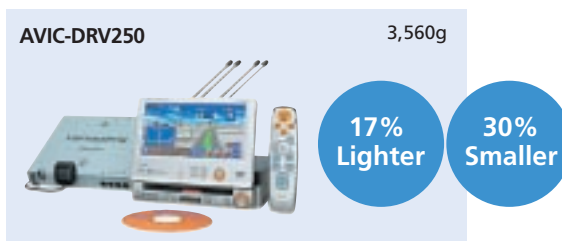
[Reducing the Size and Weight of Car Electronics]

In fulfilling our role in proactively reducing automotive exhaust emissions and improving fuel economy, Pioneer is pouring its energies into the reduction in size and weight of its car navigation and car electronics products.

In car audio products, we made the chassis slimmer and greatly reduced the number of parts, resulting in a weight reduction of some 22% compared with previous products overall. The technology we cultivated here for reducing weight is applied and rolled out to other products.



We were able to achieve a 30% reduction of volume compared to the previous year and a 17% drop in the weight of car navigation system via reductions in the size and weight of the mechanisms in the in-dash drive, by making the circuits more precise and by reducing the number of parts.



Business Vehicle Movement Management System (Vehicle View 3)

Achieving Reductions in Environmental Impact via Real-time Movement Management

Pioneer Navicom Co., Ltd. VM System Sales Division Manager
Tetsuro Mori

A number of vehicles take different routes, moving up and down, left and right. Those movements are immediately grasped when they are on a computer screen, allowing for optimal management of distribution and movement. Vehicle View 3 from Pioneer Navicom Co., Ltd. is just such a real-time movement management system.

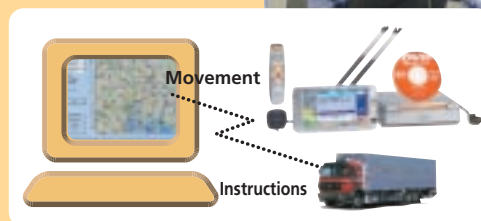
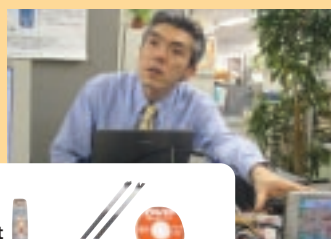
The vehicles are equipped with GPS (Global Positioning System) and DVD navigation and communicate with the head office via the digital cellular network.

VM System Sales Division Manager explains, "The system is useful in reducing environmental impact because by managing movement, the number of moving vehicles is reduced, fuel efficiency is increased, conserving energy and reducing CO₂ emissions, etc."

It is not just that the position of vehicles can be seen on a map on the screen at the head offices, the speed of traffic can be surmised from the track a vehicle is tracing and traffic jams can be grasped at a glance from the thickness of the tracks. Daily reports can easily be created from the record of movements, so the driver's workload can be relieved, while storing more accurate data on where the vehicle has traveled. Based on the results derived from that, optimal routes to take can be verified and it is possible to minimize losses stemming from things like time stuck in traffic, the weather, etc. In addition, it can

contribute greatly to driving safety by reducing the workload on the driver through things like text messaging directions from the head office to the navigation screen of the vehicle as it is driven, allowing destinations to be set up remotely.

Effective movement management reduces environmental impact, says VM System Sales Manager Mori



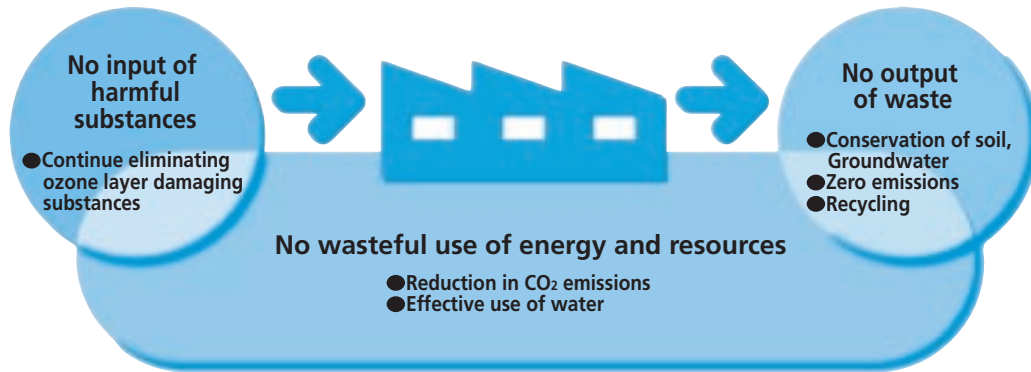
A Vehicle's Position and Speed can be Grasped in Real Time

TOPICS

Environmental Preservation at Pioneer Facilities

Pioneer is striving for reductions in the environmental impact generated at our facilities in Japan and abroad. We have a slogan, **No negative input, No negative output, No negative use** for our production processes and management activities; with this in mind, we carry out activities, such as reducing CO₂ emissions and promotion of zero wastes emission and recycling.

■ No negative input, No negative output and No negative use Activities in Facilities



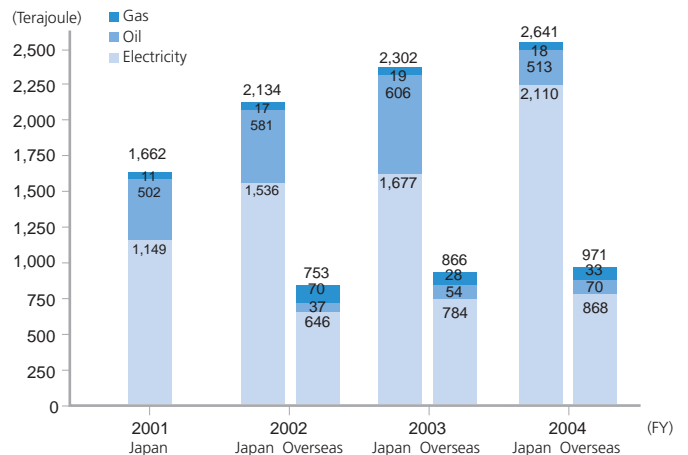
Conserving Energy

Reduction in CO₂ emissions

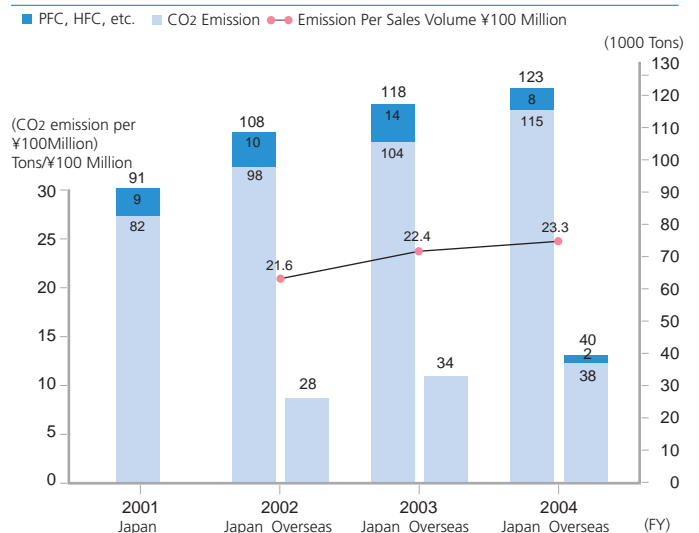
Pioneer sees the countermeasures to global warming as an important issue, and aims to reduce total green house gases emission, converting the emission of warming substances, such as PFCs and HFCs that are used in production processes into CO₂ equivalents, adding them to the CO₂ generated from energy consumption. Although the emission of green house gases as a whole is on an upward trend as the new businesses of plasma displays and organic EL are expanding, we have managed to cut down on the emissions of PFC, HFC in CO₂ conversion by 46%, compared to the previous year. We will work on improvements on a per unit of sales basis and reduce emissions while introducing energy conserving facilities from now on. Further, we will strive to reduce the volume of CO₂ generated from the electricity consumed by products that are in the hands of our customers.

Consumer Benefit refer to page 14

Shift of Total Energy Consumption



Shift of Green House Gas Emissions



Ask the Expert

What are PFCs and HFCs?

PFCs and HFCs are alternative chlorofluorocarbons, and as they do not contain chlorine or damage the ozone layer, they are used for cleaning parts and as a refrigerant in air conditioners. However, some produce a green house effect thousands of times worse than that of CO₂.



COLUMN

* A coefficient based on the Ministry of the Environment's Computation Method Guidelines for Greenhouse Gas Emissions from Facilities is used here.

Implementing more Thorough Energy Management

We have worked at our Meguro headquarters to ensure the management of energy consumption as follows. By employing these kinds of measures, we have effectively increased energy conservation even further.

1. Introducing the Power Consumption Measurement System

In April 2003, we introduced a system that can measure the power consumption (air conditioning and lighting) of each floor at our Meguro Headquarters. These measurements, have enabled us to understand how much power is being used, and to call attention to it more precisely.

2. Implementing Measures for Saving Electricity during the Summer

In addition to the daily electricity savings policy, we came up with special electricity savings plan, such as stopping the multi-displays in the lobby on the first floor in order to reduce the peak-hour power usage from 1:00 P.M. to 4:00 P.M. during the summer, June to September. This is implemented not only at our Headquarters, but is also to include facilities in the Kanto region.



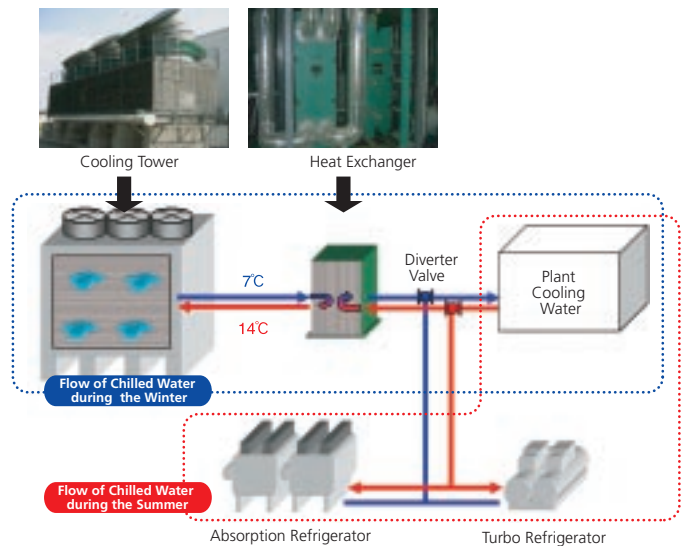
A Power Consumption Measurement System Installed at the Headquarters

Free Cooling with Natural Energy

Tohoku Pioneer Yonezawa Plant

The Tohoku Pioneer Yonezawa Plant has introduced a free cooling system that manufactures chilled water by using natural energy, taking advantage of the climatic characteristics of snow country Yonezawa.

Conventionally absorption or turbo refrigerators are used in the manufacture of chilled water, which is used as a coolant for air conditioning and in production devices. However, the absorption model uses steam energy and the turbo model utilizes electricity. Our Free Cooling System has been introduced to reduce this energy consumption. This system manufactures chilled water by utilizing the low temperature of the open air during the winter. By effectively employing natural energy, we can stop using absorption and turbo refrigerators during the winter, leading to a CO2 reduction effect of 635 tons in FY2004.

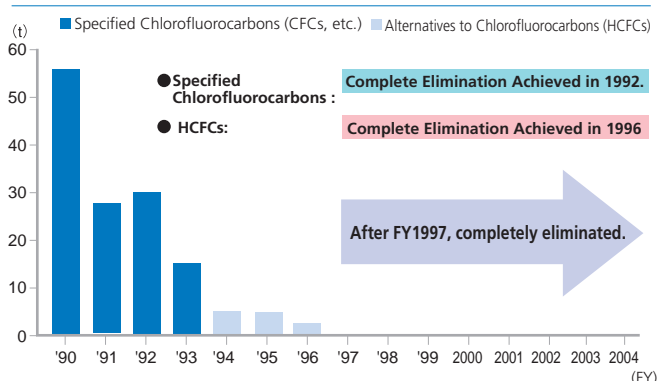


Protecting the Ozone Layer

Elimination of Ozone Layer Damaging Substances Completed

Back in 1992, Pioneer completely eliminated specified chlorofluorocarbons, which have a high coefficient in damaging the ozone layer and which were banned in 1995 according to international regulations, from the production processes of all group companies. In addition, we completely eliminated the alternatives to chlorofluorocarbons such as HCFCs, which destroy the ozone layer, from the production processes for our products in 1996, prior to 2020, as stipulated in international regulations, by switching to cleaning with alcohol or no cleaning.

Changes in the Volume of Ozone Layer Damaging Substances Used



Reduction of Harmful Air Pollutants/PRTR

Proper Management of Harmful Air Pollutants

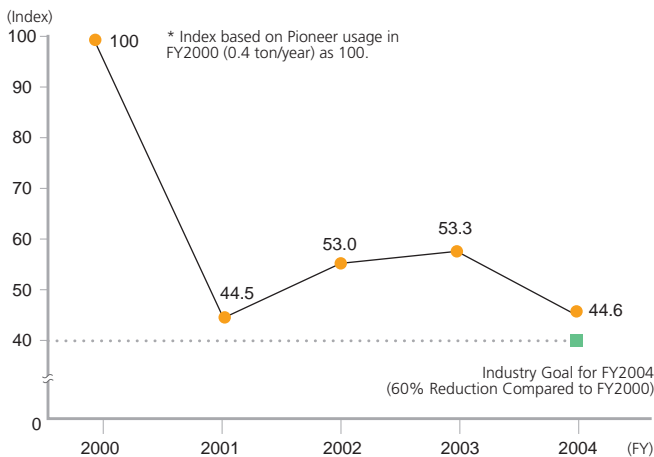
Japan's Air Pollution Control Law requires that efforts be made to reduce the use of dichloromethane, which is a harmful air pollutant. The electric/electronics industry is also working to reduce the emissions of dichloromethane, tetrachloroethylene, trichloroethylene and chloroform, which are designated as priority emission restricted substances. Pioneer reduced dichloromethane to 55% less in FY2004 than in FY2000. We missed the industry goal by a slight margin, but we achieved a 97% reduction against the emissions in FY1997, when efforts to reduce emissions started in the industry, and a 15% reduction was achieved in comparison with the previous year.

We will press forward with our reduction activities more vigorously in the future.

● Status of reductions in emission restricted substances, mainly focused on industry

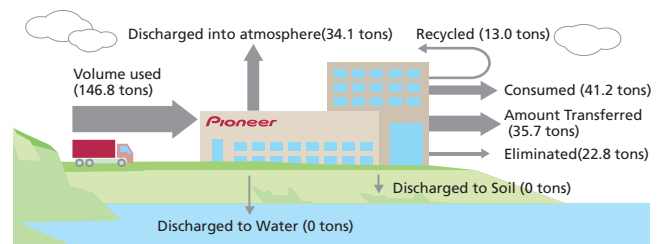
- Tetrachloroethylene → Never been used
- Trichloroethylene → Completely eliminated since FY 1999
- Chloroform → Zero emission (Volume handled is less than also 0.1 ton/year)

Atmospheric Emissions of Dichloromethane (Japan)



Management Under PRTR

In line with the PRTR (Pollutant Release and Transfer Register) protocol, we started reporting the discharge of chemical substances into the environment to the state for our business records in FY2002. As the volume we handled according to our business records was in FY2004 one ton/year or more at Pioneer, (List of Class I Designated Chemical Substances), the eight substances shown in table below were subject to reporting. Compared with the previous year, the number of substances that we handled at a volume of one ton/year or more was reduced from ten to eight types; the volume handled, was reduced 19 % and atmospheric emissions were reduced 29%. We will continue to promote reductions to our environmental impact by improving the level of environmental risk management in the future.



Ask the Expert

What is Amount Transferred in PRTR?

Amount transferred refers to the amount of waste hauled to a disposal company, or the amount treated in the sewage system. The amount eliminated means the amount of subject substances which were changed into other safe substances via neutralization and decomposition. Amount consumed refers to the amount shipped, as included in products, or changed into other substance due to chemical reactions. For example, this applies to the lead used for soldering in a product.



COLUMN

Survey Results on Substances Subject to PRTR (Japan)

Substance	No. of facilities	Volume used (tons)	Discharged into atmosphere (tons)	Amount transferred			Consumed (tons)	Eliminated (tons)	Recycled (tons)
				Amount transferred as waste (tons)	Amount transferred to sewers (tons)	Total (tons)			
2-amino ethanol	3	25.6	0	0	3.4	3.4	0	20.2	2.0
Silver and its water-soluble compounds	5	6.2	0	0	0	0	0.9	0	5.3
1, 1 dichloro-1- fluoroethane	1	1.9	1.9	0	0	0	0	0	0
Toluene	5	32.7	31.4	1.1	0	1.1	0.2	0	0
Lead and its compounds	8	71.8	0	30.7	0	30.7	38.6	0	2.5
Di-n-butyl phthalate	4	3.3	0.8	0	0	0	0	2.5	0
Hydrogen fluoride and its water-soluble salts	1	3.2	0	0	0	0	0	0	3.2
Boron and its compounds	3	2.1	0	0.5	0	0.5	1.5	0.1	0
		146.8	34.1	32.3	3.4	35.7	41.2	22.8	13.0

(Note) 1,1 dichloro-1-fluoroethane: Used on the direction of trading partners. It is not used in Pioneer products.

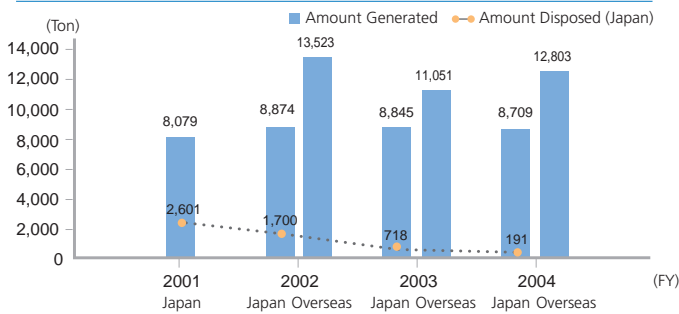
Recycling at Facilities

Pioneer is promoting its activities with the goal of having no waste at all, that is, zero emissions of waste at its production facilities throughout the world in FY2006.

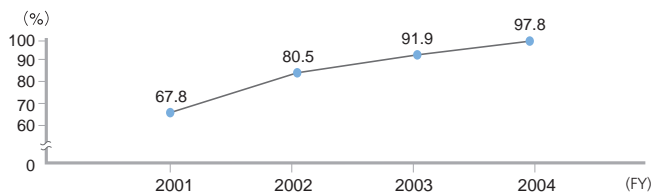
Towards Zero Emissions of Wastes

Although there were challenges, such as the increase in plasma display production in FY2004, the volume of waste generated in Japan has decreased. We reduced waste by 27% compared to the previous year and we also raised our recycling ratio to 98%. In addition, the fact that our Meguro Headquarters Facility, the Omori Facility, our Corporate R&D Laboratories, and Pioneer Precision, which produces die and resin molded goods, have achieved zero emissions contributed to the increase in recycling ratio.

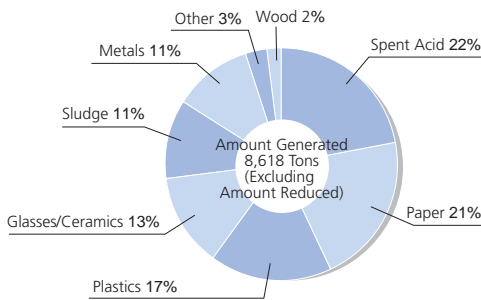
Amount of waste generated and disposed



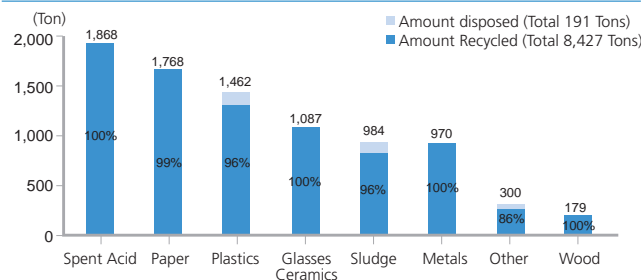
Recycling Ratio (Japan)



Breakdown of Waste (Japan)



Amount Generated and Recycling Ratio According to Waste Type (Japan)



Appreciation Award From State of Johor for our Recycling Activities

The recycling activities headed up by Pioneer Technology (MALAYSIA) SDN.BHD (MPT) in Malaysia have been evaluated highly and in December 2003, a Appreciation Award was sent from the Johor State Government. The selection was based on an evaluation of the amount of refuse recycled and our internal activities. All told, MPT recycled 483 tons of paper, plastics, aluminum, lead and soldering scraps during the term from January to November.

In conjunction with the events held by the state of Johor MPT set up an exhibition booth introducing their commitment to the environment, which many people visited.



Vice chair of Environmental Conservation Committee, Ms. Rosita Harun of MPT receiving the award from the governor of the Johore State Government. Appreciation Award from the Johor State Government

6 Facilities Commended with 3R Promotion Council Chairman's Prizes

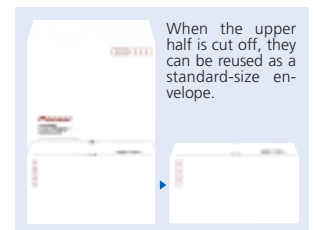
A total of six Pioneer facilities and related companies were awarded with a 3R Promotion Council Chairman's Prizes. Consumer groups, industry groups, related ministries and agencies are participating on the council, with the aim of building a sustainable society. 3R means Reduce, Reuse, Recycle. Our Meguro Headquarters, the Ohmori, Tokorozawa and Kawagoe Plants, the MTC and DPC Headquarters the Shizuoka Plants received prizes.



The Result of our Continuous Commitment to 3R Activities is Recognized

Reusable A4 Company Envelopes

We improved the design of our A4 company envelopes so that the lower half can be used again as a standard-size envelope. We used 70% recycled paper in consideration of reusing resources.



When the upper half is cut off, they can be reused as a standard-size envelope.

Zero Emission of Waste (Pioneer's Definition): Recycling and reusing 99%+ of the waste from our facilities to approach zero waste going to landfills.

Countermeasures for Water/Soil Pollution

Conserving Water Resources

Reducing Wastewater Volume

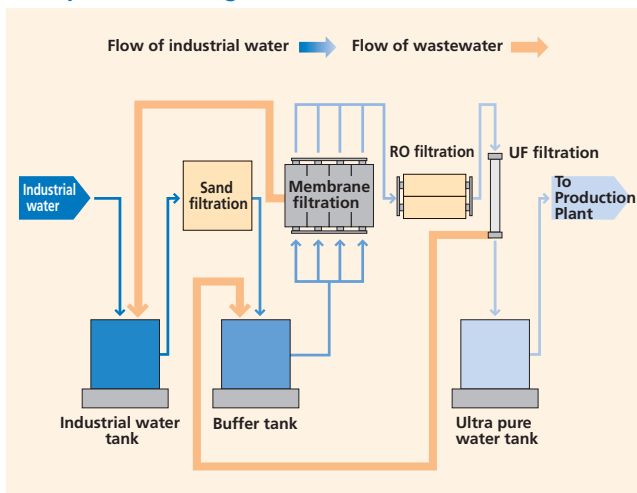
Pioneer started gathering and tabulating data on water resource use in the group since 1997, and since FY2001, we have done the same for wastewater as well. In FY2004, although water usage increased as we established a new production base in China, we are reducing the volume of wastewater by reusing it.

Reusing Wastewater

Production of organic EL, semiconductors and plasma displays requires pure water. Pure water is created by passing raw industrial water through various filters.

Wastewater is generated when the water goes through the filters, but we collect this as industrial water and use it again. The volume reused in FY2004 was 134,000 m³.

Examples of Reusing Wastewater



Thorough Water Quality Control

Pioneer has set up its own standards, which are stricter than national laws and regulations for water quality conservation and we are making painstaking efforts to manage it throughout the entire group (see table below).

For example, the Corporate R&D Laboratories implemented non-chemical cleaning of wastewater at its cooling tower as part of its water quality control efforts.

An Example of Water Quality Measurement Results (Pioneer Micro Technology)

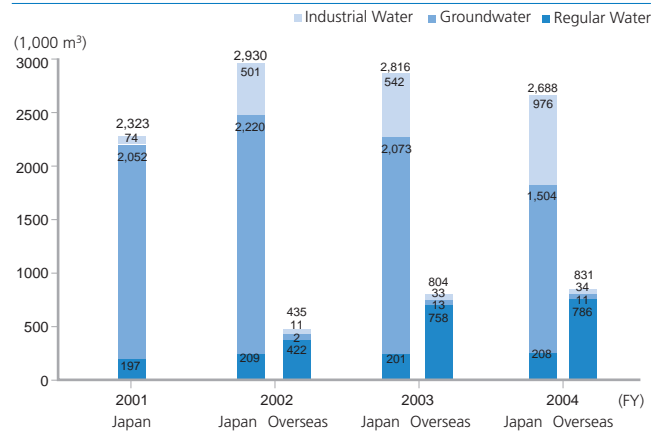
	Legal Standard	Pioneer's Voluntary Standard	Measured Value	Measurement Frequency
BOD	30	6	3.8	4/yr
SS	50	5	1.0	4/yr
n-hexane extracts	5	0.6	0.5	4/yr

BOD: Biochemical Oxygen Demand (mg/liter)

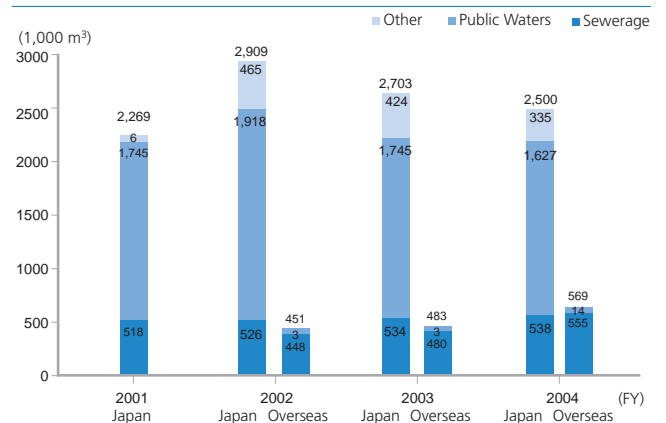
SS: Suspended Solids (mg/liter)

n-hexane extracts: General term for oils (mg/liter)

Shifts In Volume of Water Usage



Shift in Annual Volume of wastewater



Countermeasures for groundwater/soil Pollution

Since FY1999, Pioneer has conducted surveys of soil/Groundwater pollution for each production facility, and at facilities where pollution is suspected, a detailed survey, such as borings, were conducted to confirm that no problems existed. Further, a survey is conducted at non-production facilities when obtaining ISO certification.

Since FY2004, standard values have been met at all the measurement points.

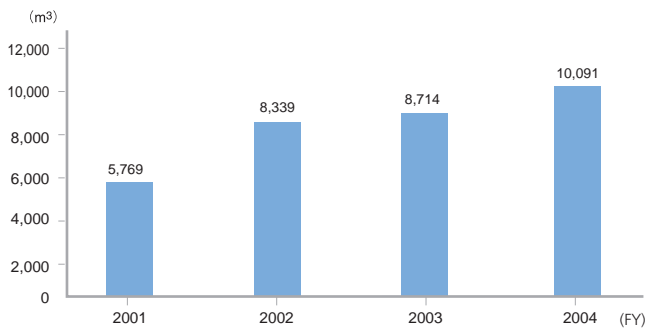
Grappling with Distribution

Pioneer thinks that improving our product transport efficiency ratio is an important factor in environmental conservation. To this purpose, eliminating steps in our distribution via integrating and rearranging distribution points, as well as reviewing the means of transport can be considered.

Modal Shifts

Shifting the means of transportation to railroad is called a modal shift. Pioneer has been putting some efforts into activities to promote this. The volume handled for FY2004 has increased greatly to 10,091 m³, which is 116% compared to the previous year. We will utilize rail transport for main routes as much as possible.

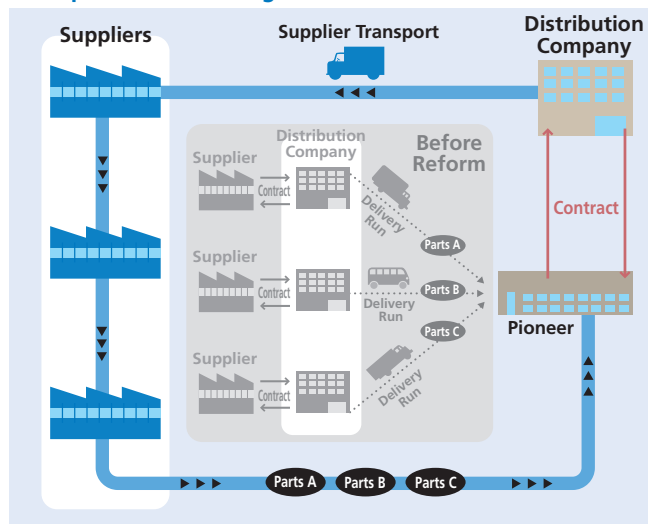
Trends in Modal Shift (Japan)



Expansion of Milk Runs

We turned our attention to the transport of parts from our suppliers in order to review distribution steps. We used to exchange a contract with a distribution company for each supplier and transport them individually; however, we have reversed this and made a distribution contract so parts are picked up from the individual suppliers in order. Doing so enabled us to eliminate overlapping distribution. The number of subject parts manufacturers increased to 30 companies from last year's 18 companies. This resulted in a shortened running distance of 165,068 km total, with 2- and 4-ton trucks combined, and a reduction of 32,261 liters of fuel, which is equivalent to 82.5 tons of CO₂. (A five-fold increase over the previous year.)

Transport Reform using milk Runs



Environmentally Friendly Sales Promotions

Pioneer has put its energies into promoting environmental activities in our ordinary work.

In sales, we have gotten creative about facilitating environmental measures, such as by utilizing recycled items and making the life of sales promotion exhibition units last longer.

Utilizing recyclable materials



Exhibition unit using recycled materials from PET bottles. As an environmental measure, acrylic materials are used for decorative lighting as an alternative to PVC.

Making Long Lived Exhibition Units

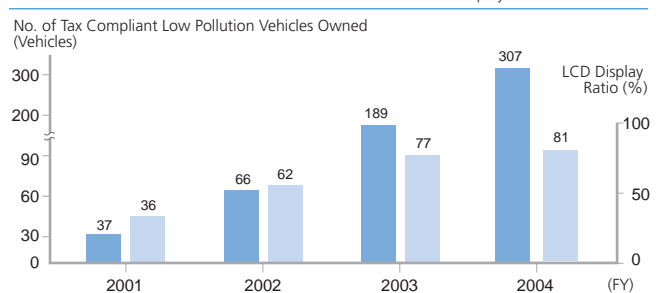


By simply replacing the back panel, conventional exhibition units can be used for a new product. This idea enabled the extended use of the sales promotion tool.

Green Purchasing

Each division of the entire Pioneer Group is pushing hard for green purchasing, in conjunction with the Green Purchasing Standards we laid down internally. In particular, we are putting energy into switching from CRT monitors to LCD, and switching our company cars to low pollution vehicles. Regrettably, paper usage increased slightly to 102%, in comparison with the previous year; however, this was due to the growth of business at group companies and increases in human resources. We will make efforts to achieve our goals by strengthening our reduction measures for facilities with increases in the future. Also, the ratio was 98.4% over the sales volume per ¥100 million compared to the previous year.

Progress in Green Purchasing (Japan)



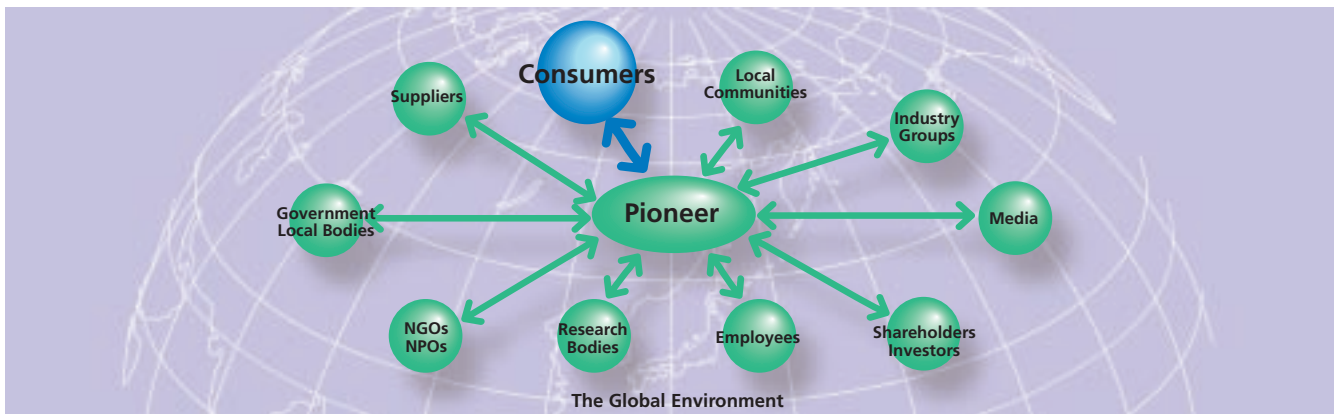
* Low Pollution Vehicles Pioneer defines low pollution vehicles as low emission gas vehicles and vehicles with a high mpg in Japan.

Social Reporting

Along with continuing to be a leader in creating markets and clearing the way for the next generation, Pioneer, as a responsible corporation, works to conserve and improve the global environment. In addition, as a "good corporate citizen," in regional and international society, we think we have to maintain a high ethical stance. We believe the Pioneer Group tenet "Move the Heart, Touch the Soul" will be realized if we take that attitude.

Linked Together with Various Stakeholders

This figure shows the role Pioneer should play among its stakeholders in order to environmental conservation of the Earth.



For social reports that are not related to the environment, see "Corporate Citizen" page of our Web site: <http://www.pioneer.co.jp/citizen/index-e.html>

Social Contributions to the Environment

Cleaning the Ayutaya Ruins World Heritage Site

Our Thai production company, Pioneer Manufacturing (Thailand) Co., Ltd. (PTM) has been cleaning up monasteries, such as the Wat Mongkhon Bophit in the Ayutaya ruins. These ruins, which are visited by some one million people every year is designated as a World Heritage Site. Everyone wants to protect these monasteries, which represent Thailand, and between July and October of 2003, we cleaned up four times, with 200 people participating each time.

The Governor of Ayutaya province initiated the fourth cleaning event in celebration of the birthday of the King of Thailand. PTM will continue to contribute to the region with its cleaning efforts in the future.



The Governor of Ayutaya Participating with Us



200 people took part each time. We collected refuse inside the ruins.

Rolling Out our Zero Garbage Movement Company-wide

Our Meguro headquarters clean up areas around commuting paths three times a year in its so-called "Zero Garbage Movement." On this occasion as well, as we headed into our fifth year, President Ito lead the way in cleaning up the area around the Meguro head office.

In addition, the Pioneer Service Network (PSN) also conducts cleaning activities on its own once a month, scheduling it to fall on the same day as the head office's cleaning activities; both President Onami and most employees participated.

All the groups across Pioneer put our energies into such environmental social activities.



President Ito participated this time, along with most executives. We are firmly established as we head toward our fifth year



PSN conducts its own cleaning work every month.

Towada Electric Group Fights "Battle for a Clean Oirase River"

The Towada Electric Group conducted a beautification program called the "Battle for a Clean Oirase River," breaking up to cover three courses in collecting garbage.

Oirase River springs from Lake Towada and is an important, clean stream in the region's history and culture. On this occasion, some 70 people participated, spending two and a half hours in cleaning up the area. The participants said that they hope that through working to protect this kind of natural environment and scenery they will have contributed, even if only a little, to the region.



With the cleaning battle over, bright, smiling faces all in a row

Members of Corporate R&D Participate in Preserving Tsurugashima Mountain

Corporate R&D Laboratories continues its activities to preserve and restore mountains in answer to a call for volunteers for creating Citizens' Forest spearheaded by Tsurugashima city.

As they had already obtained ISO 14001 certification, and achieved its goals for reducing paper, refuse and power consumption, the Laboratories answered the city's call for volunteers in an attempt to broaden their environmental conservation activities.

Further, the Tsurugashima Mountain Support Group was established in March 2003, comprising city staff, citizens and corporate members all together. Events are also held so children can become familiar with the mountains.

Pioneer employees are actively involved, taking on a central role in this club.



Cutting trees and clearing away the underbrush are indispensable to preserving the mountain

Picking Up Refuse on Chinese Environment Day

All 1,400 employees of the production company in Dongguan China, Pioneer Technology (Dongguan) Co., Ltd. (PTD), participated in June 2003 in cleaning up around the company. The event fell on Chinese Environment Day and all the members collected refuse for about one hour, with the intention of everyone keeping the town clean and living comfortably.



Police also helped by shutting off traffic in the area to be cleaned.

Tohoku Pioneer Participates in "Corporate Forest Making"

Tohoku Pioneer supports the Corporate Forest Making advocated by Yamagata prefecture, attending the opening ceremonies and taking part in the first forest-making project.

The program aims for companies to take an active role in protecting forests and woods in the spirit of public interest.

After the ceremony, we went to the forests in Tendo city, and did maintenance work, such as clearing away undergrowth and trimming off dead branches. Eleven Tohoku Pioneer staff members participated and worked hard during the half-day activity.



Participating in real work gear—clothes and helmets

Approaching Ten Years of Contributing to WWF Japan

All of Pioneer, including both facilities and related companies, collects small rechargeable batteries. In FY2004, we collected 72 kg in all. The Division of Environmental Preservation has always donated the money gained by selling the collected rechargeable batteries to recycling dealers to WWF Japan (World Wide Fund for Nature Japan). As it marked an important milestone as our tenth year in FY2004, we brought the contributions directly to the WWF Japan headquarters.

Pioneer will continue supporting these activities.



Mr. Nakano (left) of the Environmental Preservation Division giving the contribution to Ms. Yumiko Kawamura, Office Manager of WWF Japan with the WWF panda mark in the background.

Pioneer participates in various group environment related activities

As of April 2004

- Japan Federation of Economic Organizations (Keidanren) Committee on Environment and Safety
- Japan Electronics and Information Technology Industries Association Environment Committee
- Association for Electric Home Appliances Environment Related Committee
- Japan Machinery Center for Trade and Investment Committee on Trade and Environment
- Japan Battery Recycling Center (JBRC)
- Japan Environmental Management Association for Industry
- Network for Environmental Reporting (NER)
- Green Purchasing Network (GPN)
- Business Study Group on Corporate Environmental Accounting Practices sponsored by the Ministry of the Environment
- Life Cycle Assessment Society of Japan

Environmental Education

Distributing the Environmental Report to All Employees

Pioneer distributes our Environmental Report to all of our employees every year in a proactive effort to encourage and raise environmental awareness among the employees. When new hires come into the company, we also distribute the report to them during their comprehensive training, as an effort toward environmental enlightenment.

Utilizing E-Learning for Company-wide Training

We conducted general training from August to September on ISO 14001 for all company employees at our Meguro head offices. We introduced an e-learning system, which permits the participants to use their free time to study, and some 1,726 people participated. From 2004, we will take on training content for green purchasing, which will enrich the training program.

Pioneer Environmental Contribution Awards - Environmental Patent Awards

Pioneer commends facilities, groups, or individuals within the company who contribute to our environmental conservation activities with the Pioneer Environmental Contribution Awards every year. In FY2004, 56 applications were received, with excellence awards going to the Introduction of CNG (Compressed Natural Gas) Commuting Bus Within Company Housing, to Pioneer Service Network Social Contribution Activities, and to the Ohmori Facility in the individual, group, and facilities divisions, respectively. From this coming fiscal year, a promotions award will be established for the group division, rounding out the commendations for environmental contributions. In addition, among patents invented in FY2004, some 21 cases were deemed to contribute to improving the environment; from these, two were selected for Environmental Patent Awards. Pioneer is striving to raise the environmental conservation awareness of all its employees, including via this commendation system.



Recipients of Pioneer Environmental Contribution Awards



Recipients of Pioneer Environmental Patent Prizes

Fun Learning with the Environment Treasure-box

Pioneer created the Treasure Box on its environment Web site to raise interest in environmental issues in a way that is easy for everyone to understand. Environmental issues are explained via fun illustrations and conversations between a cat called Spimaru, a clever feline who knows everything about environmental issues, and the elementary school student, Pio who is ever so curious. In the first episode, they discuss the ozone layer—how it absorbs harmful ultraviolet from the sun and chlorofluorocarbons that destroy them. In the second episode, global warming is explained.



Pio and the clever cat Spimaru enjoy talking all about environmental issues



<http://www.pioneer.co.jp/environment/tamate/>
(Japanese only)

Reducing Power Consumption at Home with the COCO-chan Campaign

Over 1,000 people participated in the COCO-chan Campaign 2003, sponsored by the Japanese Electrical Electronic & Information Union.

The COCO-chan Campaign calls for the savings of electricity at home, in particular through reduced use of air conditioning during summer, and commends employees who contribute to reducing power consumption. The number of people participating year after year is getting higher, as is awareness about energy conservation.

The COCO-chan Campaign will continue in 2004.



Promoting the energy conservation movement with cute characters.

Number of Personnel with Major Environment-related Qualifications

	Qualification	No. of People Qualified	No. Qualifying in FY2004	
National qualification	Pollution-related	Pollution control manager (atmosphere, water quality, noise)	29	2
		Energy manager, type I (electricity, heat)	12	0
	Energy	Energy manager, type II (electricity, heat)	17	2
		Boiler plant operator	62	1
	Wastes	Specially controlled industrial wastes manager	81	11
	Handling	Hazardous Substances Harmful materials engineers	299	13
		Chief for specific high pressure gas	35	2
		Chief for high pressure gas	13	0
		Chief safety specialist (organic solvents, lead, specific chemicals)	611	58
		Chief for toxic substances	12	0
	Other	4	1	
Internal qualification	Environmental Management	233	62	

Environmental Communication

Issuing Environmental Reports and Site Reports

Pioneer has been issuing the Environmental Report since 1999 and working to communicate about the environment both internally and externally.

Each facility also issues its own site report for promoting active communication with their communities. Detailed data on each facility that does not appear in the main report can be found in the site report. To find out which facilities are issuing a site report, please see the list of facilities at the beginning of this book.



Site reports from Tokorozawa, Kawagoe, Ohmori, Tohoku Pioneer

Communicating with the Community

Participating in an Exhibition at Earth Day in Kawagoe

The Kawagoe Plant participates in Earth Day in Kawagoe, which is held in Minakami Park, Saitama Prefecture in September every year. We presented our work on the environment, such as zero emission achievements, reductions of environmentally harmful substances and promotion of lead-free solder.



Presenting our work on the environment in the fifth Earth Day in Kawagoe

Corporate R&D Laboratories Holds Environmental Symposium

Corporate R&D Laboratories participated as a main member and held the Tsurugashima Environment Network sponsored environmental symposium on-site at the R&D Laboratories in February 2004. This symposium offered an opportunity to think about what grown-ups should do to execute the Promises to our Children, the basic environmental plan put together by Tsurugashima city. The 130 participants filled up the room and engaged in an enthusiastic exchange of opinions from different points of view, such as citizen, school, administration, and corporation.



Panelists from the Corporate R&D Laboratories participating in a lively exchange of opinions.

Members from Meguro-Ward Residence Conference Observing our Efforts

The Environmental Promotion Group in the General Affairs Division at our headquarters invited environmental division members of Meguro-Ward Residence Conference to tour our site for collecting and separating refuse at the headquarters.

Participants marveled at the thorough recycling we do via a more detailed separation of refuse than people do at home.



Participants listening to an explanation of refuse separation at the waste collection point in our basement at the headquarters.

Kashiwa City Environmental Conservation Council Visited the Tokorozawa Plant

In November 2003, people from the Kashiwa City Environmental Conservation Council visited our Tokorozawa Plant, observing the central power-monitoring office, recycling center, etc.

The Tokorozawa Plant will continue to be proactive in disclosing information in responding to such requests in the future.



Participants from Kashiwa city Environmental Conservation Council, who observed the Tokorozawa Plant's efforts

Presentation at Symposia

Introducing our Environmental Activities at the General Meeting of the ISO Friendship Society

In April 2003, our company introduced the environmental efforts we make while engaging in our primary work responsibilities, demonstrating our vision for integrating environmental activities with business operations at the general meeting of ISO Friendship Society, sponsored by Japan Audit and Certification Organization for Environment and Quality.



ISO Friendship Society

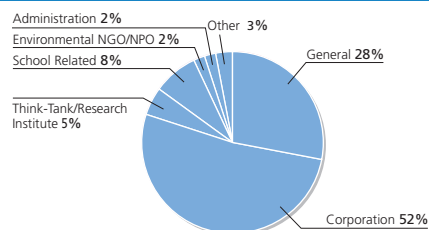
Participating in an Environmental Seminar Held by a Parts Distribution Group

Pioneer participated in the ISO 14001 Environment Management Seminar held by the Tokyo Association of Electric Wholesalers in August 2003, and presented a speech as the keynote speaker as well as participating in the panel discussions. Many participants were on the edge of their seats listening to the speech about the environmental conservation activities required for the future, green procurement and our expertise in obtaining ISO 14001. A lively Q&A session was also held.

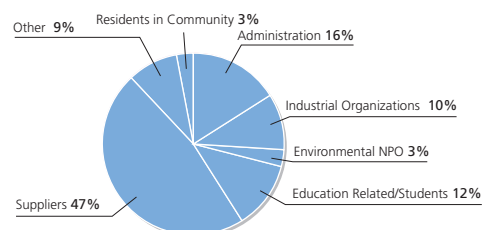


Managing Director Satoshi Matsumoto lecturing at the environment seminar held by the parts distribution group

Report Requests (of 1380)



External Inquiries (463 excluding report requests)



Exhibition at Eco Products 2003 Japan

Pioneer participated in the exhibition Eco Products 2003 held at Tokyo Big Sight in December 2003. We made a presentation on the mini stage, writing directly on the Cyberboard plasma display, to make an appeal for reducing power consumption with plasma displays. The paperless scratch event, which also used the Cyberboard screen, after the explanation was popular among the visitors.

In a slightly different vein, we had an exhibition at the main booth using No negative input, No negative output and No negative use as key words. The No negative output corner introduced things like packaging conservation and using cardboard cushioning materials to eliminate Styrofoam. At the No negative use corner, we introduced our work for making products smaller and lighter. Lead-free solder and green procurement were introduced in the No negative input corner. Pioneer will aim for easy to understand, fun booths in the future as well.



Interest from a wide range of visitors, from elementary school pupils to experts

Paperless scratch event on the Cyberboard, get a favorable reception

Listening to Opinions from Third Parties, Promoting Corporate Environmental Responsibility and Public Disclosure

Conducting an Opinion Exchange Forum with Students of Environmental Economics

We conducted an opinion exchange forum on the content of Pioneer Group's Environmental Report 2003 with 20 participants, assistant professor Masayuki Ohmori of Department of Politics and Economics, Meiji University (Environmental Economics) and students of Ohmori Seminar at our Meguro Headquarters in November 2003.

The purpose was to make the report more understandable for the general consumer, so we had the person in charge of putting the report together listen directly to the opinions of these third parties, who are the readers of the report.

Lively Discussion on Good Points and those that Need Improvement

We received favorable feedback on the report in that it is easy to read as a whole, and because incorporating negative information was also seen to be positive. On the other hand, places we can improve, included things like the lack of explanation of special terms and no specific plans for improvements being indicated when goals were not met or where failings were pointed out.

In addition, many opinions came out that reflected fresh viewpoints, which the person in charge at the corporation tends to forget. These opinions are reflected in the making of the year 2004 version of the report (this report).

TOPICS

By giving weight to opinion exchanges with third parties like this in the future, Pioneer will endeavor to create a report that is easier to understand, as well as to improve the accuracy of the content reported.



Masayuki Ohmori surrounded by seminar students, who enthusiastically expressed their opinions

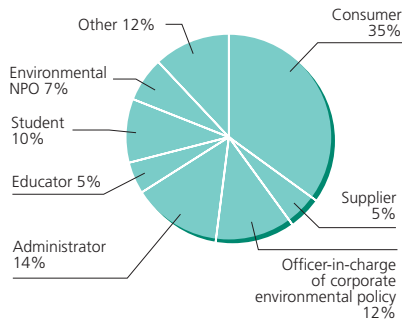
Your Opinions

Pioneer has been working hard to communicate our commitment to environmental conservation in an easy-to-understand way by issuing an Environmental Report every year since FY2000. Following is a summary of the questionnaire results about the FY2004 edition of the report.

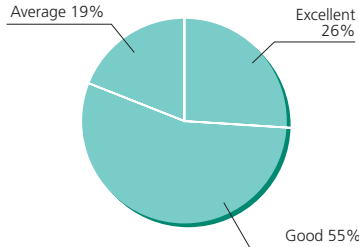
We value your opinions, thoughts and requests and will reflect them in future activities and in creating the next edition of this report.

We sincerely thank you for your cooperation.

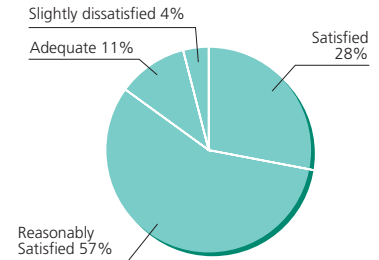
1 Your title or position



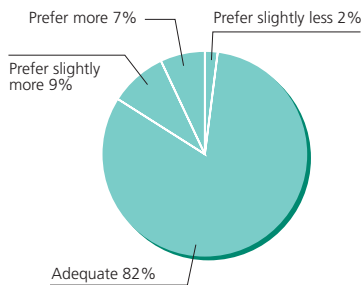
2 How would you evaluate Pioneer's environmental conservation efforts?



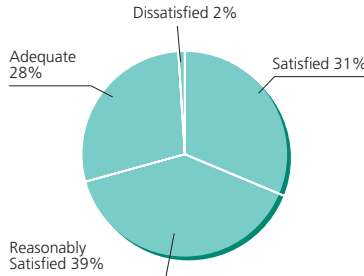
3 Content



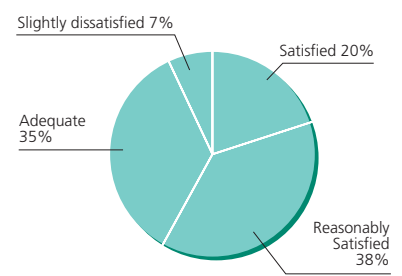
4 Number of pages



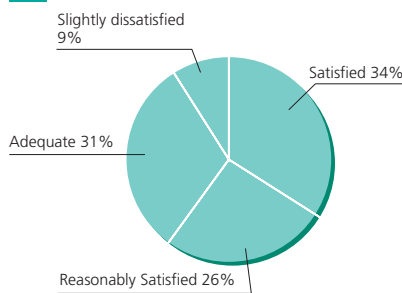
5 Clarity



6 Cover Design



7 Paper Quality



Items of Interest (Top 6)

- Environmental Targets and Performance
- Product Recycling
- Energy Savings, Reducing Environmentally Harmful Substances
- Waste Reduction
- Protection of Ozone Layer, Water Resources, Groundwater, Soil, Distribution
- Next-generation displays: Organic EL

Your Key Comments (Positive Evaluations)

- Topics are eye-catching and easy to understand
- Idea for re-using envelopes was great
- Knowledge Columns are easy to understand
- Explaining terms on the same page makes them easy to find
- It is clear Pioneer is proactive and committed
- Detailed descriptions of the mid to long-term environmental goals are good
- Using a lot of pictures and graphs makes it very easy to understand
- The policies of the top management are excellent

Questionnaire data was tabulated from 55 responses from FY2004

Pioneer Answers your Questions/Requests

I can't answer the questionnaire because I don't have a fax machine	We prepared the questionnaire answer sheet at the end of this report for those of you who do not have a fax machine.
Not enough technical data	The results of the questionnaire showed that 80% or more of respondents gave us high marks, both in terms of the number of pages and the content. More detailed information and information broken down by the region of our various facilities is allocated by its role and posted on our Web site.
Please look into environmental education for children	Although this report provides an introduction, "Manga Environment Treasure Box," (page 32) an easy to understand explanation of environmental problems is posted on our Web site.

We will attempt to reflect your opinions and requests in the content of this and succeeding issues.

Thank you for taking the time to read the Pioneer Environmental report

We would be most grateful if you would enhance our environmental activities and the editing of future environmental reports by giving us some feedback. Please complete the questionnaire below and fax it to the Pioneer Division of Environmental Preservation. We would appreciate your cooperation. Anonymous responses are also welcome.

1. Your title or position. (Please check)

- Consumer Shareholder Retailer/supplier Pioneer employee Investor/institutional investor
 Market Research Officer-in-charge of corporate environmental policy Administrator Educator
 Student Environmental NPO Other

2. Your level of satisfaction with this Environmental Report. (Please check)

- 1.Content** Satisfied Reasonably Satisfied Adequate Slightly dissatisfied Dissatisfied
2.No. of Pages Satisfied Prefer slightly less Adequate Prefer slightly more Prefer more
3.Clarity Satisfied Reasonably Satisfied Adequate Slightly dissatisfied Dissatisfied
4.Cover design Satisfied Reasonably Satisfied Adequate Slightly dissatisfied Dissatisfied
5.Paper quality Satisfied Reasonably Satisfied Adequate Slightly dissatisfied Dissatisfied

3. Items of interest to you. (Please check) (Multiple choices is OK)

- 2010 Environmental VISION and Environmental Policies Environmental Impacts and Issues
 Environmental targets and performance
- Management Activities** Environmental Management System/Environmental Risk Management/Activities in Each Country
 Environmental Accounting
- Products** Pioneer Environmental Label and Compliant Products LCA (Research and Development)
 Reducing Environmental Hazardous Substances/Green Procurement/Energy Conservation/Introducing Lead-free Solder/Eliminating PVC
 Energy Saving Product Recycling Car electronics
- Facilities** Conserving Energy and Protecting Ozone Layers Reduction of Harmful Air Pollutants/PRTR
 Recycling Countermeasures for Water/Soil Pollution Distribution, Sales, Green Purchasing
- Social Activities** Social Contributions to the Environment Environmental Education
 Environmental Communication
- Tips** Convening the 2nd Global Environmental Conference
 Aiming at Integrating Environmental Conservation and our Primary Work
 Commercial Vehicle Movement Management System Vehicle View 3
 Listening to Opinions from Third Parties

4. How would you evaluate Pioneer's environmental conservation activities overall?

- Excellent Good Average Poor

5. If you have any other opinions or impressions regarding this Environmental Report of Pioneer's environmental preservation activities, please write them here.

[]

Thank you for your kind cooperation. Lastly, if you wouldn't mind completing the following:

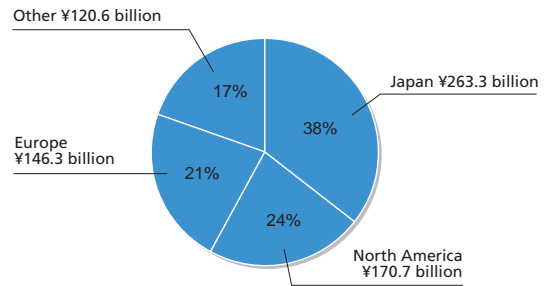
The personal information you provide here will be used for our statistics, and for sending any documents you request. Our privacy protection policy can be found on our Web site: <http://www.pioneer.co.jp/privacy/>

Name _____ Male/Female _____ Age _____
Address _____
E-mail address _____
Occupation (Company) _____ Division/Dept./Sec. _____

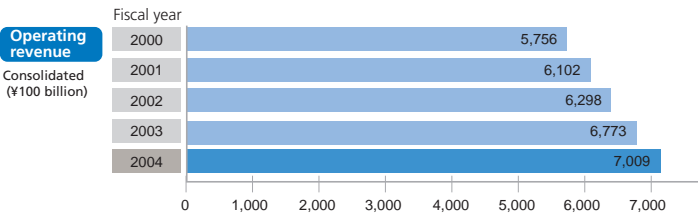
Corporate Profile

Name Pioneer Corporation
Headquarters 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654
Telephone +81-3-3494-1111
Founded January 1, 1938
Incorporated May 8, 1947
Paid-in capital ¥49 billion (as of March 31, 2003)
President and Representative Director Kaneo Ito
Business Activities Home electronics, car electronics and related business.

Sales by region

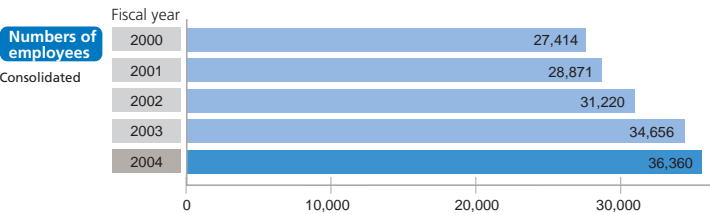


Operating revenue

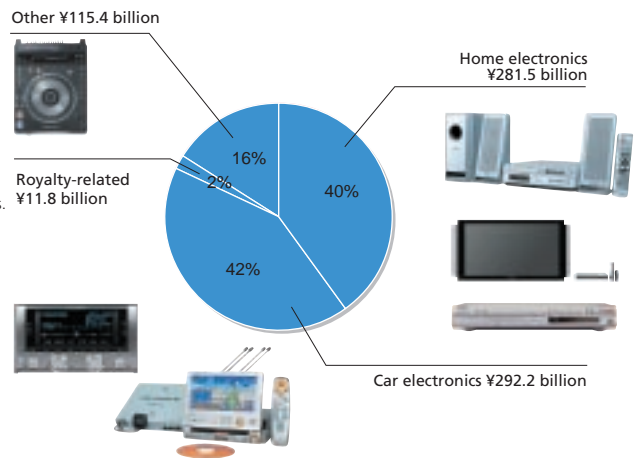


*Operating revenue is the total of net sales and royalty revenue.
 *Previous figures have been amended to comply with a change in U.S. accounting standards.

Numbers of employees



Business segments



I n q u i r i e s

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