2004

Environmental & Social Report

SUBARU

Contents

Topics 2003

Environmental Management
(p. 10)

In January 2004, the Head Office (Shinjuku-ku, Tokyo) and the Tokyo Office (Mitaka City, Tokyo) with the automobile Research and Development Division for engines and transmission power units acquired ISO 14001 certification, the environmental management system standard.

Development Phase/Products
(p. 21)

Subaru R2

We launched the new model Legacy in May 2003 and the new Subaru R2 minicar in December 2003. We actualized thorough weight reduction by evolving the body structure and adopting new technologies. Their environmental performance was also greatly improved by upgraded engines.

Production
(p. 33)

The Gunma Manufacturing Division received the 2003 3Rs Promotion Association Chairman's Award, which was given by the Reduce, Reuse and Recycling Promotion Association. The division was acclaimed for the achievements of zero emissions by all employees, elimination of its own incinerators, and techniques of recycling paint sludge.

Social Contribution
(p. 62)

In July 2003, we established the Subaru Visitor Center within the Yajima Plant of the Gunma Manufacturing Division. On display are Subaru's unique technologies and Subaru cars, as well as the manufacturing process of Subaru cars at the technology laboratory and the recycling laboratory.

■ In this report, the following have been added.

1. For sustainable development, corporate activities for social responsibility have been required. We independently added the social report concerning social actions to enhance the contents more than last year. ..... **p. 51–p. 64**
2. Until last year, we had included economic indicators in the corporate overview. However, we created a new page for economic indicators. ..... **p. 6**
3. We summarized major topics in fiscal 2003 in the contents page. ..... **p. 1**

Introduction

■ About This Environmental & Social Report

● Range of the report

- This report mainly contains the achievements of environmental conservation activities and social activities (compliance, relationship with customers, relationship with employees, social involvement, etc.) carried out in fiscal 2003 (April 2003 through March 2004). Achievements in early fiscal 2004 are also included for information purposes.
- This report mainly covers the activities of FHI's business operations in Japan. To introduce its group activities, the performance of seven domestic consolidated manufacturing and logistics companies, which are considered to have greater environmental impacts, is also mentioned. Activities of the North American Environment Committee, which are composed of five affiliated companies in North America, are also noted.

● Guidelines referenced

- "Environmental Report Guidelines (2000)" and "Environmental Report Guidelines (2003)" by the Ministry of Environment
- "Environmental Accounting Guidelines (2000)" and "Environmental Accounting Guidelines (2002)" by the Ministry of Environment

● Next Issue

Our previous Environmental Report was issued in June 2003. The next report will be published in fall 2005.

■ Corporate Symbol Setting

Founded in 1953, Fuji Heavy Industries Ltd. celebrated its 50th anniversary on July 15 2003. Taking this opportunity, we adopted the six-star *mutsuraboshi*, the Subaru automobile emblem design as our new corporate symbol. At the same time, the "Subaru" logo typeface also became our corporate logo to be used with the six-star symbol. (See the symbol below)

The red-circled mark that had been used in Japan was retired and replaced by the new symbol.

SUBARU

Top Message

Toward a Society That Enables Sustainable Development

We are pleased to issue the fifth Fuji Heavy Industries (FHI) Environmental Report 2004. From this year, our report is titled "Environmental & Social Report," reflecting additional coverage of our social activities.

In recent years the concept of CSR (Corporate Social Responsibility) has been spreading, primarily among businesses in Europe and the United States. This concept has also been capturing the attention of Japanese corporations. Traditionally, corporations have been said to have two aspects: the pursuit of profit, which is the original purpose, and corporate citizenship. Corporations are expected to enhance accountability to society in relation to both aspects. We at FHI have been actively working toward fulfilling a variety of social responsibilities, including environmental conservation activities. Thus, we are taking this opportunity to release an outline of our activities in this area.

Every year, global environmental issues have been growing in diversity and significance. It has been said that environmental pollution, deforestation, global warming, and frequent occurrence of extreme weather are the adverse effects of corporate and human activities exceeding the tolerance levels of living organisms, the earth itself. Our common goal is the prosperity and sustainable development of mankind, but this goal is being threatened by the destruction of the global environment. Therefore, corporations that impose greater environmental impacts should clearly recognize their social responsibilities. Toward the creation of a society where sustainable development is possible, corporations must continuously do their utmost to minimize the impact of their activities on the earth.

Based on this concept, in May 2002 FHI released a new mid-term management plan titled "Fuji Dynamic Revolution (FDR-1)." One of the management goals expressed in the plan is to be "an intelligent company, friendly to the earth." The primary concept is "to offer our customers clean products produced in clean factories, delivered by clean logistics through clean dealers." We are tackling environmental activities by settling on a new voluntary plan for the environment, "FHI Environmental Conservation Program (Fiscal 2002–2006)". This is the third year of implementing the plan, and in the first two years, we achieved almost all the targets that we had established in the plan. However, we believe that we must step up our efforts to implement the program.

As a transportation manufacturer focusing on automobiles, FHI is responsible for improving fuel economy and lowering exhaust emissions of automobiles and general-purpose engines. Moreover, in our management goals, improving environmental performance through weight reduction technologies is valued just as highly as activities to improve safety performance and product quality, and activities to reduce cost. FHI also develops environmental businesses, such as wind turbine generator systems and building refuse disposal systems. We will provide original environmental products by using our exceptional technologies accumulated over 50 years. By establishing solid corporate bases, we will also contribute to the creation of a recycling-oriented society that will meet social demands.

We will continue to improve our environmental reports so as to provide you with information of higher quality and in higher quantity. Thank you very much for taking the time to read this report; we would very much appreciate your feedback.

K. Takenaka.

Kyoji Takenaka
President and CEO

Recognizing the Close Relationship between Environmental Problems and Business Activities

Environmental Problems and Business Activities

Mankind faces a wide range of global environmental problems, including global warming caused by energy consumption; waste and accompanying recycling problems derived from a society based on mass production, mass consumption, and mass disposal; and problems related to chemical substances. We acknowledge that these problems are linked to our business activities; in some cases directly and in other cases indirectly. We also believe that it is important to live in harmony with the community surrounding our plants as we continue our manufacturing activities.

Looking Back on Activities of Fiscal 2003

In the area of environmental management, the Head Office and the Tokyo Office, which is the development center of automotive power units, obtained ISO 14001 certification. We hosted the North American Environment Committee, which consists of five affiliated companies in North America (SIA, SOA, SCI, SRD, RMI).*1 FHI group environmental activities proceeded further, as Subaru dealers joined our activities to promote environmental efforts.

In the area of products, we introduced a new model, Subaru Legacy, and a new minicar Subaru R2, to the market in May and December 2003, respectively. Through a total redesigning of the body structure and with use of new technologies, we achieved drastic weight reduction in both models. Subsequently, with the help of improved engine performance, we significantly boosted their environmental performance.

In the production stage, our introduction of energy conservation activities and cogeneration systems helped reduce the emissions of CO_2 by 13.7% from the fiscal 1990 level. Waste reduction activities showed sound progress. Thus, our environmental activities in the production stage were almost implemented according to plan.

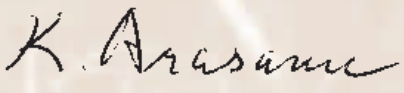
Activities of Fiscal 2004

FHI has devised, released, and implemented a mid-term plan for global environmental conservation titled "FHI Environmental Conservation Program (Fiscal 2002–2006)." Since fiscal 2004 is an important year, at the halfway point to reach our ultimate goals, we will implement the program as originally planned.

In January 2005, the Law on Recycling End-of-Life Vehicles will finally be put into effect. We will focus our efforts on preparing for the law, as FHI Group and as an automotive manufacturer.

Last year, I visited each specialized committee and each company, in order to conduct hearings on their current activities, and found that there still remains some room for improvement. First of all, we must re-acknowledge that environmental problems are closely associated with business activities. Then, we have to make continuous efforts to attain cleanliness in all the stages in which we are involved, including development of products, production at factories, transportation of products, selling the products through dealers to customers, and recycling used products.

In view that corporations are expected to actively practice social responsibility for sustainable development, FHI has included a social report for the first time in this "Environmental & Social Report." We would appreciate your opinions and comments to help us improve future reports.



Koichi Arasawa
Executive Vice President
(Responsible for the environment)

SUBARU レガシィ(LEGACY / B4 / OUTBACK)
2003 2004 日本カー・オブ・ザ・イヤー受賞

Subaru Legacy Named "Car of the Year Japan 2003–2004"

The Subaru Legacy was chosen "Car of the Year Japan 2003–2004." The judges noted that "the new Subaru Legacy is the ultimate form of continued pursuit of enhancement to meet the demands of the new generation, while retaining Subaru's unique horizontally-opposed engine and creative technology of all-wheel drive (AWD). The new Subaru Legacy enjoys not only world-class sophistication as a Japanese car, but also highly balanced total performance as a medium-sized sedan." In addition, it was highly evaluated for its high-level and well-balanced achievement of environmental performance, including excellent driving performance and improved fuel economy.

*1. SIA, SOA, SCI, SRD, RMI: See Overseas Affiliated Companies (P48)

Corporate Overview

Name	Fuji Heavy Industries Ltd.
Established	July 15, 1953
Paid-in capital	¥153.7 billion (as of March 31, 2004)
Employees	(consolidated) 27,296 (as of March 31, 2004)
	(non-consolidated) 14,189 (as of March 31, 2004)
Head office	7-2 Nishi-shinjuku 1-chome, Shinjuku-ku, Tokyo 160-8316, Japan
Sales	(consolidated) ¥1439.4 billion (for the fiscal year ended March 31, 2004)
	(non-consolidated) ¥936.9 billion (for the fiscal year ended March 31, 2004)

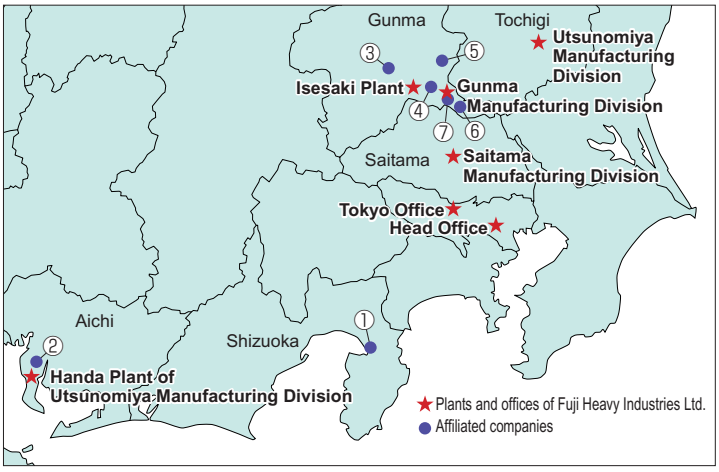
Principal manufacturing locations and products

Gunma Manufacturing Division (Ohta City, Gunma, etc.)——Legacy, Impreza, Forester, R2, Pleo, Sambar
Utsunomiya Manufacturing Division (Utsunomiya City, Tochigi)——Aircraft, environmental equipment
Saitama Manufacturing Division (Kitamoto City, Saitama)——Robin-engines, engine electrical generators
Isesaki Plant (Isesaki City, Gunma)——Automobile repair parts, prefabricated mini-houses

Locations

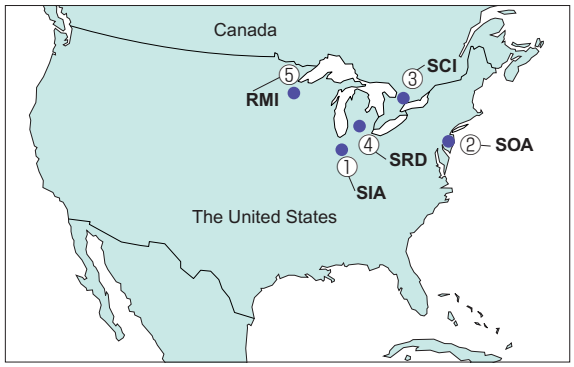
Note: Locations of major plants of Fuji Heavy Industries Ltd. and affiliated companies mentioned in this report are shown below.

Japan



Company Name	Location	Business
① Fuji Robin Industries Ltd.	Numazu City, Shizuoka	Manufacture, service, and sales of agricultural/ forestry equipment, engines, fire pumps, etc.
② Yusoki Kogyo K.K.	Handa City, Aichi	Manufacture and sales of trailers, crane trucks, construction materials, automobile parts, etc.
③ Fuji Machinery Co., Ltd.	Maebashi City, Gunma	Manufacture and sales of automobile parts, industrial machinery, and agricultural transmissions
④ Ichitan Co., Ltd.	Ohta City, Gunma	Manufacture and sales of forged parts for automobiles and industrial machinery
⑤ Kiryu Industrial Co., Ltd.	Kiryu City, Gunma	Manufacture of Subaru specially equipped automobiles and logistics control of Subaru automobile parts
⑥ Subaru Physical Distribution Company	Oizumi-Town Ohra-gun, Gunma	Shipping and land freight of automobiles and their parts
⑦ Subaru K.D. Logistic Co., Ltd.	Ohta City, Gunma	Packaging and delivery of production machinery and parts for overseas

North America

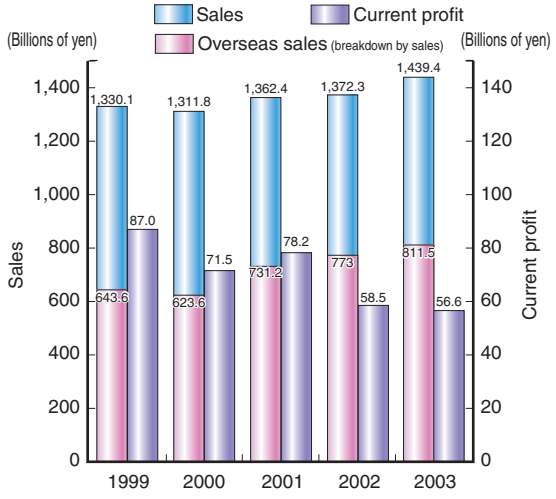


Company Name	Location	Business
① SIA*1	Lafayette, Indiana	Production base of Subaru automobiles in the U.S.
② SOA*2	West Cherry Hill, New Jersey	Distribution base of Subaru automobiles in the U.S.
③ SCI*3	Mississauga, Ontario	Distribution base of Subaru automobiles in Canada
④ SRD*4	Ann Arbor, Michigan	Research and development base on automobiles in the U.S.
⑤ RMI*5	Hudson, Wisconsin	Production base of general-purpose engines in the U.S.

*1. SIA: Subaru of Indiana Automotive, Inc.
*2. SOA: Subaru of America, Inc.
*3. SCI: Subaru Canada, Inc.
*4. SRD: Subaru Research and Development, Inc.
*5. RMI: Robin Manufacturing U.S.A., Inc.

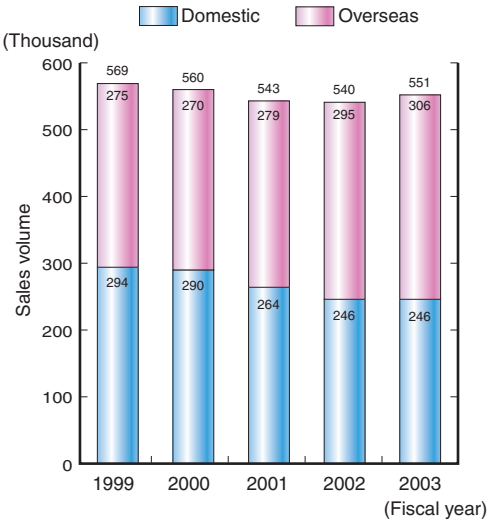
Economic Indicators

Trends in Sales and Current Profit (Consolidated)

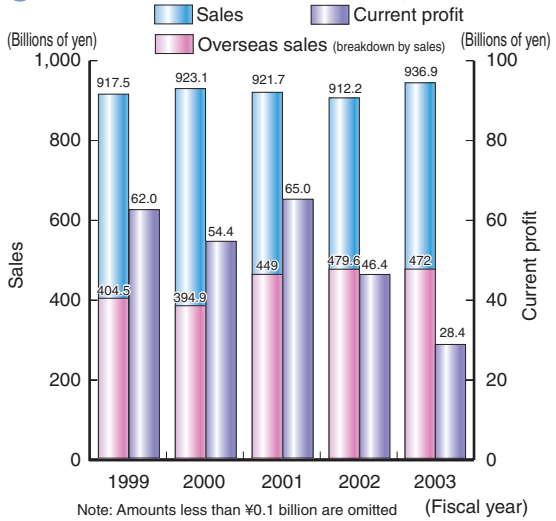


Note: Amounts less than ¥0.1 billion are omitted

Trends in Sales Volume (Consolidated)

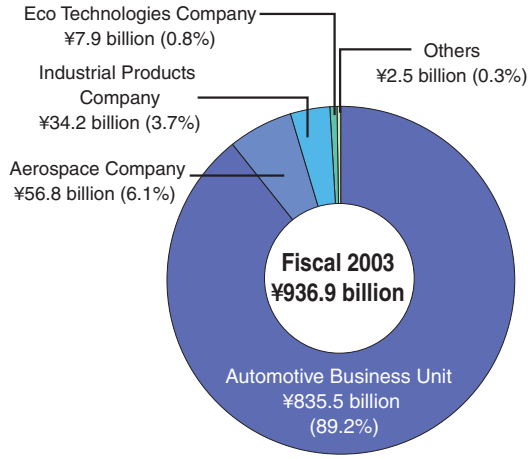


Trends in Sales and Current Profit (Non-Consolidated)



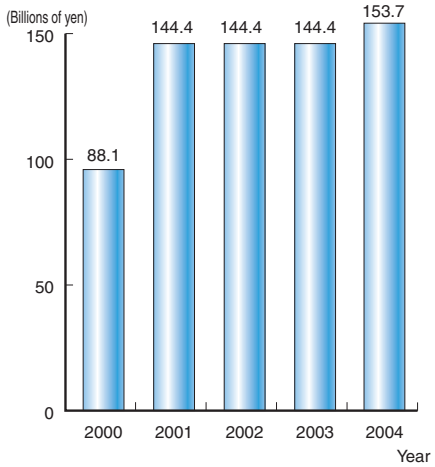
Note: Amounts less than ¥0.1 billion are omitted

Net Sales Breakdown by Division (Non-Consolidated)



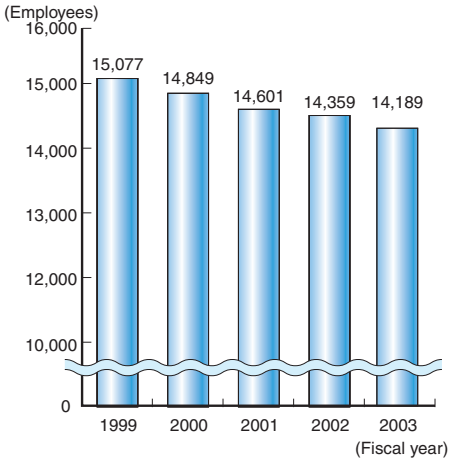
Note: Figures are rounded off to the nearest ¥0.1 billion

Trends in Paid-in Capital

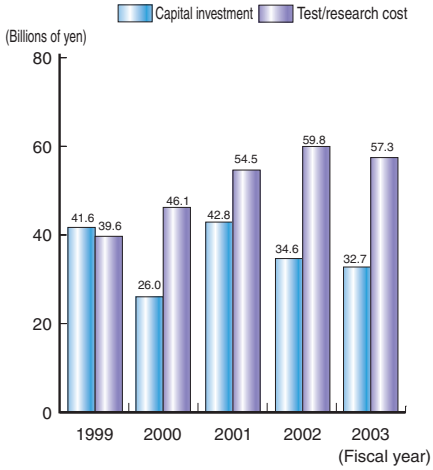


Note 1: Amounts less than ¥0.1 billion are omitted
Note 2: Amounts at the end of March every year

Trends in the Number of Employees (Non-Consolidated)



Trends in Capital Investment and Test/Research Cost (Non-Consolidated)



Corporate Philosophy

The manufacturing principles of Fuji Heavy Industries Ltd. are built on the tradition of aircraft manufacture established by Nakajima Aircraft Co., Ltd., the predecessor of FHI. The DNA of our company consists of the pursuit of the best performance, the fundamental concept for designing aircraft, a concentrated and lean package to materialize it, and thorough implementation of safe operations under all environments. While maintaining an emphasis on these principles, we will strive to develop new values, and actively work on environmental problems and compliance issues so that FHI will be able to provide customers and other stakeholders with more satisfaction and reliance, and subsequently coexist in harmony with society.

1. We will strive to create advanced technology on an ongoing basis and provide consumers with distinctive products with the highest level of quality and customer satisfaction.
2. We will aim to continuously promote harmony between people, society, and the environment while contributing to the prosperity of society.
3. We will look to the future with a global perspective and aim to foster a vibrant, progressive company.

We Aim to Become What We Want to Be

We have been striving to move into our ideal picture of a company with appeal and presence and develop new values. To achieve the goals, FHI initiated a new five-year management plan, FDR-1 (Fuji Dynamic Revolution 1), in 2002. FDR-1 sums up its mid- and long-term vision in the phrase: “To be a global player with a premium brand.” Innovation, individuality, and courage are our standards in developing special values in every phase from product development to production, sales and after-sales service, and we reflect them in our products and services. It is our dream and desire to establish a Subaru brand loved and supported by customers all around the world and become a model company where employees work with pride. With these in mind, we will carry our activities forward steadily and make the most of our premium values in every business area, including automobiles, as a company which continues to evolve for the future.

Corporate Code of Conduct

FHI set down a corporate code of conduct to comply with laws and regulations and to fulfill social responsibilities, based on our corporate philosophy. We will continue to strive to become a company trusted by all and contribute to making society more affluent by respecting individual employees and the corporate code of conduct and acting on the same sense of values.

1. We will develop and provide creative products and services while paying sufficient attention to the environment and safety.
2. We will respect human rights and the individuality of each individual.
3. We will promote harmony with society and contribute to its prosperity.
4. We will meet social norms and act honestly and fairly.
5. We will look to a global perspective and aim to be in harmony with international society.

I Environmental Report

Environmental Management

FHI started the Environmental Action Project in 1990 and has since worked actively to protect the environment. We released a new plan for conservation of the global environment, “FHI Environmental Conservation Program (Fiscal 2002–2006)” (New Voluntary Plan for the Environment) in May 2002. Under the program, we are tackling conservation of the environment with a united effort. Developing the activities to our domestic and overseas affiliated companies, we are trying to reduce environmental impacts as the FHI Group.

Environmental Policy

FHI believes that responding to the problems of the global environment is one of the important tasks of management. Based on its corporate philosophy, FHI has established an Environmental Policy, a policy for carrying out environmental conservation. Under this policy, FHI has established guidelines for specific actions as the Operating Criteria.

Environmental Policy

(Established in April 1998)

FHI recognizes the integral relationship between the environment and its business activities and strives to provide products that are friendly to the earth, society, and people. FHI is protecting the environment to ensure our future.

Operating Criteria for Environmental Conservation

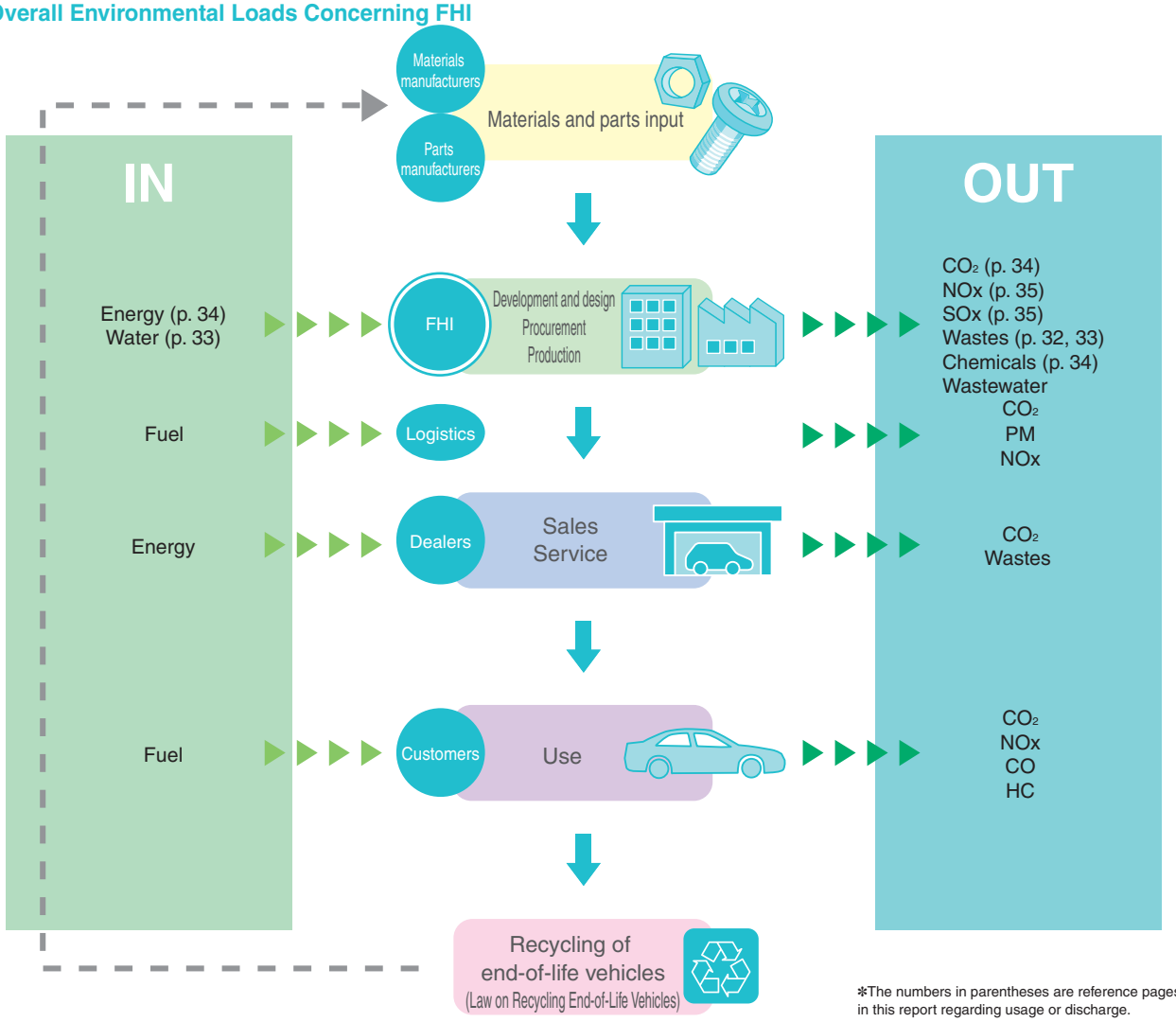
1) FHI is committed to environmental conservation and gives consideration to environmental impact at every step of product development, design, manufacture, sales, service, and disposal.
2) FHI observes the relevant laws, regulations, and agreements with communities and industries, while also promoting voluntary activities in accordance with its own environmental objectives and targets as determined by the Company.
3) FHI recognizes the importance of continual improvement and efforts to prevent pollution and encourages every employee to act with self-awareness and responsibility.
4) FHI endeavors to raise environmental consciousness by providing educational opportunities for its employees according to their job status and job description.
5) FHI regularly performs audits and inspections to improve its environmental conservation activities.
6) FHI is committed to interacting within the community and engaging in joint activities to further environmental preservation.

Corporate Activities and Environmental Impacts

FHI is a transportation manufacturer focusing on automobiles. Automobiles, which are convenient and comfortable vehicles, are now indispensable for us living in a modern society. On the other hand, however, automobiles require limited global resources as materials and fuels. Consequently, they emit CO_2, which causes global warming, as well as carbon monoxide (CO), hydrocarbon (HC), and nitrogen oxides (NOx) that pollute the air. FHI believes that automobiles make life more pleasant and reflect an affluent society but understands that automobiles have both advantages and disadvantages.

FHI accepts the task of conserving both the global environment and the benefits of automobiles by considering the environmental impacts and reducing the environmental loads through the lifecycle of development, production, use, disposal, and recycling.

Overall Environmental Loads Concerning FHI



*The numbers in parentheses are reference pages in this report regarding usage or discharge.

New Voluntary Plan for the Environment

Under the new voluntary plan for the environment, "FHI Environmental Conservation Program (Fiscal 2002 –2006)" (see p.19–20), we consider living with society and realizing sustainable development, while improving the environment, as ideal. Our goals are to offer clean products from clean factories using clean logistics through clean dealers to our customers, in order to contribute to society with our products and to make all the stages clean. Achievements of the items for which goals were set in fiscal 2003 are indicated in the table below.

Goals and Achievements in Fiscal 2003

Items	Goals	Achievements	Page in this report
(Clean factories) Green procurement activities	[Industrial Products Division] Establish an environmental management system at suppliers by March 2004	○	p. 36
(Clean products) Clean exhaust gas	[Automobile Division] Start launching ultra-low emission vehicles into the market in 2003	○	p. 24

Organization

FHI sets the Corporate Environment Committee as the core of its environmental conservation activities, which determines policies and plans, ascertains results and achievements, and is actively involved in a variety of activities to reduce environmental impacts. The Corporate Environment Committee is composed of six specialized committees, the Environment Committees for individual Companies, and the North American Environment Committee as follows. Specialized committees have the necessary subcommittees for promotion of practical activities. Subaru Automotive Business Unit and respective Companies have working groups under specialized committees for efficient activities to attain their goals. Members of the Corporate Environment Committee are chairpersons of the above specialized committees and representatives of all the offices including the Head Office.

Corporate Environment Committee

Chairman:
Executive Vice President
Koichi Arasawa

Deputy Chairman:
Senior Vice President
Yoji Ishimaru

Secretariat:
General Manager of Environmental Affairs Promotion Office

Engineering Environment Committee
Reduction of environmental impacts such as fuel economy and exhaust emissions of the products

Purchasing Environment Committee
Environmental consideration for procurement of parts and materials
- Green Procurement Subcommittee
- Green Purchasing Subcommittee

Production Environment Committee
Reduction of environmental impacts in production activities
- Zero Emissions Subcommittee
- Global Warming Prevention Subcommittee
- Pollution Prevention Subcommittee
- Domestic Affiliated Company Subcommittee

Environmental Risk Assessment Committee
Identifying and reducing environmental risks in the office facilities

Sales and Service/Logistics Environment Committee
Promotion of environmental conservation activities at dealers and the reduction of environmental impacts in the distribution of our products
- Sales/Service Subcommittee
- Logistics Subcommittee

Recycling Promotion Committee
Development of recycling technologies and use of recycled resources
- Recycling Engineering Development Subcommittee
- Renewable Resources Application Subcommittee
- Market Subcommittee

Environment Committee for Individual Companies
Promotion of the activities by establishing the Production Environment Working Group, the Environmental Risk Assessment Working Group, the Engineering Environment Working Group, the Purchasing Environment Working Group, the Sales and Service/Logistics Environment Working Group, and the Recycling Promotion Working Group, according to the characteristics of the activities

North American Environment Committee
Composed of FHI-affiliated companies in North America; reduction of environmental impacts in all the processes of product development, procurement, manufacture, sales, service, logistics, and disposal (recycling)

Environmental Management System

FHI has acquired ISO 14001 certification in all of its main businesses.

Acquired ISO 14001 Certification

Business site		Certification date
Gunma Manufacturing Division	Main Plant	March 24, 1999
	Yajima Plant	
	Ohta North Plant	
	Oizumi Plant	
	Subaru Test & Development Center	
	Isesaki Plant	
Saitama Manufacturing Division		May 21, 1999
Utsunomiya Manufacturing Division (Aerospace Company, Eco Technologies Company)	Main Plant	July 2, 1999
	South Plant	
	South No. 2 Plant	
	Handa Plant	
Head Office		January 19, 2004
Tokyo Office		January 21, 2004

Note: The Gunma Manufacturing Division expanded the applicability of its certification to the Isesaki Plant after the assessment conducted in February 2004.

Certification in Fiscal 2003

The Head Office, with the automobile sales, management planning, personnel, and general affairs department, and the Tokyo Office, with the automobile research and development department for engine and transmission power units, acquired ISO 14001 certification in January 2004 after passing the main assessment in December 2003.

FHI-affiliated companies, Ichitan Co., Ltd., Subaru Physical Distribution Company, and Iwate Subaru, Inc., acquired ISO 14001 certification. In addition, Robin Manufacturing U.S.A. Inc. (RMI) also acquired certification.

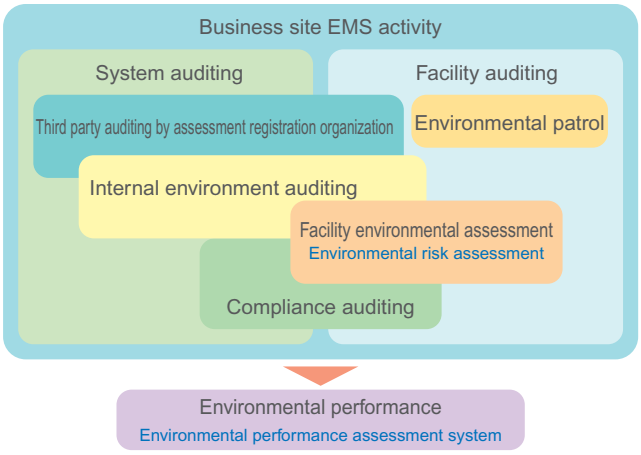
Assessment at the Sales Support Department (Head Office)

Interview with Mr. Kudo, vice president (right), who supervises environmental conservation (Tokyo Office)

Environmental Audits

FHI implements environmental audits from different aspects to see whether our environmental conservation activities are appropriate. At each business site, we conduct third party auditing by the ISO 14001 assessment and registration organization, internal auditing, and environmental patrol by the involved division. As unified company-wide auditing, we have implemented an environmental risk assessment for facilities using original company risk assessment standards since fiscal 2001. In fiscal 2002, we organized the environmental performance assessment system to check the activities of each business site and specialized committee. Based on this system, the secretariat of the Head Office conducts hearings and the chairman of the Corporate Environment Committee audits the self-evaluated activities. Through these audits, we are upgrading our environmental activities in all the business processes, including product development, manufacture, sales, and disposal.

Environmental Auditing System



Assessments by External ISO 14001 Assessment and Registration Organization

(*)	Type of assessment	Assessment date	Assessment
1)	Regular assessment	April 16-18, 2003	The EMS was evaluated as effectively operated and maintained, satisfying ISO standard requirements; although, there was a nonconformity, which did not influence the effectiveness of the EMS.
2)	Regular assessment	June 24-26, 2003	The EMS was evaluated as being operated and maintained satisfactorily with constant improvements according to ISO standard requirements; although, a minor nonconformity was identified.
3)	Certification assessment	December 16-19, 2003	There were nonconformities, which did not influence the effectiveness of the EMS. By taking corrective measures, the EMS was regarded as qualified for ISO 14001 certification.
4)	Certification assessment	December 17-19, 2003	There were no nonconformities. The EMS was regarded as qualified for ISO 14001 certification.
5)	Regular assessment Site expansion assessment	February 2-5, 2004	There were no nonconformities but two items required observation. The EMS was evaluated as being operated and maintained satisfactorily with constant improvements according to ISO standard requirements. The Isesaki Plant was allowed to be integrated into the certification given to the Gunma Manufacturing Division.

(*); 1) Saitama Manufacturing Division
2) Utsunomiya Manufacturing Division
3) Tokyo Office
4) Head Office
5) Gunma Manufacturing Division

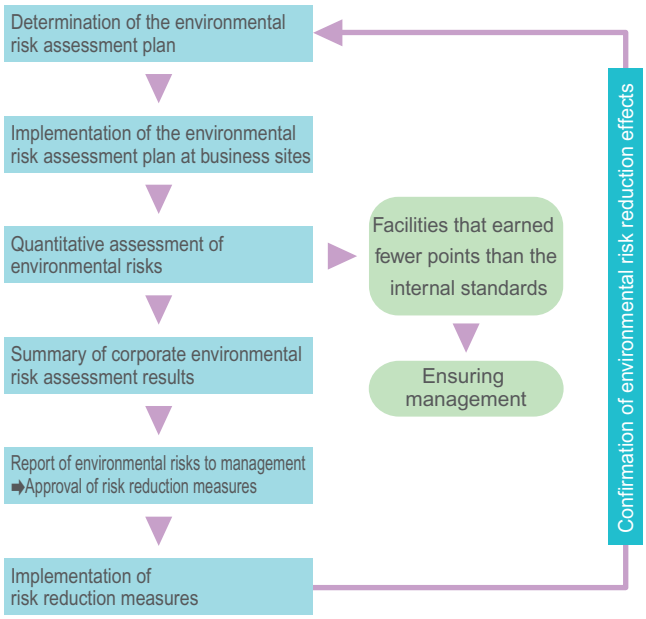
Environmental Risk Assessment for Prevention of Pollution

To minimize environmental risks and prevent pollution, the Environmental Risk Assessment Committee specifies the original environmental risk assessment approaches based on the concepts that “facilities break down” and “humans make operational errors.” In accordance with the approaches, we identify factors that cause environmental accidents to improve the cases with great risk. We regarded 80 cases as needing improvement in fiscal 2001, 54 cases in fiscal 2002, and 64 in fiscal 2003. We have completed the improvements for about 80% of them.

Environmental Risk Assessments and Improvements

Fiscal year	Number of risk assessments	Number of cases to be improved	Number of cases improved
2001	325	80	80
2002	795	54	54
2003	371	64	25

Risk Reduction Process Using Environmental Risk Assessment



Improved Cases

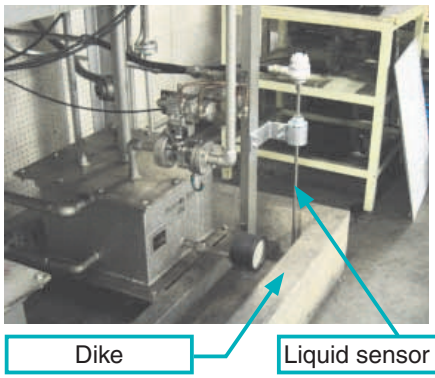
●Prevention of Overflow from the Circulating Water Pit

Eco Technologies Company reflected the environmental risk assessment results in modifying the painting booth for refuse collection vehicles. We attached the upper level limit sensor to the circulating water pit for the prevention of overflow. We also arranged detecting tubes at the four corners of the pit to see whether the liquid spilled over from the underground pit.

Level sensor attached to prevent overflow of the circulating water pit (Eco Technologies Company)

●Prevention of Spillage from Relay Tanks

Liquid relay tanks in the plants and laboratories control the supply from the remote storage tanks by detecting their own levels. If the upper level of the tank has been mistakenly detected, a great quantity of liquid spills over. By using a risk assessment, we improved the relay tanks with a single upper limit detection mechanism for prevention of overspills.



In the process where relay tanks for gasoline and oil are installed together, a level detector inside the relay tank dike stops the supply by transmitting signals. (Saitama Manufacturing Division)

●Check of Improved Cases Identified by Risk Assessment

Members of the Environmental Risk Assessment Committee check improvements of cases identified by a risk assessment. The photo below shows that Committee members are checking improvements of a case identified at the Saitama Manufacturing Division on April 22, 2004.

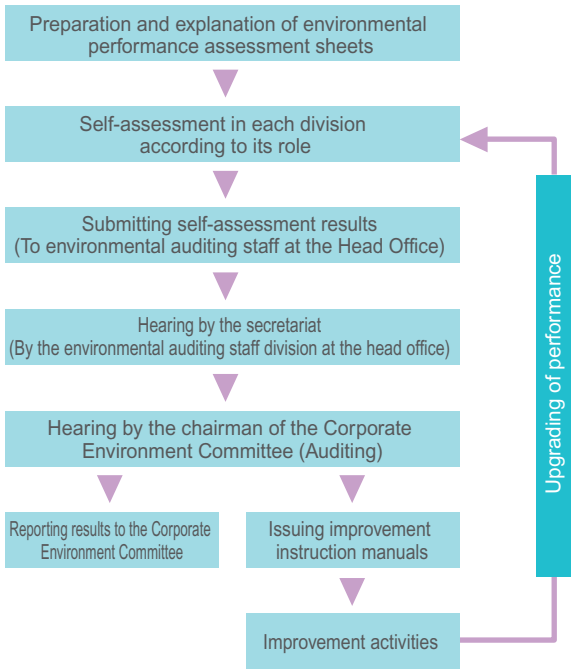
Checking improvements of a case identified by an environmental risk assessment (Saitama Manufacturing Division)

Environmental Performance Assessment System

The environmental performance assessment system was introduced in fiscal 2002 to check our environmental conservation activities company wide. The system reviewed in fiscal 2003 was composed of about 250 items. Each business site and specialized committee implements self-assessment on all applicable items to enhance autonomy in improvements. After a hearing by the secretariat of the Head Office, the chairman of the Corporate Environment Committee visits each business site to conduct a hearing (auditing) with the person responsible for the site on the self-assessment results. Thus, we unify our activities with verification of the achievements and identification of improvements. In fiscal 2003, the chairman conducted hearings at all nine divisions from March 25 through April 22, 2004.

The photo shows a hearing by the chairman at the Gunma Manufacturing Division. Mr. Arasawa, chairman of the Corporate Environment Committee and executive vice president (right center), and Mr. Kondo, chief general manager of the Gunma Manufacturing Division (at that time) (left front)

●Environmental Performance Assessment Process

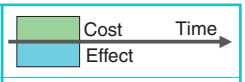


Environmental Accounting

Concept and Calculation of Environmental Costs and Economic Effects

With reference to the guidelines of the Ministry of the Environment (Year 2000 and 2002 Reports), FHI formulated its own guidelines according to its environmental conservation activity organization, based on which the environmental costs and economic effects are calculated. (Those for the group companies are also calculated based on our guidelines. See p. 47)

Definition and Categorization of Environmental Costs

1) Costs for reducing the environmental impact	Costs for reducing the environmental impact during the production process	
2) Investment costs	Costs for obtaining environmental conservation effects which continue for several terms	
3) Other costs	Costs not belonging to the above categories	
Investments in environmental facilities	For reference (facilities are included in the depreciation cost (in the same manner as in the financial accounting))	

Environmental Cost Calculation Method

For related costs (depreciation costs, maintenance and management costs, etc.) of the facilities that are used both for environmental conservation and for other purposes, and for labor costs, either the aggregated balance or the pro rata aggregation is adopted. For example, the environmental cost of energy saving in a production facility is calculated as follows.

Environmental costs = K × (Depreciation costs, maintenance and management costs, and other costs of the facility)
where K, coefficient of environmental impact, is calculated as follows:
K = (Total amount of investment – Cost of investment without energy saving purpose) /(Total amount of investment)

Economic Effects Calculation Method

Referring to the guidelines by the Ministry of the Environment and partially incorporating original FHI concepts, FHI determines the calculation methods based on the effects of the cost reduction and others available by reducing environmental loads. Specifically, the effects are calculated for each cost category.

For example, the effect of reduced waste treatment costs (waste treatment costs reduced by controlling the waste and changing the treatment methods) and the effect of reduced energy costs are calculated for each cost category. As for the economic effects of facilities (depreciable assets), the effects are calculated for the depreciation period. As for the environmental improvement measures without facilities, the effects are the difference from the costs in the previous year (the difference between cases where the improvement measure was implemented and cases where it was not). For the time being, however, because of the difficulty in estimating clear-cut figures, the economic effects in those categories, such as contributions to value-added products and the effect of risk aversion (evaded responsibilities for compensation), are excluded.

Results of Aggregated Environmental Costs and Effects in Fiscal 2003 (Subject: FHI (not consolidated) Period: April 2003 through March 2004)

Environmental costs							Facilities investment (¥million)
Cost category in [ ] is based on the "Guidelines by the Ministry of the Environment"*1		Amount (¥million) Fiscal 2003	Fiscal 2002	Fiscal 2001	Main activities ★: New measures in fiscal 2003	Detailed pages	Fiscal 2003
Costs for reducing environmental impacts (Production stage)	Waste treatment and recycling Waste reduction [①-3]	701	948	907	Paint sludge recycling plant Maintenance of the recycling center ★Introduction of the polish scum briquette system	32,33	45
	Energy conservation and CO_2 emissions reduction [①-2]	376	295	249	Cogeneration system Introducing gas into the air conditioner and boiler Introducing invertors or improving other production systems	34	336
	Reduction of CFC-alternative discharge [①-2]	6	8	11	Recovery of air conditioner refrigerants	35	0
	Pollution control such as wastewater and exhaust gas treatment [①-1]	1,034	893	817	★Partial renewal of wastewater treatment and phosphorus measures ★Additional installation of the painting-deodorizing furnace ★Addition of the dike and oil-water separator tank	11,12 35,36	430
	Reduction of VOC discharge [①-1]	70	83	73	Facilities for collecting washing thinner	35	144
	Total costs to reduce environmental impacts	2,187	2,228	2,056			955
Investment costs	Education and ISO 14001 related matters [③]	476	465	486	Environmental education, training, and environmental improvement activities at the worksites ★ISO 14001 certification acquired by the Head Office and the Tokyo Office	10,11 15	–
	Product research and development [④]	20,088	21,766	20,998	Improvement of fuel economy, cleaner emissions, and better recycling efficiency Research and development of wind power generation	21–31 37–40	1,973
	Total investment costs	20,563	22,232	21,484			1,973
Other costs	Measures for end-of-life products [②]	259	146	77	Collection of used market bumpers →recycling Measures to cope with the Law on Recycling End-of-Life Vehicles	38,42	–
	Social contribution and other environmental measures [③⑤⑥⑦]	2,034	1,504	1,760	Cost increase due to changes in materials Preparation of environmental reports and cleaning around plants Planting trees, measures for environmental discrepancies etc.	63	7
	Total other costs	2,292	1,650	1,838			7
Total cost		25,043	26,109	25,378			2,936

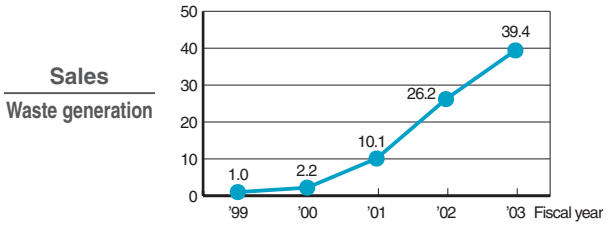
*1. Cost categories based on the Guidelines by the Ministry of Environment: ① Costs in the business area; ①-1 Pollution prevention cost; ①-2 Global environment conservation cost; ①-3 Resource circulation cost; ② Upstream and downstream cost; ③ Management activity cost; ④ Research&Development cost; ⑤ Social activity cost; ⑥ Environmental damage cost; and ⑦ Other costs.

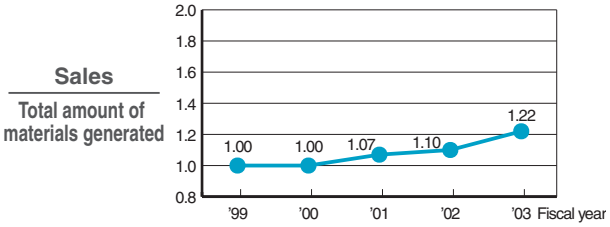
Environmental Costs and Economic Effects in Fiscal 2003

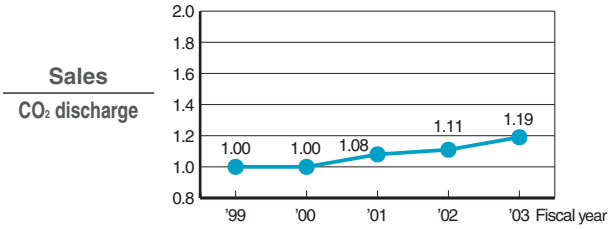
Environmental costs were ¥25 billion, a reduction of ¥1.1 billion (4%) from the ¥26.1 billion of the previous year. This was because product environmental research and development costs decreased. Economic effects totaled ¥2 billion, an increase of ¥0.8 billion (67%) from the ¥1.2 billion of the preceding year. This was mainly because energy costs decreased and sales profits for valued materials increased. With fewer costs than the previous year, environmental performance (quantitative effects) improved remarkably. In addition, the Head Office and the Tokyo Office acquired ISO 14001 certification. In the Legacy and the R2, weight reduction was actualized and fuel economy was improved. The system to respond to the Law on Recycling End-of-Life Vehicles has been in progress.

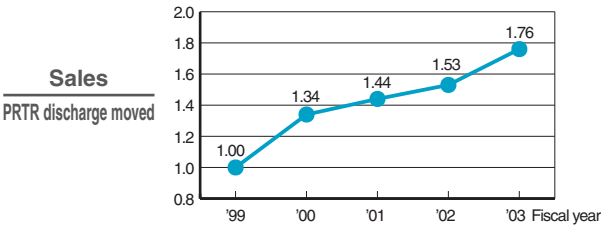
Study of Environmental Management Indexes

Environmental efficiency of business activities, which is one of the environmental management indexes, was regarded as [sales ÷ environmental loads], and calculated with the environmental loads in the production process. The results are indicated in the following graph.









Environmental efficiency has been steadily enhanced for waste generation, total waste generation, CO_2 discharges, and PRTR discharges moved. (The fiscal 1999 levels were regarded as benchmarks.)

We will further study additional environmental management indexes appropriate for reviewing management and environmental activities.

Economic effects	Amount (¥million)		
	Fiscal 2003	Fiscal 2002	Fiscal 2001
Reduced costs through waste control and treatment method changes. Profit from the sales of valued materials obtained through recycling	1,263	675	499
Reduced energy costs	465	257	157
Reduced virgin material purchasing costs by reusing recovered air conditioner refrigerants	3	2	3
Reduced costs by replacing cleaning agents (chemical agents)	9	8	8
Reduced paint and solvent usage	282	264	273
Total savings from environmental impact reduction effects	2,022	1,205	939
–	–	–	–
(Total investment effects) N/A for the time being	0	0	0
Reduced virgin material purchasing costs by using recycled materials	22	20	21
Reduced costs by changing raw materials	0	0	16
Total other effects	22	20	37
	2,044	1,226	976

Environmental performance (quantitative effects)					
Category	Unit	Fiscal 2003	Increase/ decrease from fiscal 2002	Fiscal 2002	Fiscal 2001
Amount of matter generated	ton	75,917	−6,408	82,325	85,536
Amount of waste generated	ton	182	−85	267	697
Amount of landfill	ton	6	−7	13	41
Energy consumption per production	KL/¥100 million	14.53	−0.65	15.18	15.55
CO_2 emissions	thousand tons	236	−10	247	256
Emissions of greenhouse gases other than CO_2	ton-CO_2	379	11	368	366
PRTR chemicals*2					
Amount handled	ton	3,874	14	3,860	3,858
Amount released and transferred	ton	1,252	−151	1,403	1,503
VOC discharge (automobiles only)	g/m²	47.2	−2.3	49.5	51.7

Note: As figures are rounded, some totals are not precise.

*2 PRTR chemicals: Totaling the chemicals, of which annual amounts handled are one ton or more (0.5 tons or more for Specified Class I Designated chemicals).

◆Estimated market effects by improving fuel economy (Legacy)

- Reduced CO_2 emissions: 12,079 tons (annually)
- Customer economic effects: ¥563 million (annually)

Calculation: $\Sigma\ [\ (A/B_1 - A/B_2)\ \times C \times D]$

A: Annual mileage (calculated in 10,000 km based on the "Statistical Report on Motor Vehicle Transport" by the Ministry of Land, Infrastructure and Transport

B_1: Fuel economy of old model cars (10-15 mode, km/liter)

B_2: Fuel economy of new model cars (ditto)

C: Coefficient of gasoline CO_2 discharge (Customer economic effects are calculated with the gasoline unit price of ¥110/liter: National average premium unit price by the Oil Information Center)

D: Number of new model cars sold in fiscal 2003

Environmental Education

It is true that our business activities have some relationship with global warming, as well as the environmental problems of increasing waste, air pollution, and water contamination. It is important in product development and plant production activities to recognize and reduce such impacts on the environment. FHI provides a variety of environmental education: education and training based on the Environmental Management System (EMS), education for different levels of employees ranging from new recruits to those receiving promotions, and necessary specialized education. In addition, we utilize all opportunities to carry out instructive activities, including environmental campaign months and environmental lectures.

Adoption of E-Learning

The head office is composed of common divisions, the Automotive Business Unit, the Aerospace Company, the Eco Technologies Company, and many other divisions. Therefore, e-learning over the intranet was introduced because of the difficulty in providing lectures directly to employees. E-learning is a very convenient educational means: each employee can learn at his or her own convenience and check comprehension soon after learning with a check test. Through the e-learning system, all employees, including directors, participate in the lectures to understand environmental management.

Emergency Drills Based on EMS

At every worksite, we conduct a drill according to specific procedures so that we can take appropriate action to prevent or minimize the impact of an accident or emergency if it should happen.

Emergency drill in case heavy oil A should leak from a pipe (Gunma Manufacturing Division). We are well prepared for an emergency by conducting drills for checking the flow direction and using sandbags.

Subaru Safety Environment Association (Suppliers)

At the Gunma Manufacturing Division, the Subaru Safety Environment Association was established for the improvement of environmental activities of its local suppliers. Through the conference, the Association exchanges information on environmental conservation such as energy saving, waste reduction, and pollution control. The association also supports environmental education to new recruits of the member companies (in April and June 2003).

Subaru Safety Environment Association (Education for new recruits of a member company)

Educational Activities through Lectures and Presentations

In November 2003 at the Head Office, FHI gave a lecture on environmental management to company executives, inviting Mr. Iwatsuki, senior managing director of Denso Corporation, as the lecturer. The Gunma Manufacturing Division invited Mr. Watanabe, general manager of the Global Environment Division of Denso Corporation, to give a presentation on his company's environmental conservation efforts in June, when an environmental campaign was implemented.

Environmental Case Study Presentation at the Utsunomiya Manufacturing Division

Message from Chief General Manager, Kondo (at that time) at the "Energy Conservation Case Study Presentation" at the G.M.D..

The Utsunomiya Manufacturing Division held environmental case study presentations twice a year (in August 2003 and February 2004 for fiscal 2003).

In March 2004, the Gunma Manufacturing Division conducted the "Energy Conservation Case Study Presentation" for the ninth time, where ten teams, including the engineering and indirect divisions, participated.

Signboard that says "Stop Idling" (Gunma Manufacturing Division)

The Gunma Manufacturing Division installed signboards saying "Drive Safely/Stop Idling" for safe driving that is friendly to the environment at the main entrances and exits of the parking lot in each plant.

Environmental Incidents

Environment-Related Complaints

In fiscal 2003, FHI received six complaints about noise. The Gunma Manufacturing Division received a complaint on noise from air conditioning work being conducted at its main plant for 24 hours. The Isesaki Plant received a complaint due to the sound of an alarm near the boundary to the premises. They were settled by improving the work and moving the alarm buzzer. Eco Technologies Company (Utsunomiya City) received complaints due to noise caused by the work to relocate the plant and due to the honking of horns by refuse collection vehicles during the inspection process. The two cases were settled by improving the work and changing the work procedure. In addition, we received five complaints about offensive odors. They were caused by exhaust air from the coating booth of the main plant of the Gunma Manufacturing Division and by paint odors from the Eco Technologies Company. We responded to all the cases by improving the exhaust position and installing deodorizing equipment. In addition, we changed the paints and improved the facilities.

Product Recalls

In fiscal 2003, there were no environment-related product recalls.

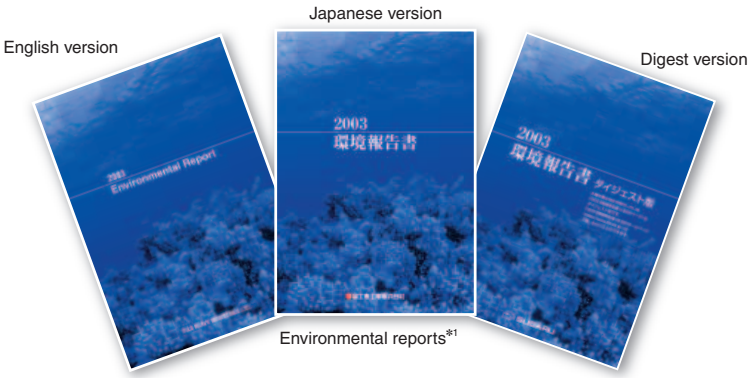
Environmental Communication

FHI has arranged contact channels to maintain communication with local residents and distributed environmental information in a variety of ways. FHI also introduced its approaches to environmental conservation on its Web site (http://www.fhi.co.jp).

In October 2003, the Utsunomiya Manufacturing Division organized an exchange meeting with twelve neighborhood community associations near the plant, where a plant tour was arranged and environmental measures were explained. In October, over 20 environmental advisors from the Gunma Prefectural Government visited the Gunma Manufacturing Division to study environmental measures at its plants. Also in fiscal 2003, we prepared environmental ads for journals and magazines. In July 2003, the Subaru Visitor Center was opened at the Yajima Plant of the Gunma Manufacturing Division. The center has a recycling lab to introduce the methods Subaru uses to tackle environmental issues. FHI participates in the Environmental Management Forum sponsored by Nikkei Business Publications.

Environmental advisors visiting the plant (Gunma Manufacturing Division)

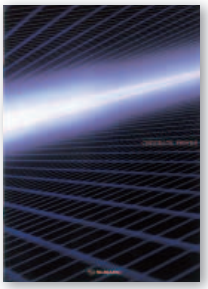
Media to Transmit Environmental Information



Environmental reports*1

Recycling Lab (the photo shows the exhibition of recycled bumpers) in the Subaru Visitor Center (Gunma Manufacturing Division)

Environmental information according to car models*1



Company brochure

"Shuho," the in-house newsletter

Environmental advertisement (for the new Subaru R2 minicar)

Environmental page in the product catalogue (Subaru R2)

International photo news (for elementary schoolchildren and junior high school students)

*1. You can access the environmental report and the environmental information according to car models on our Web site: http://www.fhi.co.jp/english/envi/top/index.html

Overall Achievements in Fiscal 2003 and Fiscal 2004 Plans

Environmental Management

Fiscal 2003		Fiscal 2004 goals
Goals	Achievements	
Establish environmental management system at the Head Office and the Tokyo Office	• The Head Office and the Tokyo Office acquired ISO 14001 certification • The Isesaki Plant was also approved as a site under the certification of ISO 14001 • The North American Environment Committee meeting was held	Further establish EMS
Further improve information in the 2003 Environmental Report (environmental achievements in fiscal 2002)	Partially mentioned the social report in the 2003 Environmental Report (environmental achievements in fiscal 2002)	Further improve information in the 2004 Environmental Report (environmental achievements in fiscal 2003)

Development Process and Products

Category	Fiscal 2003		Fiscal 2004 goals
	Goals	Achievements	
Fuel economy	• Continue fuel economy improvement for every full model change and annual model change • Satisfy fiscal 2010 fuel economy standards earlier in fiscal 2006	• Met fiscal 2010 fuel economy standards in three ranks out of five for passenger vehicles and in six ranks out of six for mini-sized trucks	Implement as planned
Exhaust emissions	• Start introducing "ultra low emission" vehicles with the 2000 standard emission gas reduced 75% or vehicles with the 2005 standard emission gas reduced 50% in 2003, and shift 80% of all passenger cars to either low emission vehicles by 2005	• Introduced low emission vehicles with the 2005 standard emission gas reduced 50% for some models of the new Legacy and R2	Implement as planned
Noise	Further reduce all noise levels of the car	Developed low-noise power units, drive lines, and other components in the annual improvement of all Subaru vehicles	Reduce all noise levels of the car for further reduction of environmental noise
Clean energy vehicles	• Hybrid vehicles: Introduce hybrid vehicles to the market by fiscal 2006 • Natural gas vehicles: Introduce the new Legacy B4 CNG to the market in spring 2004 • Fuel cell vehicles: Start developing next-generation FCVs	• Development of secondary batteries for hybrid and fuel cell vehicles: NEC Lamilion Energy, Ltd., a new company established jointly with NEC, went ahead with development of automotive manganese lithium-ion combination batteries, which are much thinner, lighter, and cheaper yet with higher performance than existing ones • Natural gas vehicles: Proceed with development of NGVs based on the new Legacy toward introduction to the market	• Hybrid vehicles: Proceed with development toward introduction to the market by fiscal 2006 • Development of secondary batteries for hybrid and fuel cell vehicles: Proceed with development as planned • Natural gas vehicles: Introduce NGVs based on the new Legacy to the market

Production Stage

Category	Fiscal 2003		Fiscal 2004 goals
	Goals	Achievements	
Waste reduction	• Control generation of waste • Promote activities for zero emission of landfill waste	• Amount of waste generated: Reduced generated waste by 32% from the previous year • Amount of landfill waste: The amount was six tons in fiscal 2003 but zero emission was realized in October and thereafter	Control generation of waste
Energy conservation	• Improve energy consumption per production by 1% or more than the fiscal 2002 level • Work to accomplish CO_2 discharge reduction goal (6% reduction compared to the fiscal 1990 level by fiscal 2006)	• Improved energy consumption per production by 4.3% from the previous year • Reduced CO_2 discharges by 13.7% compared with the fiscal 1990 level	• Work to accomplish energy consumption per production goal (28% reduction compared with the fiscal 1990 level by fiscal 2006) • Work to accomplish the CO_2 discharge reduction goal (6% reduction compared to the fiscal 1990 level by fiscal 2006)

Category	Fiscal 2003		Fiscal 2004 goals
	Goals	Achievements	
Reduction of environmental impact substances (Automotive Business Unit)	Work to accomplish paint VOC reduction goal (45 g/m^2 or less by fiscal 2006)	Reduced generation of paint VOC (per unit area) to 47 g/m^2, a 57% reduction compared with the fiscal 1995 level	Work to accomplish paint VOC reduction goal (45 g/m^2 or less by fiscal 2006)
Green procurement	・Automotive Business Unit: Establish EMS at all suppliers by March 2004 by supporting suppliers presently with no such systems ・Industrial Products Company: Establish EMS at all suppliers by March 2004 ・Eco Technologies Company Start green procurement activities ・Expand green procurement	・Automotive Business Unit: 92% of the suppliers established EMS ・Industrial Products Company Established EMS at all suppliers by March 2004 ・Aerospace Company: Organized the green procurement working group ・Eco Technologies Company Started green procurement activities ・Expanded the scope of green procurement in the Gunma region	・Automotive Business Unit: 95% or more of the suppliers establish EMS ・Industrial Products Company: Continue activities ・Aerospace Company: Promote establishment of EMS at suppliers ・Eco Technologies Company: Promote establishment of EMS at suppliers ・Try to expand green procurement : Develop commercialization of eco products in the Head Office area

Note: Reduction of CFC alternatives in the automobile production lines we have mentioned is excluded here, since its goal (a 90% or more reduction of discharges to the atmosphere per unit compared with the fiscal 1996 level by fiscal 2005) was achieved in fiscal 2001, and it is now maintained and controlled.

Recycling

Category	Fiscal 2003		Fiscal 2004 goals
	Goals	Achievements	
Improvement of recycling efficiency	・Continue to develop technologies for easier dismantling and higher recycling efficiency ・Promote further expansion of use in PP-grade integrated materials ・Complete development of basic technologies on ELV (End-of-Life Vehicles) recycling and start studying their practical application	・Incorporated recycling design for easier dismantling and higher recycling efficiency in the new Legacy and R2 ・Promoted establishment of a system to cope with the Law on Recycling End-of-Life Vehicles ・Adopted more PP-grade integrated materials in expanded areas ・Promoted study of practical application on recycling of ELVs , particularly airbag treatment, and glass and ASR recycling	・Continuously incorporate technologies developed for easier dismantling and higher recycling efficiency in new cars ・Complete establishment of a system to cope with the Law on Recycling End-of-Life Vehicles to be enforced on January 1,2005 ・Continuously promote study of practical application on ELV recycling
Recycling volume	Increase the number of used bumpers collected from the market	Collected about 37,700 used bumpers	Increase the number of used bumpers collected from the market
Reduction of environmental impact substances	・Promote technological development of lead substitutes and continue to study further reduction of usage ・Continuously promote technological development of hexavalent chromium substitutes and their application	・Promoted action to cope with the EU directive on restriction of environmentally hazardous substances (Ban on the use of lead, mercury, cadmium, and hexavalent chromium, in principle, from July 2003)	・Promote replacement technologies for parts and environmentally hazardous substances newly subject to control in 2004 and thereafter by the EU directive ・Promote measures for the voluntary action program under the “Environmentally Hazardous Substances Reduction Goals for New Model Cars” by the Japan Automobile Manufacturers Association
Sales and services	・Promote environmental activities by dealers	・Held the meeting of personnel in charge of promotion of environmental activities at all dealers ・Iwate Subaru Inc. acquired ISO 14001 certification	・Cope with the Law on Recycling End-of-Life Vehicles without delay ・Further promote environmental conservation activities by dealers

Logistics

Fiscal 2003		Fiscal 2004 goals
Goals	Achievements	
Promote logistics efficiency and control generation of waste ・Further rationalize transportation of completed vehicles ・Control generation of packing material waste	・(Transportation of completed vehicles) Increased the number of vehicles transported jointly with other companies ・(Transportation of repair parts) Transportation to the Hokkaido region was shifted from ships to the railroad, while from the truck to the railroad to the Kyushu region	Further promote reduction of environmental impacts in logistics

Reference New Voluntary Plan for the Environment

FHI Environmental Conservation Program (Fiscal 2002 through Fiscal 2006)

Items		Goals and actions
Clean factories	Promoting energy saving and curbing global warming	◆ Aim to reduce energy consumption per production by 28% compared to the fiscal 1990 level by fiscal 2006 ◆ Aim to reduce CO_2 emissions by 6% from production plants compared to the fiscal 1990 level by fiscal 2006
	Control and reduction of environmental pollutants at production plants	◆ Establish stricter standards than current voluntary standards for newly established and remodeled environmental facilities in order to reduce the burden on the air and water ◆ Reduce emissions of chemical substances listed in the pollutant release and transfer register (PRTR) in the environment ◆ Reduce Volatile Organic Compound (VOC) emissions in car production lines to the level below 45 g/m^2 on average by the end of fiscal 2006
	Reducing wastes generated at the production plants	◆ Aim at further advances in zero emissions and zero levels of landfill disposal both directly and indirectly ◆ Promote recycling of waste materials and using them as parts of products, as well as curbing their generation
	Saving water resources	◆ Reduce the amount of water used in the production plants
	Green procurement activities	◆ Request a research report from suppliers on the environmental pollutant content and establishment of an environmental management system. The following are the target dates for establishing the environmental management system: • Automobile division: 95% or more of the suppliers, including overseas ones, will establish a system by March 2005 • Industrial products division: by the end of March 2004 ◆ Promote green procurement activities in other divisions including the aerospace division ◆ Develop green procurement activities with overseas suppliers (automobile division) • Research starts in fiscal 2002 on the status of introducing the environmental management system and of the environmental pollutant content
Clean products	Improving fuel economy	[Automobiles] ◆ Continue to improve fuel economy for every full model change and annual model change ◆ Achieve fiscal 2010 fuel economy standards for all weight ranks by fiscal 2006 [Multipurpose engines] ◆ Aim to improve the average fuel economy of multipurpose engines by 15% (compared to the 1995 level) by 2005
	Clean exhaust gas	[Automobiles] ◆ Produce excellent low emission vehicles (E-LEV) or good low emission vehicles (G-LEV) for all models, except for a few, by autumn 2002 ◆ Start to put ultra low emission vehicles (U-LEV) into the market in 2003 and produce ultra low emission vehicles for more than 80% of passenger vehicles by 2005 [Multipurpose engines] ◆ Aim to reduce the average emissions of HC and NOx from multipurpose engines by 30% (compared to the 1995 levels) by 2005
	Developing products using clean energy	[Automobiles] ◆ Limited introduction of the Legacy B4 CNG to the market by autumn 2002 ◆ Introduce hybrid vehicles to the market by fiscal 2006 ◆ Develop fuel cell powered vehicles for the next generation [Multipurpose engines] ◆ Introduce multipurpose engines compliant with CNG and LPG fuel during fiscal 2002
	Improving recyclability	◆ Improve recyclable design for new models and contribute to a recycling rate of 95% in 2015 • Improve dismountability in the recycle market such as re-use • Use easy-to-recycle plastic materials more extensively

Items		Goals and actions
Clean products	Reducing substances with environmental impacts	[Automobiles] ◆ Promote development of technologies, which substitute substances with environmental impacts, aiming at faster application to developing vehicles ● Further reduce the amount of lead to less than 10% of that of 1996 after January 2006 ● Stop using mercury after January 2005 except in the following parts: Liquid crystal displays, combination lamps, discharge head lamps, room fluorescent lighting ● Stop using cadmium after January 2007 ● Stop using hexavalent chromium after January 2008 [Multipurpose engines] ◆ Promote reducing the amount of environmental pollutants, such as lead and hexavalent chromium, for multipurpose engines
	Reducing exterior noise	◆ Promote developing technology to reduce noise that can realize both fuel economy improvement and exhaust emissions reduction
	Curbing global warming regarding air conditioning refrigerants	◆ Promote further reduction in the amount of refrigerant (HFC 134a) per vehicle
	Research on traffic environments	◆ Work further on Intelligent Transport Systems (ITS) that realize a safe and comfortable motorized society
Clean logistics	Reducing environmental impacts in logistics	◆ Improve logistics efficiency and work on reducing the amount of packing materials
Clean dealers	Promoting environmental conservation activities at dealers	◆ Support environmental conservation activities by dealers ◆ Promote recycling and proper disposal during the distribution and disposal stages ● Collect and destroy specified chlorofluorocarbon (CFC12), collect CFC12's substitute (HFC134a), collect and dispose of airbags, and collect warning flares ◆ Continue to collect used bumpers ◆ Work to comply with the Law on Recycling End-of-Life Vehicles
Management extension	Implementing social actions	◆ Continue to participate in environmental events, communicate with local residents at plants, and deal with visitors to plants ◆ Continue to participate in cleaning and tree-planting activities in the area around each plant ◆ Offer support and cooperation to environmental activity groups
	Disclosing environment-related information	◆ Publish environmental reports consistently and release environmental information through publicity channels from time to time ◆ Improve the content of environmental reports (e.g., compliance with guidelines and reports including group businesses)
	Implementing environmental education and educational campaigns	◆ Implement environmental education incorporated into the company education system. Implement educational campaigns through company newsletters and various media ◆ Continue to implement lectures and in-company presentations of improvements
	Establishing an environmental management system	◆ Establish an environmental management system at business sites presently with no such systems and continuously improve the environmental management system at ISO 14001-acquired sites ◆ Implement internal environmental audits and environmental facility risk assessments ◆ Strengthen the liaison with related companies and establish consolidated environmental management system
Others	Promoting environment-related projects	◆ Promote environment-related businesses, such as wind power generation systems and environmental equipment and devices

Note: In green procurement activities of "clean factories," the content on establishment of the environmental management system in the automobile division was partially changed.

Development Phase/Products —Automotive Business Unit—

The new model Subaru Legacy was put on the market in May 2003, and the new Subaru R2 minicar was launched in December 2003. Subaru actualized both thorough weight reduction and excellent body rigidity by evolving the body structure and adopting new technologies. Their environmental performance was also improved with upgraded driving and safety performances.


New Legacy

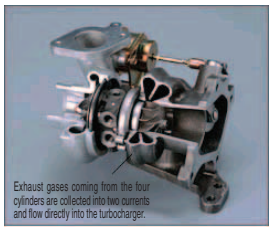
Fuel Economy

When motor vehicles consume fuel, they emit carbon dioxide (CO_2) in proportion to the amount of fuel. Improving fuel economy can contribute to preventing global warming, which is caused by heat-trapping substances, including CO_2, as well as saving limited energy resources. Subaru promotes the development of technologies to improve fuel economy, including enhancement of efficiency with an improved engine, reduction of transmission loss in the driveline, reduction of vehicle weight, and reduction of running resistance, while taking advantage of such features as all-wheel drive (AWD) and high-powered engines. Subaru produces cars that meet the fiscal 2010 fuel economy standards, which is a fuel economy target for gasoline-powered vehicles, and launches them into the market one after another.

Improvement of the Engine

New Legacy

- The supercharging efficiency was enhanced by adopting the twin scroll single turbocharger, which uses exhaust energy more effectively.
- The intake and exhaust efficiency was improved by adopting plastic intake manifolds (for the turbo vehicle) and intake manifolds with ports arranged vertically (for the SOHC and DOHC vehicles) and equal length/constant pulsation independent exhaust manifolds, of which exhaust interference is small.
- The weight of the engine was reduced.



Twin scroll single turbocharger

R2: New Mini-Sized Passenger Car

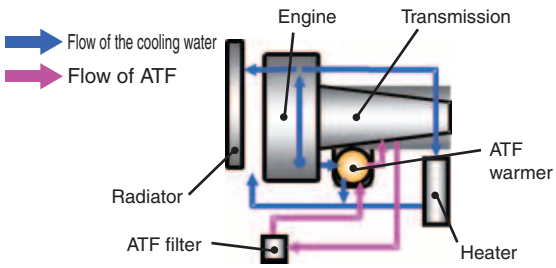
- Intake and exhaust efficiency, as well as combustion efficiency, were enhanced by using the newly designed tumble straight port cylinder head and plastic long-port intake manifolds with equal length for the DOHC 16-valve engine.
- Intake efficiency was improved by adopting the intake AVCS (active valve control system: variable valve timing) for the DOHC 16-valve engine.

Enhanced Efficiency of the Drive Line

New Legacy

- With the turbo-charged vehicle, fuel economy was improved by the application of the 5AT (increased steps) transmission, which utilizes low engine speed, as well as by securing the optimum driving force.
- Application of the new ATF (automatic transmission fluid) warmer, which warms ATF quicker, allowed reduction of cold oil agitation resistance and early execution of torque converter lock-up control, resulting in improved practical fuel economy.
- Friction was reduced by optimizing the bearing and applying surface treatment to the gear.
- The Info-ECO*1 mode was adopted for all AT vehicles and turbo engine MT vehicles.

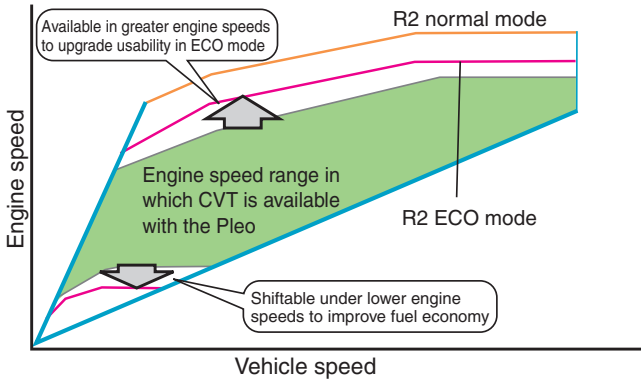
ATF Warmer System Diagram



R2: New Mini-Sized Passenger Car

- Shift characteristics were optimized according to the vehicle. For the DOHC-NA engine, the ECO mode was adopted to select fewer revolutions.
- The optimum tuning was actualized in accordance with the engine torque features by altering the torque converter fluid characteristics.

CVT Shift Characteristics of the R2



*1. Info-ECO mode: Fuel economy was improved by optimizing the engine control, shift change control and lock-up control for the AT, and controlling the turbo-charging pressure. When the car is running with good fuel economy, the information lamp comes on to indicate it.

Weight Reduction

For the new Legacy and the new R2 minicar, drastic weight reduction was implemented in order to upgrade fuel economy, driving, and safety performance, while improving body rigidity and driving quality simultaneously. The improved New Ring-Shaped Reinforcement Frames with reinforced subframes around pillars allowed higher body rigidity and improved collision safety performance. At the same time, weight was drastically reduced by adopting lightweight materials.

New Legacy

A 130 kg increase for the new Legacy was forecasted considering future driving environments that require further collision safety measures, reinforced braking, enhancement of suspension rigidity, upgrading of power, renewal of the exhaust system, enhancement of aerodynamic performance, and comfort equipment. In order to reduce vehicle weight under such conditions, optimum weight reduction technologies were applied to use proper materials for the proper places, based on the concept of mass development.*1

◆Body/Chassis

Reviewing the body structure thoroughly, we adopted new technologies and manufacturing methods, utilized such new materials as ultra high tensile steel panels, applied more laser welding, and rationalized the structure, which made up a 230 kg weight reduction for the GT wagon. In total, Subaru realized a 100 kg weight reduction for the GT wagon (see the chart below, the Major Components for the New Legacy Weight Increase and Decrease). This was not a mere weight reduction but rationalization of the structure with increased rigidity in the suspension and body and upgraded braking.

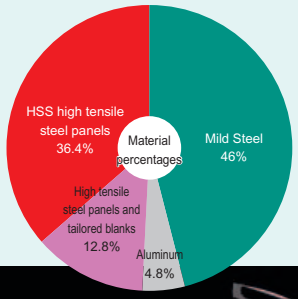
◆Engine

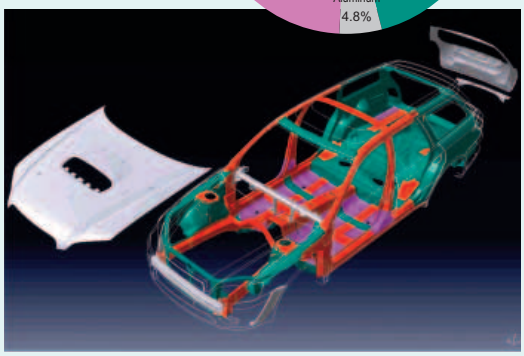
The turbo system was reviewed. The turbocharger was improved by adopting the twin scroll style and the titanium alloy turbine. For the turbo system, 15 kg were reduced through a shift to the single turbocharger from the sequential turbocharger, which had been adopted for the previous Legacy. Also for the turbo engine, 24 kg was eliminated by paring down the aluminum parts and using plastic materials.

◆Transmission

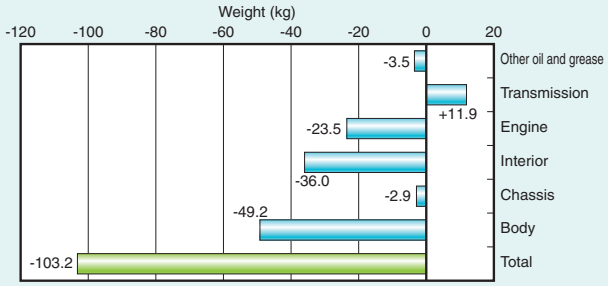
The drastic weight increase was expected to be caused by changing from the existing four-speed automatic transmission to the five-speed automatic transmission. Since the automatic transmission had the restriction that the stress applied on the part must be within the fatigue limit of the material, it was difficult to remarkably reduce weight from one part. Therefore, we reviewed the design of each part to replace materials step by step, and then to pare and hollow parts in about 400 spots. Consequently, the weight of transmission was increased by only 11.9 kg, which was less than half of the increase we had expected.

Weight Reduction in the New Legacy
(Comparison on material usage and elements)





Major Components for the New Legacy Weight Increase and Decrease



Comparison between old GT-B E-tune Ⅱ and new 2.0GT

New R2 Mini-Sized Passenger Car

Under the concept that "Aim for secure safety because of a small car," Subaru tackled weight reduction, achieving both swift running and good fuel economy. Consequently, the vehicle weight was reduced by 70 kg, which is 9% of the total vehicle weight (see the chart below, Major Components for the New Mini-Sized Passenger Car R2 Weight Increase and Decrease) while upgrading collision safety performance.

◆Body

High tensile steel panels were used for 33% of the body. The plate thickness was reduced by adopting the curved surface body panel form, while applying more efficient collision safety structure such as the one-motion form, to eliminate inflection points.

Subaru R2

◆Chassis

Metal sheets were used for the exhaust system, and weight was reduced in the tires and the wheels.

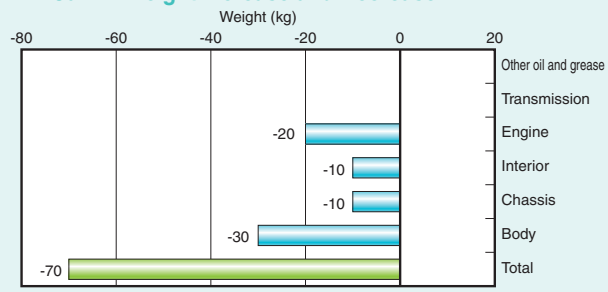
◆Interior

The seat structure was redesigned, and the heater and evaporator were integrated.

◆Engine

The cast iron cylinder block was pared down, intake system parts were integrated, and auxiliary equipment was installed directly.

Major Components for the New Mini-Sized Passenger Car R2 Weight Increase and Decrease



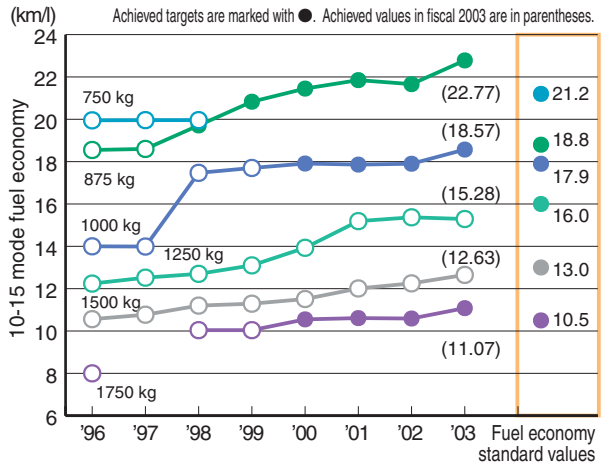
Comparison between R2 R (2WD, i-CVT) and PLEO LS (2WD, i-CVT)

*1. Mass development: Cross-sectional activity by the cross-functional team to reduce vehicle weight.

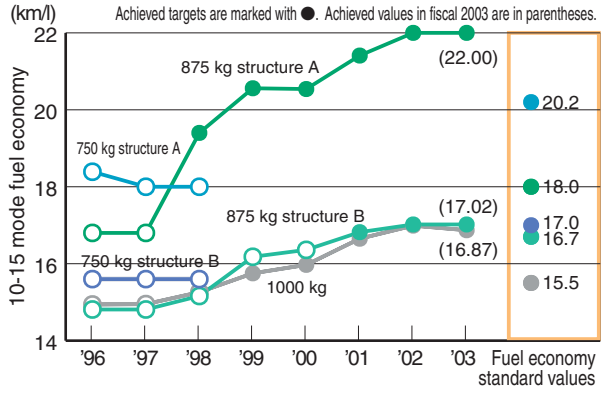
Trends in Average Fuel Economy by Equivalent Inertia Weight

In an effort to meet the fiscal 2010 fuel economy standards, we achieved the target in three ranks out of the five ranks of equivalent inertia weight for gasoline passenger cars. In gasoline mini-sized trucks, we succeeded in attaining the target in all the applicable ranks of the equivalent inertia weight.

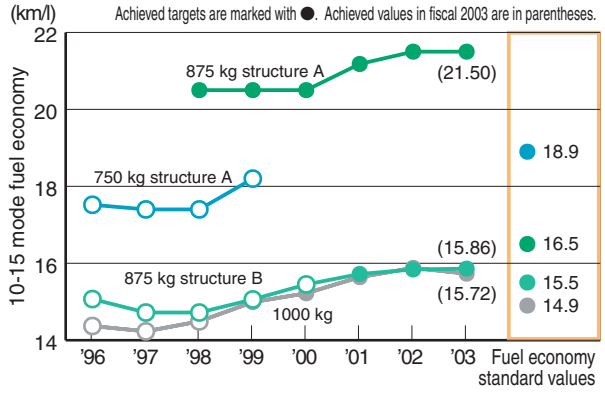
Trends in Average Fuel Economy by Equivalent Inertia Weight (Gasoline Passenger Cars)



Trends in Average Fuel Economy by Equivalent Inertia Weight (Gasoline Mini-Sized MT Trucks)

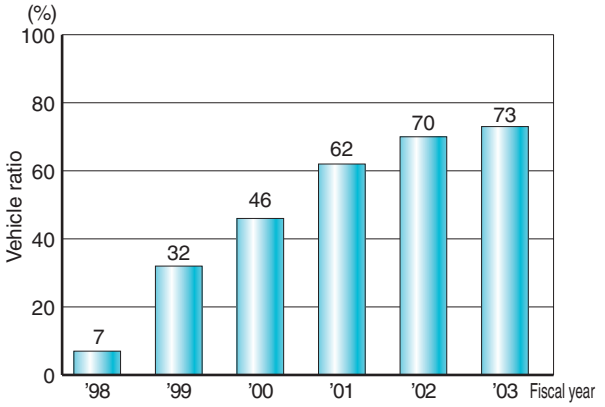


Trends in Average Fuel Economy by Equivalent Inertia Weight (Gasoline Mini-Sized AT Trucks)

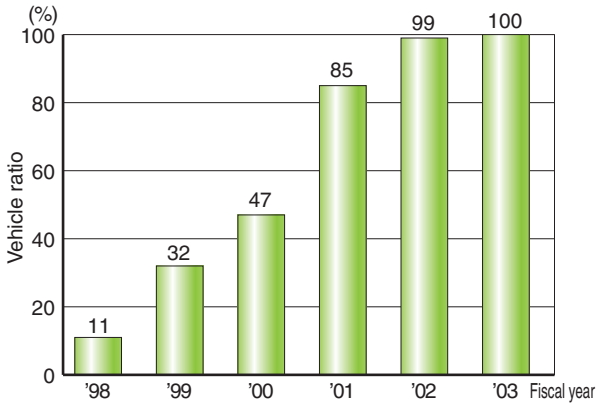


Trends in Attainment Rates for Fiscal 2010 Fuel Economy Standards

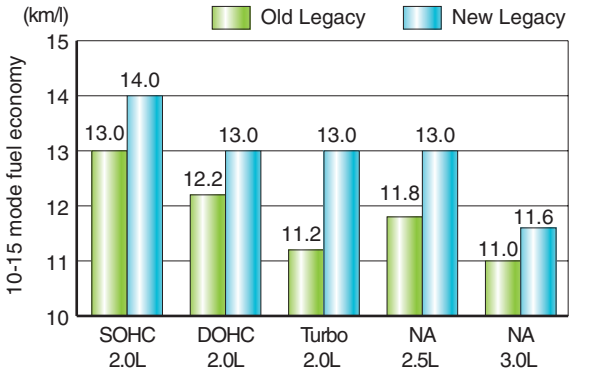
Trends in Attainment Rates for Fiscal 2010 Fuel Economy Standards (Gasoline Passenger Cars)



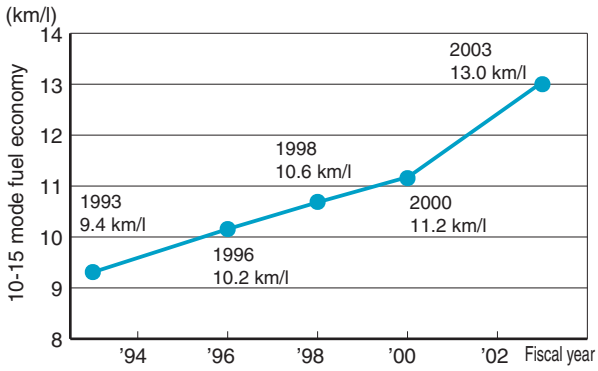
Trends in Attainment Rates for Fiscal 2010 Fuel Economy Standards (Gasoline Mini-Sized Trucks)



Fuel Economy of the New Legacy (AWD-AT IW = 1500 kg)



Trends in Fuel Economy of the Legacy Turbo AT



Exhaust Emissions

Substances emitted from automobiles, such as carbon monoxide (CO), hydrocarbon (HC), and nitrogen oxides (NOx), are one of the causes of air pollution in metropolitan areas where there is heavy motor traffic. In order to improve air quality, Subaru is launching low emission vehicles (certified by the Ministry of Land, Infrastructure and Transport) that meet higher standards than the regulation standards in the market one after another.

Application Status of Low Emission Vehicles

The 2.0L SOHC engine vehicle has reached the "ultra low emission" level for the first time at Subaru by reviewing the catalyst layout in the new Legacy that has received a full model change in fiscal 2003. The "ultra low emission" level is 75% more stringent than the 2000 emissions standard. Additional models, the 2.5L SOHC vehicle and the 3.0L DOHC vehicle, also meet the "ultra low emission" level. The vehicles with other engines also meet the "good low emission" level, which is 25% more stringent than the 2000 standard.

The new R2 minicars that are powered by naturally aspirated engines, also satisfy the "ultra low emission" level, which is 75% more stringent than the 2000 emissions standard, while the vehicle with a supercharger meets the "excellent low emission " level, which is 50% more stringent than the 2000 emissions standard.

The new Legacy, powered by the 2.0L SOHC engine (B4, Touring Wagon) and the 3.0L DOHC engine(Touring Wagon, Outback), and the R2, powered by the naturally aspirated engine, also meet the "U-LEV" level, that is 50% more stringent than the 2005 emissions standard.

Exhaust Gas Measures for the New Legacy

- Optimized combustion chamber form with the fully improved cylinder head
- Upgraded air-fuel ratio control performance by adopting the electronically controlled throttle valve
- Adoption of the HC adsorbent catalyst (turbo and SOHC vehicles)

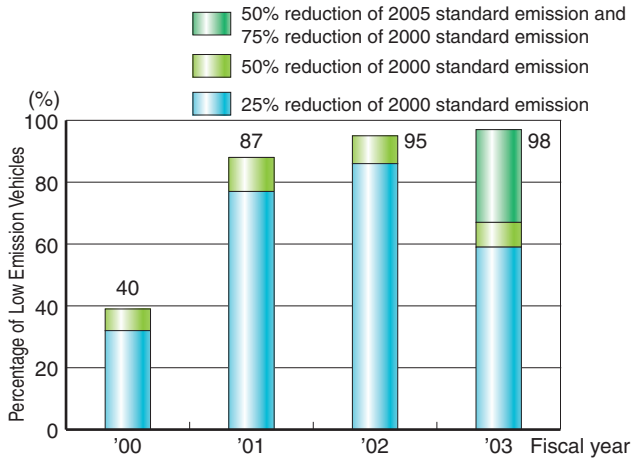
Exhaust Gas Measures for the New R2 Minicar

- Optimized combustion chamber form with the fully improved cylinder head and control of uneven combustion among the cylinders
- Optimized combustion by adopting the Active Valve Control System (AVCS)
- Upgraded air-fuel ratio control performance by adopting the electronically controlled throttle valve
- Upgraded after treatment capability due to pared down walls and increased cells in the catalytic honeycomb
- Improved air-fuel ratio control performance by adding the O_2 sensor to the downstream of the catalyst (adoption of the double O_2 sensor system)

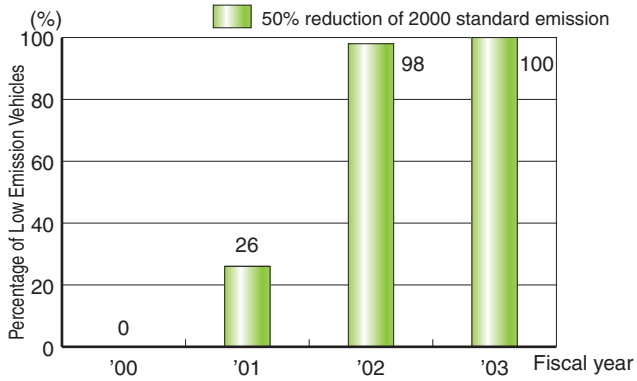
Trends in Percentages of Low Emission Vehicles

The low emission vehicles certification system started in April 2000. The percentages of the Subaru brand low emission vehicles are as follows.

Trends in Percentages of Low Emission Vehicles on Gasoline Passenger Cars



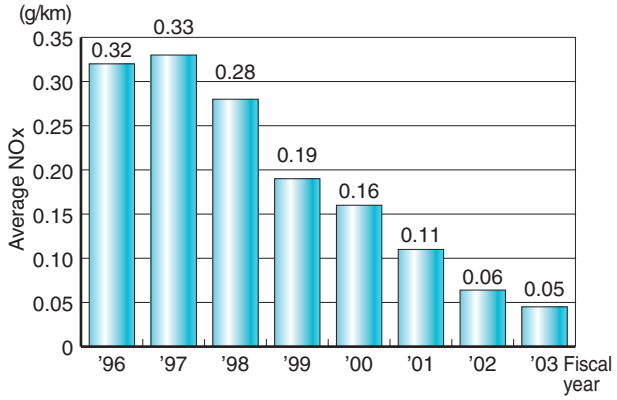
Trends in Percentages of Low Emission Vehicles on Mini-Sized Gasoline Trucks



Trends in NOx Averages

By putting more low emission vehicles into the market, Subaru has been able to reduce the average amount of NOx emitted by Subaru vehicles every year, as shown in the chart below.

Trends in Average NOx Emissions of Subaru Vehicles

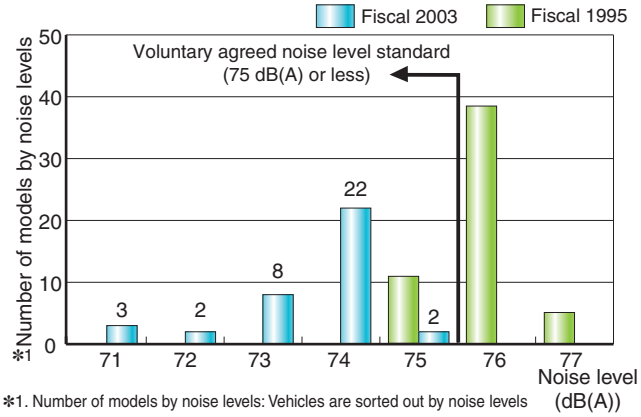


Notes: · The figures were calculated based on the regulation values and the standard values at the time of shipment.
· From fiscal 2003, some of the models were calculated with the regulation values to conform to the new test mode. The new test mode is a combined mode in which the 10-15 mode and 11 mode are combined.

Noise

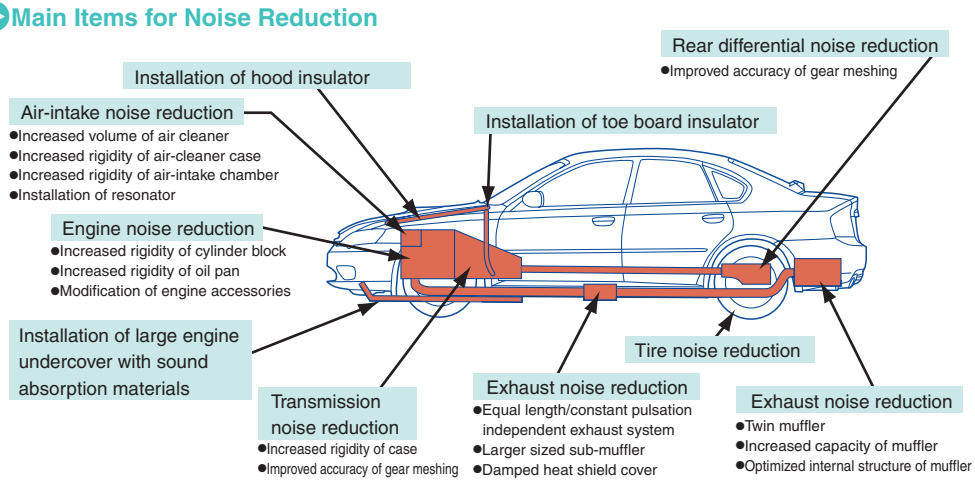
Subaru has been working to reduce the noise generated from the engine, transmission, air intake and exhaust, and tires in order to reduce the noise induced by a vehicle. In addition, Subaru reduces the noise induced by the rear differential of AWD vehicles. In fiscal year 2003, Subaru adopted the equal length/constant pulsation independent exhaust system and the twin muffler for the new Legacy to reduce noise further. Also in other models, Subaru is aspiring to reduce noise by increasing the capacity of the exhaust system and by promoting adoption of large undercovers.

Trends in Acceleration Noise (Domestic/Passenger cars)



*1. Number of models by noise levels: Vehicles are sorted out by noise levels because the same model can be in a different noise levels depending on the engine power and transmission type.

Main Items for Noise Reduction



Equal length/constant pulsation independent exhaust manifolds

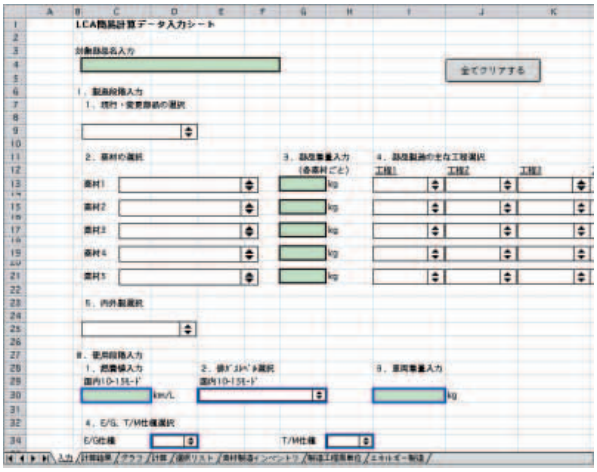
LCA Activities

In April 2002, Subaru established the LCA Utilization Investigative Commission to study LCA. In fiscal year 2003, we started using LCA on a trial basis, through the arrangement of data and application of LCA case study on parts in the development stage. Subaru has developed LCA simplified calculation software for easy LCA application to parts level development in order to utilize the LCA concept for the development process.

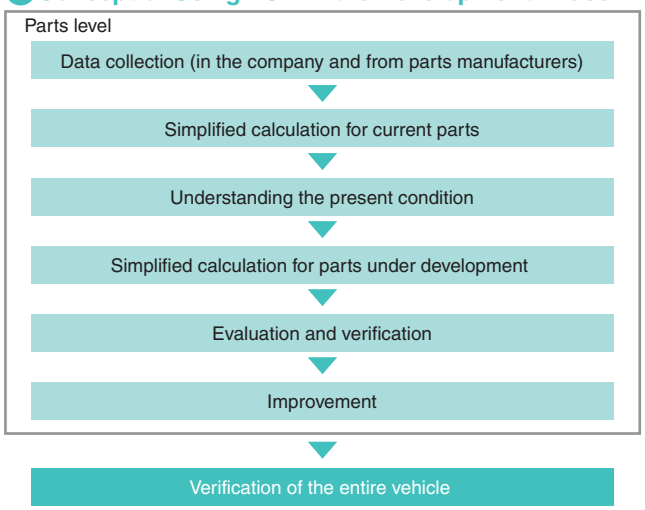
An example of the LCA concept is to evaluate and verify the effects of material changes for weight reduction and the effects on fuel economy in practical use for the total lifecycle by applying simple estimates in parts levels, such as body panels and interior products.

We will continue to scrutinize and accumulate in-house data in order to expand the LCA application.

Data Input Sheet



Concept of Using LCA in the Development Phase



Clean Energy Vehicles

Clean energy vehicles emit less global warming substances (carbon dioxide) and air pollutants (carbon monoxides, hydrocarbons, nitrogen oxides, etc.) and are less harmful to the environment than the gasoline vehicles. However, there are technical problems related to cost and driving distances. Subaru has been developing clean energy vehicles that have the gasoline vehicle-level performance and utility.

Development of Secondary Batteries (Chargeable Batteries) for Hybrid Vehicles and Fuel Cell Electric Vehicles

In May 2002, FHI established NEC Lamilion Energy, Ltd., jointly with NEC Corp. as a planning and development company for automotive manganese lithium-ion battery packs. By utilizing NEC's laminated manganese lithium-ion battery cell technology and FHI's automotive battery pack technology, the new company will develop secondary batteries for hybrid vehicles, electric vehicles and fuel cell electric vehicles, which are much thinner, lighter, and cheaper yet exhibit higher performance than existing ones. The company is aspiring to develop secondary batteries that will be accepted as an international de facto standard.

Natural Gas Vehicles

The Legacy B4 CNG has been limitedly introduced to the market since fall 2002. Ten vehicles were delivered to local governments and gas companies in fiscal 2002, and two vehicles at the beginning of fiscal 2003 for the purposes of data collection and practical evaluation through actual use. In addition, the car was exhibited at 14 sites, including low-pollution vehicle fairs (see Social Contributions), so that people could actually view and drive the CNG. The NGV, which is based on the new Legacy launched in spring 2003, has been on sale since May 2004.

Legacy B4 2.0 CNG

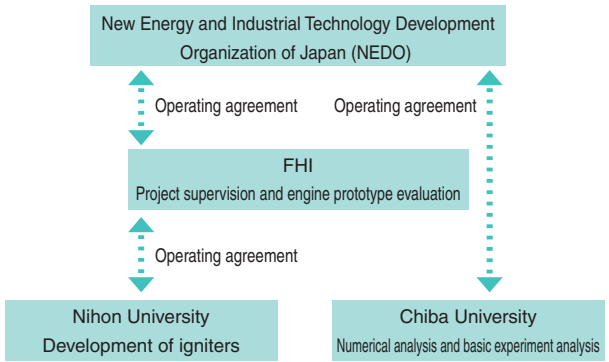
Legacy B4 CNG Ran Around Japan

In August 2003, we provided the Legacy B4 CNG for the Saitama Energy Association Network, an organization of filling stations in Saitama Prefecture, to cooperate for the "Project of Running Across Japan by NGV" organized by the association (a part of the program to investigate and actualize sophisticated management of oil dealers in 2003 supported by the Agency for Natural Resources and Energy).

Joint Development of Energy-Saving Engines by Industry, Academia, and Government

For cleaner, energy-saving power sources for the future, national-scale cross-sectoral development is required among the industry, academia, and government, besides research and development at each company. Subaru has been involved in the "Energy Use Rationalizing Technology Strategic Development Project" by the New Energy and Industrial Technology Development Organization of Japan (NEDO) since 2003. Jointly with Chiba University and Nihon University under consignment from NEDO, Subaru is conducting basic research on new gasoline engines that emit fewer pollutants with higher efficiency parity with diesel engines. We will contribute to conservation of future energy in Japan by developing gasoline engines of super high compression ratios, which has been thought to be difficult, by the industry, academia, and government through NEDO.

Research System and Responsibility



Reference Fiscal 2010 Fuel Economy Standards (10-15 Mode)

Gasoline Passenger Cars

Equivalent inertia weight (kg)		—750	875	1000	1250	1500	1750	2000	2250	2500—
Vehicle weight (kg)	Lower limit		703	828	1016	1266	1516	1766	2016	2266
	Upper limit	702	827	1015	1265	1515	1765	2015	2265	
Fiscal 2010 fuel economy standards (km/l)		21.2	18.8	17.9	16.0	13.0	10.5	8.9	7.8	6.4

Gasoline Mini-Sized Trucks

Equivalent inertia weight (kg)		—750		875		1000—
Vehicle weight (kg)	Lower limit			703		828
	Upper limit	702		827		
Vehicle structure (Note)		Structure A	Structure B	Structure A	Structure B	—
Fiscal 2010 fuel economy standards (km/l)	AT	18.9	16.2	16.5	15.5	14.9
	MT	20.2	17.0	18.0	16.7	15.5

Note: Structure A : ① $\frac{\text{Maximum load capacity}}{\text{Gross vehicle weight}} \leqq 0.3$

② FWD (front-wheel drive) vehicles or FWD-based 4WD vehicles (excluding trucks); Pleo vans

Structure B : Vehicles other than Structure A; Sambar vans and trucks

Reference Exhaust Emission Regulation Values, Low Emission Vehicle Authorization Standard by the Ministry of Land, Infrastructure and Transport

New Short-Term Regulations for Gasoline and LPG Passenger Cars

	10-15 mode (g/km)			11 mode (g/test)			Remarks
	CO	HC	NOx	CO	HC	NOx	
2000 exhaust emission regulations	0.67	0.08	0.08	19.0	2.20	1.40	
2000 standard emission 25% reduction level	0.67	0.06	0.06	19.0	1.65	1.05	Good low emission vehicle
2000 standard emission 50% reduction level	0.67	0.04	0.04	19.0	1.10	0.70	Excellent low emission vehicle
2000 standard emission 75% reduction level	0.67	0.02	0.02	19.0	0.55	0.35	Ultra low emission vehicle

New Long-Term Regulations for Gasoline and LPG Passenger Cars

	Combined mode (g/km)				Remarks
	CO	NMHC	NOx	Combination	
2005 exhaust emission regulations	1.15	0.05	0.05	10-15 mode & 11 mode	
2005 standard emission 50% reduction level	1.15	0.025	0.025	10-15 mode & 11 mode	U-LEV
2005 standard emission 75% reduction level	1.15	0.013	0.013	10-15 mode & 11 mode	SU-LEV

New Short-Term Regulations for Gasoline and LPG Mini-Sized Trucks

	10-15 mode (g/km)			11 mode (g/test)			Remarks
	CO	HC	NOx	CO	HC	NOx	
2002 exhaust emission regulations	3.30	0.13	0.13	38.0	3.50	2.20	
2000 standard emission 25% reduction level	3.30	0.10	0.10	38.0	2.63	1.65	Good low emission vehicle
2000 standard emission 50% reduction level	3.30	0.07	0.07	38.0	1.75	1.10	Excellent low emission vehicle
2000 standard emission 75% reduction level	3.30	0.03	0.03	38.0	0.88	0.55	Ultra low emission vehicle

New Long-Term Regulations for Gasoline and LPG Mini-Sized Trucks

	Combined mode (g/km)				Remarks
	CO	NMHC	NOx	Combination	
2007 exhaust emission regulations	4.02	0.05	0.05	10-15 mode & 11 mode	
2005 standard emission 50% reduction level	4.02	0.025	0.025	10-15 mode & 11 mode	U-LEV
2005 standard emission 75% reduction level	4.02	0.013	0.013	10-15 mode & 11 mode	SU-LEV

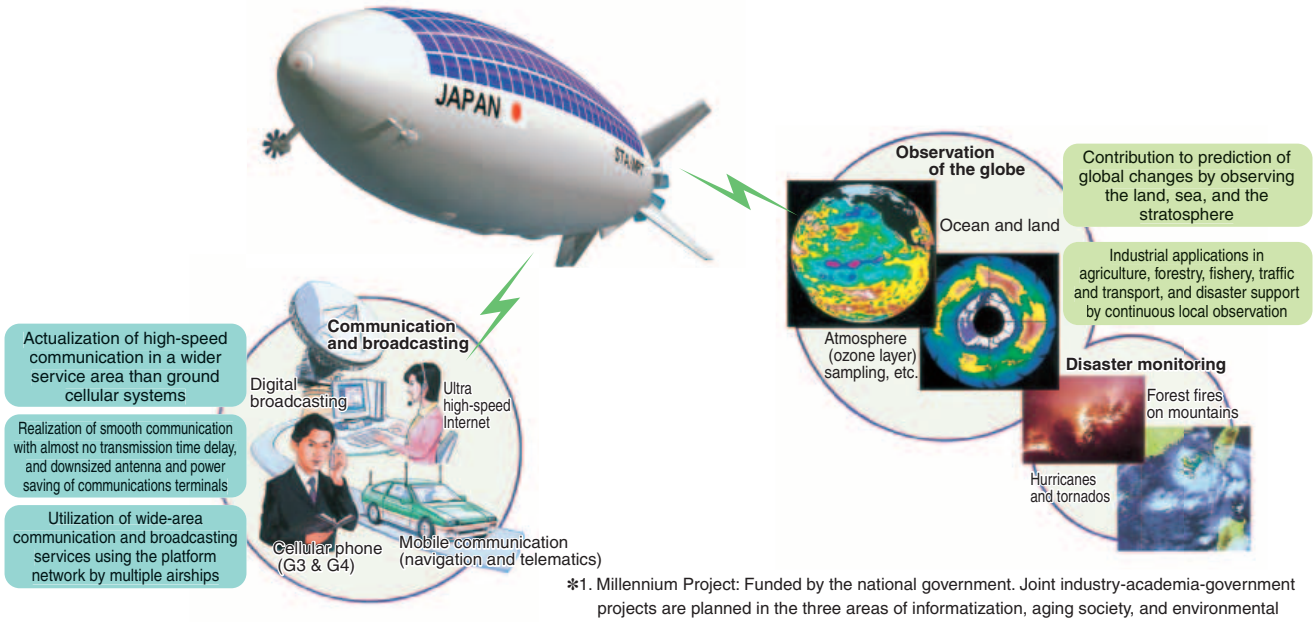
Development Phase/Products —Aerospace, Industrial Products and Eco Technologies Companies—

Aerospace Company

The Aerospace Company has been contributing with a remarkable participation in the national government Millennium Project*1 in Japan, mostly on the meteorological issue of the greenhouse effect, which may cause global warming. We are now developing two unmanned prototype airships to utilize stratospheric platform technology. In the future, the goal of the stratospheric airship is to realize broad applications of telecommunications, broadcasting, and remote sensing observations. The Stratospheric Platform Airship is expected to have a very long geostationary flight duration at an altitude of 20 km by benefiting from the stable, calm winds and sunshine.

Currently, we are going ahead with the design and manufacturing stage for two prototypes of the airship (48-meter, non-powered, balloon-like, high-altitude, flight-testing model and a 68-meter unmanned reusable low-attitude model) under a contract with the National Aerospace Laboratory of Japan. In future production models, which will follow these prototype airships, we will install high efficiency solar and fuel cells for pollution-free power sources, which are mandatory for a long stay in the stratosphere.

It is anticipated that a new type of service business using undeveloped traffic-free airspace in the stratosphere will grow quickly and broadly in areas useful to the public and commercial market. In the information and communications area, advanced information services for next-generation cellular phones, digital high definition television broadcasting, and telematics are strongly expected to develop as new businesses. In the area of global observation, the Stratospheric Platform Airship will enable long, continuous observation in support of rescue/restoration/reconstruction projects by its wide coverage area for serious disasters, as well as monitoring and surveys of land, sea, and atmospheric pollution. After one of the stratospheric airship production models enters service, it will cover an area with a radius of more than 100 km using next generation remote sensing and observation for high resolution and accuracy.

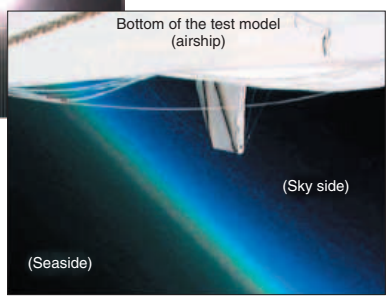


*1. Millennium Project: Funded by the national government. Joint industry-academia-government projects are planned in the three areas of informatization, aging society, and environmental measures, which are very important and urgent to the Japanese economy and society so as to cope with current issues and to keep current with technological innovation that creates new industries.

Flight Test of 48-Meter Model

In August 2003, a flight test of the 48-meter, non-powered, balloon-like, high-altitude flight-testing model was conducted at Hitachi Seaport in Ibaragi Prefecture. Although the test flight had been postponed due to bad weather, it was clear with a mild wind on that day. Under the best conditions, the test model flew stably in accordance with the anticipated simulation: launch (at 3:21 a.m.), climb, stay (reached altitude: about 16.4 km), descend, and land on the water (at 5:15 a.m.). We accomplished a significant goal by checking the performance of the model and the validity of the simulation.

Launching



The horizon was photographed from the stratosphere by a camera mounted on the airship model.

Completed Assembly of the 68-Meter Model

At the end of March 2004, assembly of the 68-meter unmanned reusable low-altitude model, which started in April 2003, was completed. Outside the hangar, the verification test was implemented to check the statistical floating characteristics of the manufactured ship. It floated stably at an altitude of about 12 m during the 10-minute test.

From April to the middle of May 2004, the system functions of the equipment mounted on the ship were tested for verification. After the test linked with the tracking control system in June, the test flight will start in July. We will repeat communication and broadcasting experiments with this test ship during its stationary flight at an altitude of 4 km. We aim to establish the design, manufacture, and operation technologies required for development of the stratosphere platform airship in the future.

Note: Regarding the operational concept of the 68-meter unmanned reusable low-attitude model, see p. 22 of the 2003 Environmental Report.

68-meter model coming out of the hangar
(The front truck is called a mast car)

Floating function verification test

Industrial Products Company

Industrial Products Company produces multipurpose engines. These engines are used in machines that support our life such as construction and agricultural machinery for infrastructures, leisure-related equipment for a more fulfilling life, snow removal equipment, and engine equipped generators for harsh environments. In our brand application equipment, a new series of generators were launched in November 2003.

Main Activities to Reduce Environmental Impacts

Reduction of Environmental Impacts

We promote reduction of environmental impact substances, such as lead and hexavalent chromium, used for multipurpose engines and application equipment. We adopt substitutes such as trivalent chromium for plating and unleaded paint.

Cleaner Exhaust Gas and Improved Fuel Economy in Multipurpose Engines

In fiscal 2003, we produced the following results.

- Fuel economy : Improved 9% compared to 1995
- Exhaust gas : Reduced 38% compared to 1995

The EU will apply new emission standards from August 2004. We have already started production of the EX and other engine series, which had been authorized under the new standards, from January 2004 in sequence.

New Type of Inverter Generator Series

The new inverter generator series is available in six models (SGi14, SGi25, SGi25S, SGi28, SGi28SE and SGi38SE) from 1.35 kVA to 3.8 kVA depending on the purposes. Particularly, the frame type soundproof generator (SGi25s, SGi28SE and SGi38SE), which is equipped with an OHC engine, is light and compact with low noise. It satisfies the requirements from professional users. All of the models conform to the US EPA and CARB exhaust emission standards, as well as the EU exhaust emission standards. In addition, its low noise design meets Stage II of the EU noise standards.

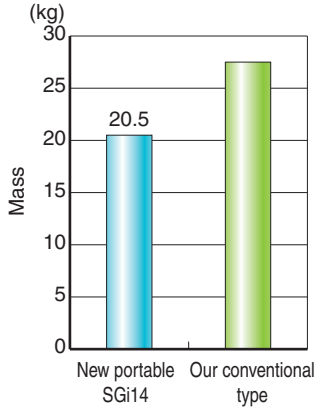
Portable generator (SGi14)

Frame type soundproof generator (SGi28SE)

Light and Compact Design

New type of compact, portable generator (SGi14) equipped with a multipolar generating system is designed for weight reduction. In addition to that, resin is used for the cover and the inverter unit is thoroughly downsized. As a result, its weight is drastically reduced, actualizing a dry weight of 20.5 kg, which is a 25% reduction from the existing generator of the same class.

Weight reduction

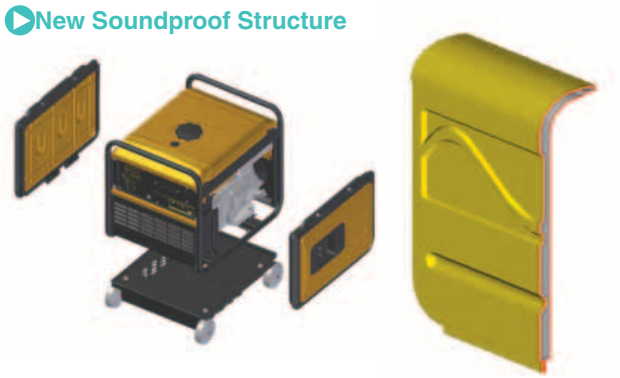


Low Noise and Good Fuel Economy

The frame-type soundproof power generator actualizes high soundproofing by a two-layer structure with hollow side panels, as well as low noise and good fuel economy by mounting the auto power saving system to all models. For smooth recycling, disassembly is facilitated and resin parts indicate their material signs.

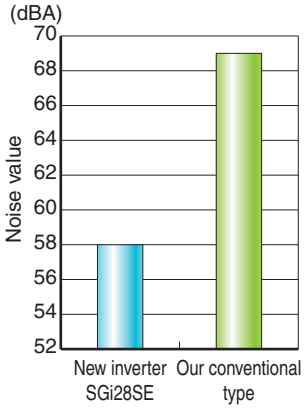
Resin part that indicates its material sign

New Soundproof Structure

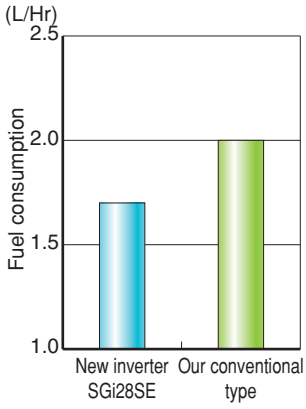


Hollow side panel

Noise in Rated Operation



Fuel Consumption in Rated Operation



Eco Technologies Company

Eco Technologies Company deals with a variety of products that contribute to creating comfortable living environments and a resource recycling society, including a refuse sorting system (intermediate treatment) and the recent refuse disposal system for skyscrapers, as well as various vehicles and equipment for waste collection, transport, and recycling. Handling the wind turbine generator systems to produce clean energy, Eco Technologies Company contributes to conservation of the global environment with its ecological products.

Development of Products that Contribute to Recycling-Oriented Society

Refuse Collection Vehicle with a Large Sorting Box (LP200)

We have developed a refuse collection vehicle with a large sorting box (LP200) to cope with areal refuse recycling operations, which have been remarkably promoted. In this vehicle, a large sorting box is arranged at the rear part of the cab. The vehicle efficiently recovers recyclable refuse when garbage is collected.

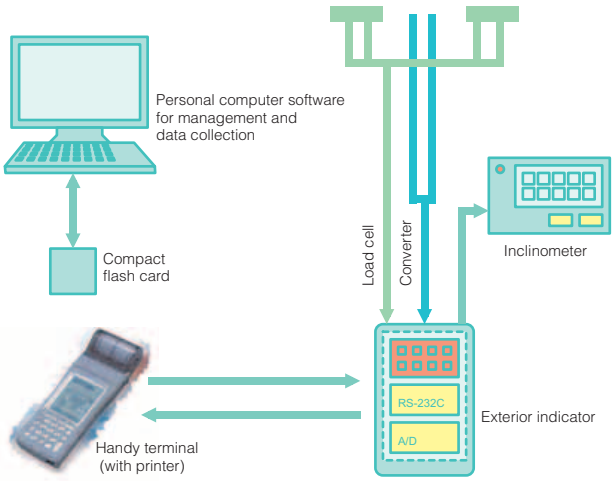
Refuse collection vehicle with a large sorting box (LP200)

Body Weighing System for Refuse Collection Vehicles

Reduction (reuse and recycling) of waste is becoming more and more important in society. Under the circumstances, we developed the body weighing system for refuse collection vehicles that enables efficient measurement of a collected waste load, the issue of slips, and an interface with a personal computer for management and data collection. Under the system, the weight of individual refuse loaded into the vehicle is indicated on the spot, as well as the total weight of the loaded refuse.

Refuse collection vehicle equipped with a body weighing system

Body Weighing System for Refuse Collection Vehicles



Action Program for Recycling of Commercial Vehicle Body Components

To meet the requirements of the Law on Recycling End-of-Life Vehicles to be enforced in January 1, 2005, we have proceeded with voluntary measures for recycling of body components of refuse collection vehicles. As a part of the Action Program on Recycling of Commercial Vehicle Body Components led by the Japan Auto Body Industries Association Inc., we implement the following.

- Establishment of the guideline for 3R criteria and their release on the Web site
- Preparation of the disassembly manual and its release on the Web site
- Indication of the manufacturer on the body
- Indication of the parts using resin of 100 g or more on the body (attachment of the "material indication plate")

In addition, the environmental standard compliance label issued by the Association is affixed on the rear part of the body. (Started with vehicles shipped from April 1, 2004)

"Material indication plate" attached to the refuse collection vehicle

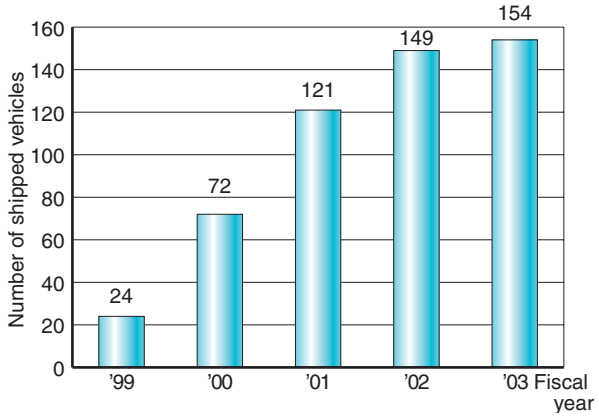
Stamping no. (Different according to each vehicle)

Environmental standard compliance label (attached to the rear part of the body)

CNG Refuse Collection Vehicles

The number of shipped CNG refuse collection vehicles that use compressed natural gas (CNG) as their fuel for clean emissions is increasing year by year.

CNG Refuse Collection Vehicles Adopted



Wind Turbine Generator Systems

Subaru 40 kW Wind Turbine Generator System

Wind power generation contributes to the reduction of CO_2 by using natural energy. Having state-of-the-art technologies, it is also friendly to the environment: easy to install, easy to start at a low wind velocity, and low in noise. Because of these characteristics, it is used by local governments and research institutions for enlightenment, study and monuments.

We are improving products for further environmental conservation by reducing the use of GFRP, a material difficult to recycle, with the weight reduction of the nacell cover*1 (about 110 kg per unit).

*1. Nacell cover: Fairing (cover to smooth the form for reduction of air resistance) to mainly store and protect the generator and its auxiliary equipment.

Achievements in Fiscal 2003 (40 kW)

	Customer	Location
1	Nosegawa Village, Nara Prefecture	Tsuruhime Park, Nosegawa Village
2	Iwaki City, Fukushima Prefecture	Iwaki Municipal Flower Center
3	Ashikaga Institute of Technology	Campus of Ashikaga Institute of Technology (Ashikaga City, Tochigi Prefecture)

Nosegawa Village

Iwaki City

Ashikaga Institute of Technology

Subaru 100 kW Wind Turbine Generator System

FHI started mass production of the 100 kW wind turbine generator systems developed under a research contract with NEDO as a system for isolated islands in its New Sunshine Plan. We are tackling weight reduction of the parts and enhancement of safety and operability by reviewing the prototype specifications and improving design based on the know-how obtained through the 40 kW wind turbine generator system. (Actual installation starts in fiscal 2004 and thereafter.)

Exhibitions

We participated in the New Environment Exposition 2003 (in September in Osaka) and the NEDO achievement exhibitions (in October in Osaka and in November in Tokyo) to have our wind turbine generator systems become well known to the public. We also advocated the value of wind power by attending the academic conferences and events as a panelist.

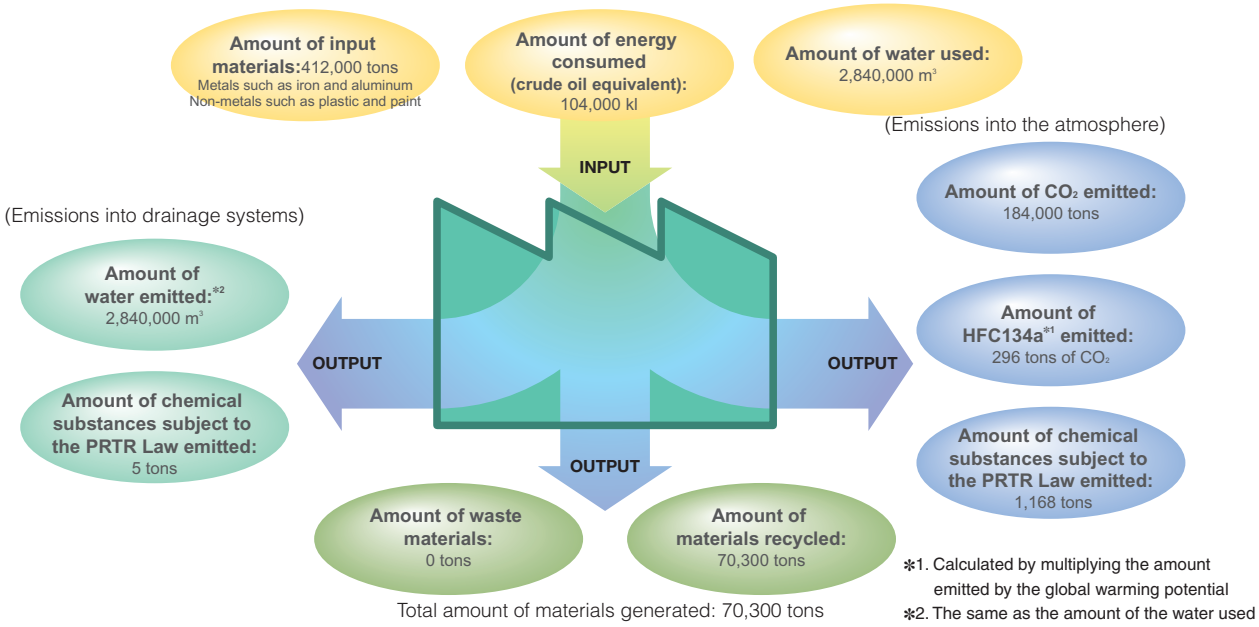
Giving a lecture on the environment and wind power generation at the outside seminar

Production

Amount of Input Resources and Emissions in Plants

This figure shows the amount of input resources and emissions in fiscal 2003 at the Gunma Manufacturing Division, our main automobile production plant in Japan.

Amount of Input Resources and Emissions



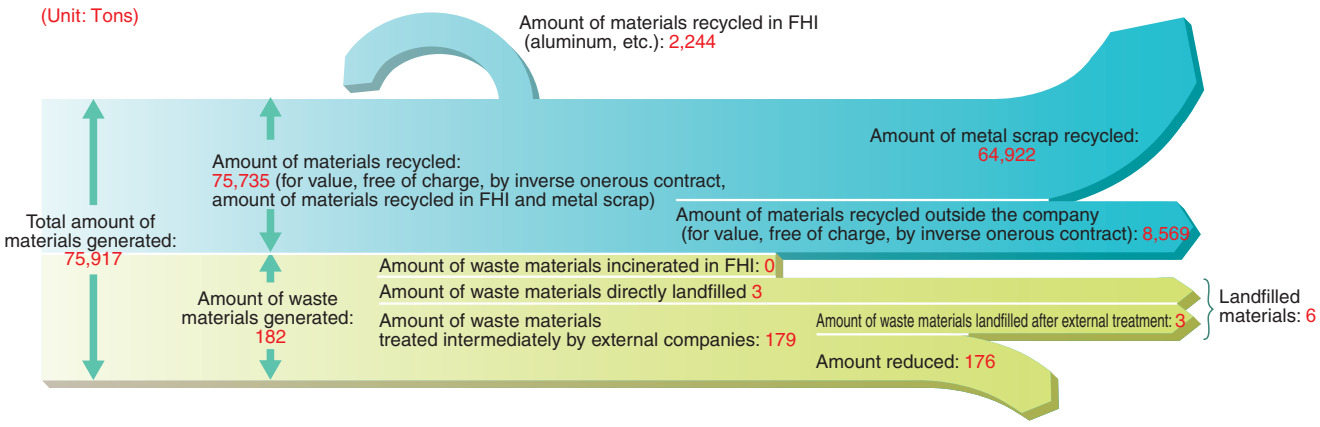
*1. Calculated by multiplying the amount emitted by the global warming potential
*2. The same as the amount of the water used

Reducing Waste Materials

FHI is actively committed to reducing waste in all its plants. At the Gunma Manufacturing Division for development and manufacturing of automobiles, the Utsunomiya Manufacturing Division for development and manufacturing for the Aerospace Company and Eco Technologies Company, and the Saitama Manufacturing Division for development and manufacturing for the Industrial Products Company, zero emissions have already been achieved. In 2003, zero emissions was achieved at the Tokyo Office for research and development of automobiles.

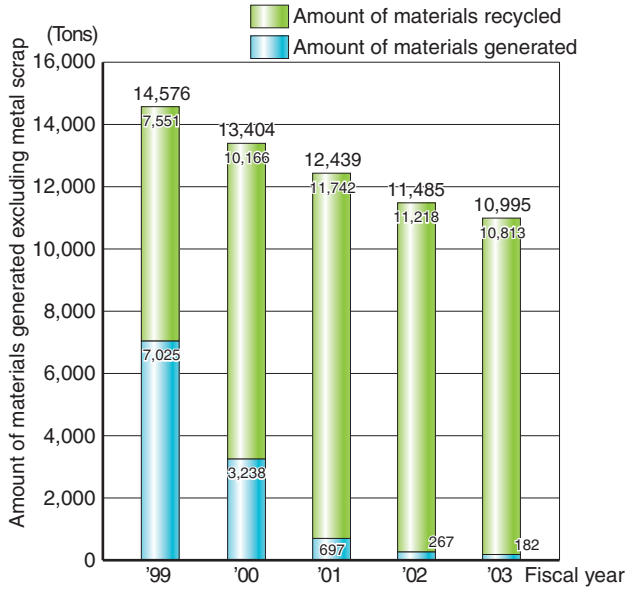
The total amount of materials generated, including scrap metal associated with production activities in 2003, was 75,917 tons in total for all plants, and the materials generated were treated as the figure below shows. All, excluding six tons of the landfilled materials, were recycled. The amount of waste materials generated (waste materials treated intermediately by external companies plus waste materials treated directly) was reduced by 32% compared with the previous year to 182 tons in all plants. The reduction was due to the progress in the measures for by-product sources and enhancement of recycling. The amount of waste materials landfilled has been at the zero level since October 2003.

Outline of Treatment of Materials Generated



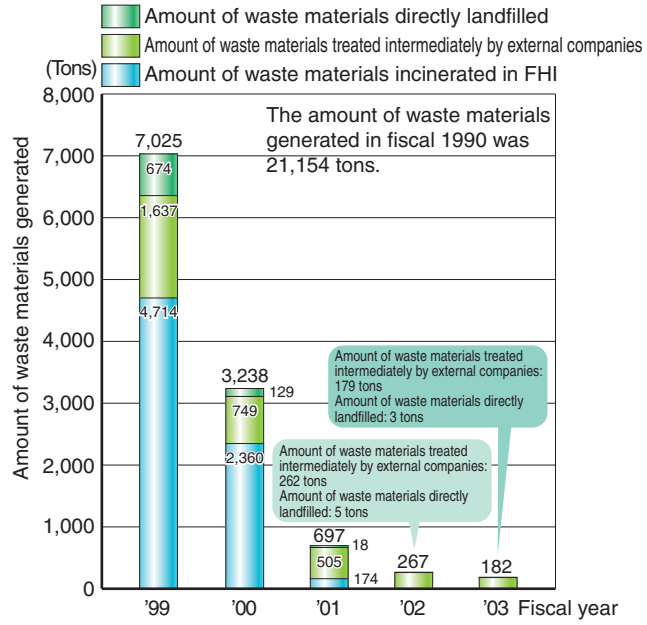
The following chart shows trends in the amount of materials generated excluding metal scrap from fiscal 1999 to 2003. The generation of materials has been inhibited and the recycling rate has been increased.

Trends in Amount of Materials Generated Excluding Metal Scrap



The following chart shows trends in the amount of waste materials generated from fiscal 1999 to 2003.

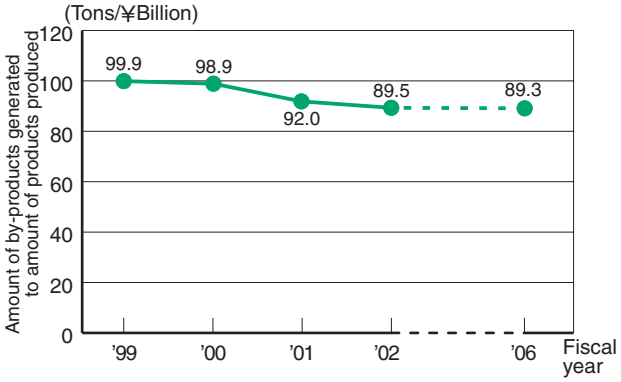
Trends in Amount of Waste Materials Generated



To Reduce the Amount of Metal Scrap in Automotive Production Process

As for metal, including iron and aluminum, the primary material for automobiles, FHI is making efforts to generate as little metal scrap (by-products) as possible by changing the quality of materials for weight saving and improving the yield ratio during the production process, in order to improve automobile environmental performance and effectively utilize resources. The following chart shows the past records after fiscal 1999 and our future plan.

Ratios of Amount of By-Products Generated to Amount of Products Produced



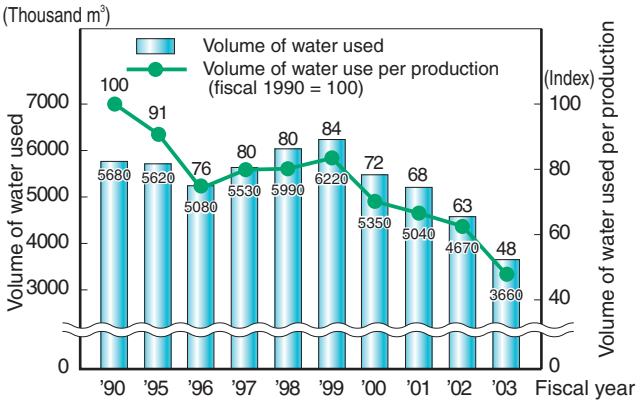
The Gunma Manufacturing Division Received the 2003 3Rs Promotion Association Chairman's Award

The Gunma Manufacturing Division received the Chairman's Award in 2003, which was given by the Reduce, Reuse and Recycling Promotion Association. This award is presented to individuals, groups, and companies, which have taken the initiative in the promotion of the 3Rs and have achieved satisfactory results through continuous activities. The Gunma division received high acclaim that all the employees worked on separating, collecting, and recycling waste materials; achieved zero emissions; abolished all of its own incinerators; and developed the technology to recycle paint sludge.

Reducing Water Consumption

In fiscal 2003, we continuously implemented energy conservation measures in everyday operation and the strict maintenance of water pipes to reduce water consumption. We also improved water supply facilities when we integrated production lines for minicars. As a result of these activities, the volume of water used by FHI was 3,660,000 m^3, and we achieved a 23.4% reduction in the volume of water use per production compared with the previous fiscal year.

Trends in Volume of Water Used



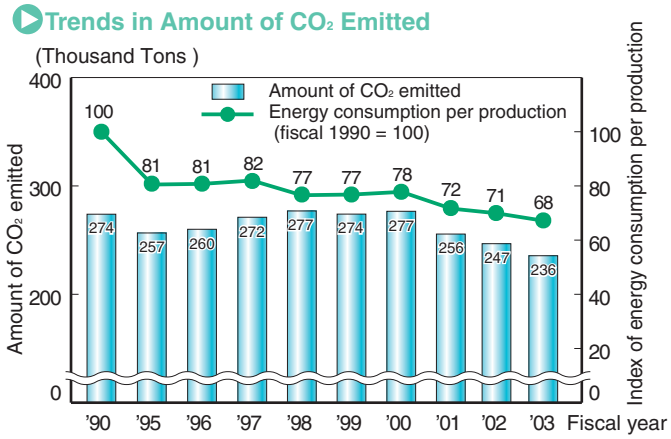
Energy Saving (Prevention of Global Warming)

Every FHI plant is committed to improving the energy efficiency of facilities to avoid waste or loss of energy. In September 2002, the Yajima Plant in the Gunma Manufacturing Division implemented a natural gas cogeneration system.

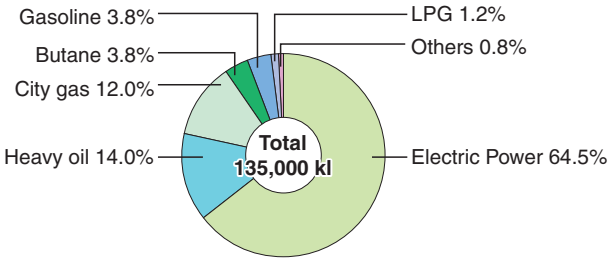
In fiscal year 2003, we reduced energy use by 2.1% compared with the previous year to 135,000 kiloliters (crude oil equivalent) in total for all plants, mainly by integrating production lines for minicars, though the number of vehicles produced increased by 5.9% since automotive production is our main business. The total amount of CO_2 emissions decreased 4.1% compared with the previous year to 236,000 tons in fiscal 2003, owing to the use of natural gas for air conditioning and boilers. This is a 13.7% reduction compared with fiscal 1990 levels. Energy consumption per production declined 4.3% compared with the previous year, which was a 32.3% reduction compared with fiscal 1990 levels.

The amount of greenhouse gas emitted, excluding CO_2 (methane, dinitrogen monoxide, HFC, PFC, sulfur hexafluoride) was 380 tons of CO_2 (CO_2 equivalent).

Trends in Amount of CO_2 Emitted



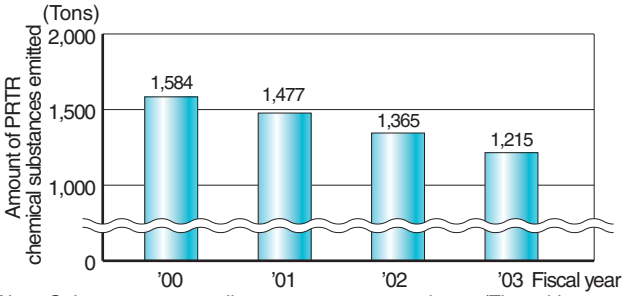
Component Ratio of Energy Used



Management of Chemical Substances (the PRTR Law)

In fiscal 2003, 19 chemical substances subject to the PRTR Law were used by FHI, as detailed below. The total use of such chemical substances was up 0.4%, broadly flat compared with the previous year, but their release into the atmosphere and water was down 11.0%. Major reasons for this include a change in the cleaning thinner during the automotive painting process to one with less xylene and that we combined the production lines for minicars.

Trends in Amount of Chemical Substances Subject to the PRTR Law



Note: Only amounts exceeding one ton a year are shown. (The achievement values are different from those of the previous year since only amounts exceeding five tons a year were shown in the earlier Environmental Report.)

Totals of PRTR Chemical Substances Used in Fiscal 2003

(Only amounts exceeding one ton a year are shown. Substances marked with * are Specified Class 1 Designated Chemical Substances)[Unit: Tons per year, mg-TEQ per year (only dioxins)]

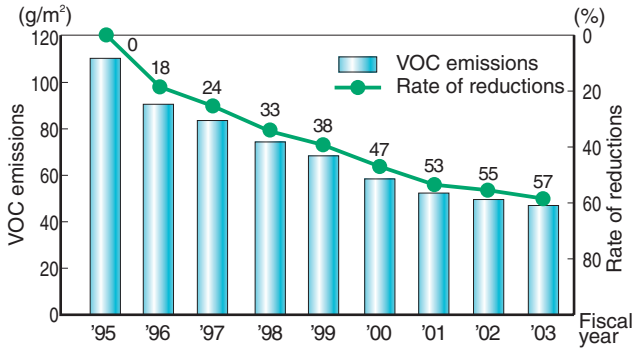
Code	CAS Number	Name	Amount handled	Amount emitted into atmosphere	Amount emitted into public water supply	Amount removed	Amount consumed	Amount eliminated by processing	Amount recycled	Amount treated at landfills
1	none	Soluble compound of zinc spelter	24.01	0	0.26	4.82	18.94	0	0	0
9	103-23-1	Bis (2-ethylhexyl) adipate	1.28	0	0	0	1.26	0.01	0	0
16	141-43-5	2-aminoethanol	4.30	0	0.35	0.04	0	3.91	0	0
30	25068-38-6	Polymer of 4, 4'-isopropylidene diphenol and 1-chloro-2,3-epoxypropane (liquid)	16.49	0	0	2.30	14.02	0.17	0	0
40	100-41-4	Ethylbenzene	464.47	244.85	0.44	0	77.55	8.66	132.98	0
43	107-21-1	Ethylene glycol	798.33	0	0	0	798.33	0	0	0
63	1330-20-7	Xylene	1,272.73	571.73	0.97	6.73	367.79	20.75	304.76	0
69*	none	Chromium (VI) compounds	2.07	0	0	0.71	0.17	1.18	0	0
176	none	Organotin compound	2.79	0	0.01	0.13	2.65	0	0	0
179*	–	Dioxins	0.51	0.51	0	0	0	0	0	0
224	108-67-8	1,3,5-trimethiylbenzene	45.96	17.72	0	0	18.35	1.01	8.87	0
227	108-88-3	Toluene	1,107.04	373.29	1.64	4.18	622.94	40.26	64.74	0
232*	none	Nickel compounds	5.26	0	0.23	3.83	1.20	0	0	0
272	117-81-7	Bis (2-ethylhexyl) phthalate	82.65	0	0	3.70	78.95	0	0	0
283	none	Hydrogen fluoride and water-soluble salts	6.62	0	1.15	5.46	0	0	0	0
299*	71-43-2	Benzene	26.95	0.05	0	0	26.90	0	0	0
309	9016-45-9	Poly (oxyethylene) = nonylphenyl ether	1.19	0	0.09	0.92	0.09	0.10	0	0
310	50-00-0	Formaldehyde	1.66	1.66	0	0	0	0	0	0
311	none	Manganese and its compounds	9.90	0	0.21	4.50	5.19	0	0	0
Total			3,873.68	1,209.30	5.36	37.31	2,034.31	76.05	511.35	0

Reducing Substances with Environmental Impact

Reducing VOCs Generated in the Painting Process (Automobile Division)

In fiscal 2003, we reduced emissions of VOCs per unit of area painted on the vehicle body to 47 g/m^2, thereby reducing emissions by 57% compared to fiscal 1995 levels. Since painting plants were also combined and restructured when production lines of minicars were combined, the painting and collection ratio of thinner was improved.

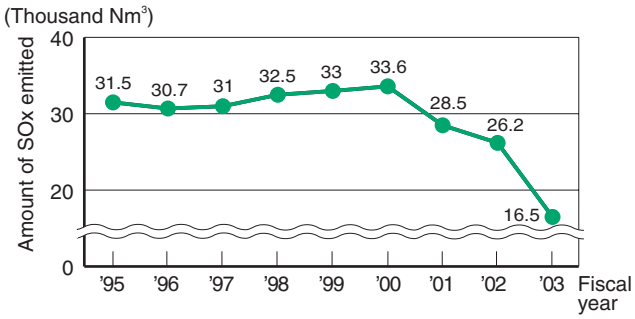
Trends in VOC Emissions



Sulfur Oxide (SOx) Emissions

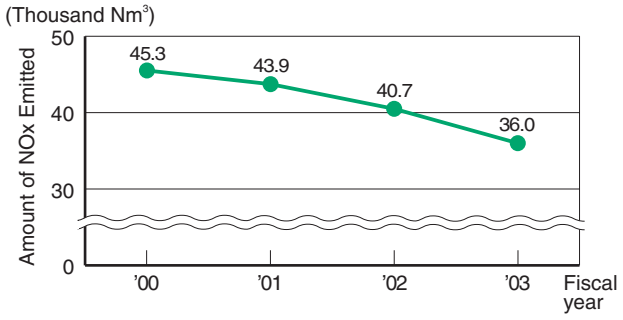
Amount of SOx emitted in fiscal 2003 was reduced compared with the previous year through full-year effects by introduction of a cogeneration system at the Yajima Plant in the Gunma Manufacturing Division and utilization of natural gas as fuel for boilers.

Trends in Amount of SOx Emitted (total for all plants)



Nitrogen Oxide (NOx) Emissions

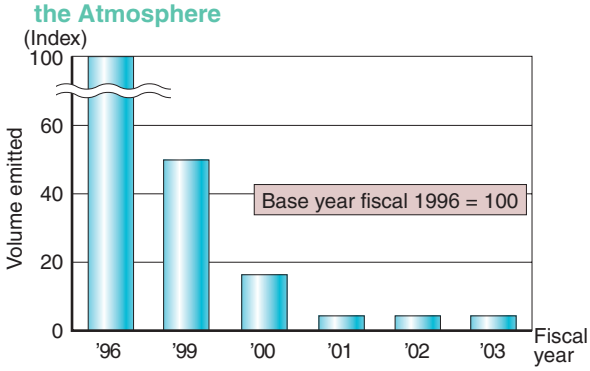
Trends in Amount of NOx Emitted (total for all plants)



Reducing Use of HFC134a (Automobile Division)

HFC134a, currently used as a CFC-alternative refrigerant in air conditioners, is also believed to contribute to global warming. To reduce atmospheric emissions from the vehicle manufacturing line, we have been minimizing leakage while pumping gas into air conditioners. As a result, we were able to reduce atmospheric emissions to 225 kg, which represents a 95% reduction from fiscal 1996 levels.

Trends in Amount of HFC134a Emitted into the Atmosphere



Emissions of Nitrogen, Phosphorous, and BOD

The chart below shows the total amount of nitrogen, phosphorous, and BOD emitted and included by drainage from all plants in fiscal 2003. These reductions were realized through improvements in the wastewater processing facilities for nitrogen and in the treatment of water discharged from cafeterias.

Amount of Nitrogen, Phosphorous, and BOD Emitted

Substance	Fiscal year	Nitrogen	Phosphorous	BOD
Amount emitted (tons per year)	2002	49	12	92
	2003	34	9	54

Dioxin Emissions from Incinerators

Incinerators were shut down in the Gunma Manufacturing Division in December 2000, and in the Utsunomiya Manufacturing Division and the Saitama Manufacturing Division in September 2002. This means we shut down all incinerators in every FHI division, ending dioxin emissions from all the sources.

The vacant lot of the incinerator in the Yajima Plant in the Gunma Manufacturing Division is now green space.

Our Activities Regarding the Environment

Reduction of Risks of Chemical Spills (Utsunomiya Manufacturing Division)

In order to prevent chemical leaks from a tank lorry when the chemical is fed from the tank lorry to the wastewater treatment facility, grooves surrounding the site where tank lorries stop were established. Pits with a shutoff valve, which is closed to prevent leakage while the chemical is being fed, were established to prevent the chemical from flowing into storm drains.

Reduction of risks of chemical spills where tank lorries stop (near the wastewater treatment facility) (Utsunomiya Manufacturing Division)

Establishment of Sound Barrier (Gunma Manufacturing Division)

Since the housing construction was planned near the Oizumi Plant in the Gunma Manufacturing Division, a sound barrier was established to reduce noises from the plant. The plant also implemented such environmental activities as using electric fork lifts instead of engine ones when handling cargo near the border.

Establishment of sound barrier
(Oizumi Plant in the Gunma Manufacturing Division)

Green Procurement

Automotive Business Unit

We held an explanatory meeting on our green procurement activities to suppliers in January 2004 and asked them to set up an environmental management system (EMS), that is, to complete ISO 14001 certification procedures or to independently set up the EMS equivalent of ISO 14001. We also held the conference of the Subaru Safety Environment Association regularly every April to assist local suppliers to set up their EMS. The EMS was completed by 272 suppliers out of 296 target suppliers in Japan by March 2004.

We are using the International Material Data System (IMDS), a system that meets global standards to measure substances with an environmental impact for included components, and we continued to assist our suppliers in inputting data.

Industrial Products Company

We asked 102 suppliers to set up an EMS and report their use of certain substances designated by FHI. In fiscal year 2003, all of the suppliers completed the establishment of an EMS. We will continue to work on activities for environmental preservation with the suppliers' cooperation by reviewing delivery containers and cushioning materials.

Aerospace Company

In September 2003, the company and suppliers started a green procurement working group. We asked our suppliers to set up their EMS and held the sixth training session to assist them in fiscal 2003.

Eco Technologies Company

We explained our green procurement activities in May 2003 to suppliers. We asked them to set up their EMS and report their use of certain substances designated by FHI.

Green Purchasing

In October 2000, the Gunma Manufacturing Division compiled a list of environment-conscious office equipment, and in January 2004, we had an explanatory meeting for suppliers subject to green purchasing to further promote the use of environment-friendly products. The ratio of environment-friendly products purchased by the Gunma region reached 80% in fiscal 2003. We will promote the eco-products campaign in the Head Office area in fiscal 2004.

Recycling

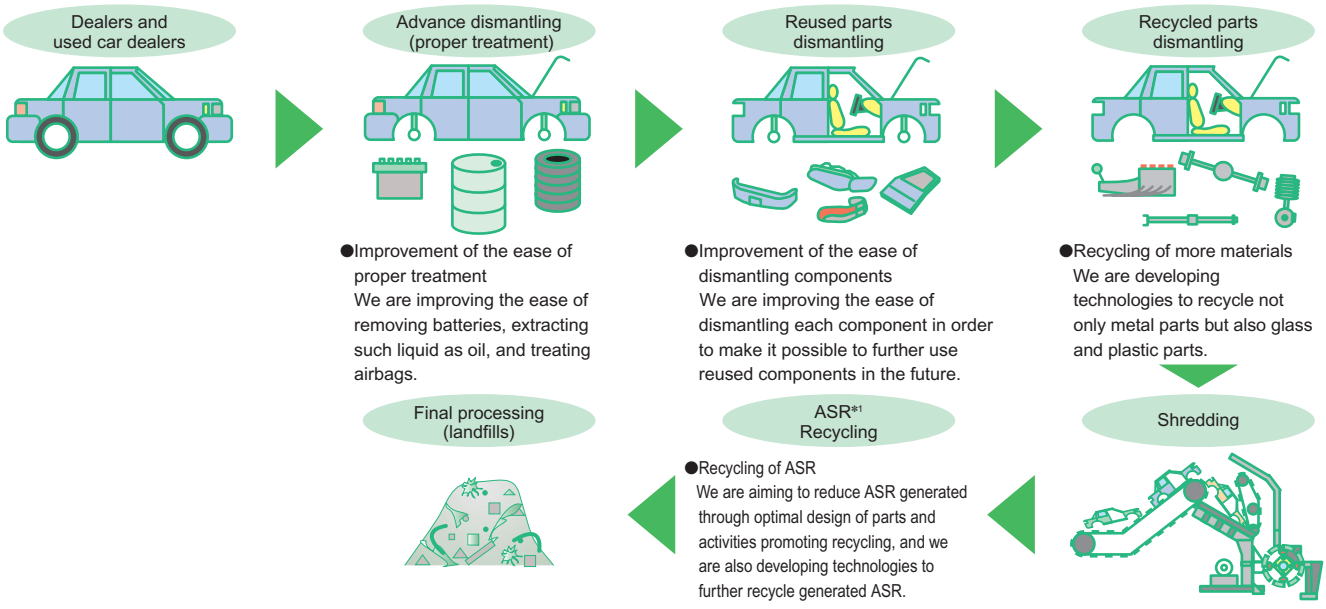
Automobile-related companies are obligated by the Law on Recycling End-of-Life Vehicles, enforced on January 1, 2005, to share the responsibility for creating a sustainable environment of recycling and to properly treat end-of-life vehicles (ELV). FHI recognizes that the role of automobile manufacturers is important. In addition, we strive to comply with related regulations that prohibit the use of substances with environmental impact, call back ELVs without compensation, and regulate the target figures of reuse and recovery rates in compliance with the Directive 2000/53/EC of the European Parliament and of the Council on ELVs effective since September 18, 2000.

FHI is also making efforts to achieve greater efficiency and lower cost recycling while making it clear what kind of role the company should play at each stage of design, manufacturing, use, and disposal. In particular, we recognize the present situation and future of treatment of ELVs, and are planning, designing, and making efforts, always taking into consideration what vehicles we will develop and what our recycling techniques should be.

Contributions to a High-Efficiency, Low-Cost Recycling-Oriented Society

Our Efforts for the Future

Outline of Our Efforts



*1. ASR: Automobile Shredder Residue: residue left after shredding of body shell, sorted by metal type for recycling

Response to Recycling Related Laws

Law on Recycling End-of-Life Vehicles

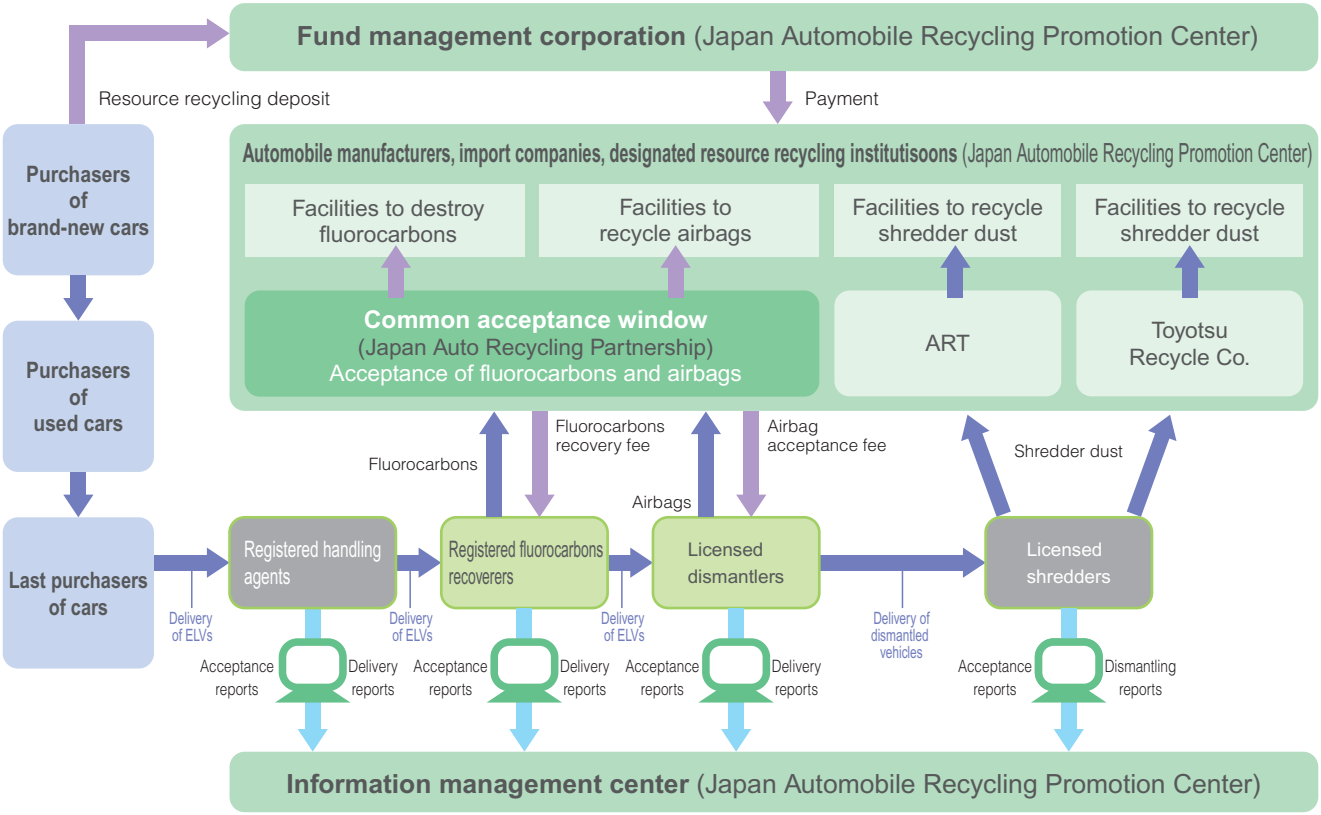
The three characteristics of the Law on Recycling End-of-Life Vehicles:

- Automobile manufacturers must accept fluorocarbons, airbags, and ASR, destroy fluorocarbons and recycle the others.
- Expenses for recycling must be paid by users in advance as recycling deposit.
- Tracking reports of ELVs after they are accepted from users until they are appropriately disposed of is required.

As for fluorocarbons and airbags, FHI established the Japan Auto Recycling Partnership (JARP) in cooperation with other automobile manufacturing companies to establish a collection system to properly treat fluorocarbons and airbags. As for ASR, FHI established ART*1 (Automobile shredder residue Recycling promotion Team) jointly with six other automobile manufacturers including Nissan Motor Co., Ltd. Moreover, FHI started project teams to establish internal systems for developing IT systems regarding automobile recycling and managing recycling information and expenses.

*1. ART: Eight companies including FHI, Nissan Motor Co., Ltd., Mitsubishi Motors Corporation, Mazda Motor Corporation, Suzuki Motor Corporation, Isuzu Motors Limited, Nissan Diesel Motor Co., Ltd., and Mitsubishi Fuso Truck and Bus Corporation. (as of March 2004)

Outline of Law on Recycling End-of-Life Vehicles (According to the JARP Web site)



Directive 2000/53/EC of the European Parliament and of the Council on ELVs

This EU directive includes the following five characteristics.

- Prohibition against using substances with environmental impact, in principle
- Charge-free acceptance of ELVs
- Including recyclable ratio in requirements for type certificate
- Issue of dismantling manuals
- Regulation on effective recycling ratio

Subaru responded to this directive in the following ways.

First, we took measures on the three vehicle types, Legacy, Impreza, and Forester, according to the law which prohibits the usage of substances with environmental impact (lead, mercury, cadmium, and hexavalent chromium) in principle for automobiles introduced after July 1, 2003.

Second, we have established a common system with related automobile manufacturers to deal with charge-free acceptance of ELVs. Furthermore, we are using the International Dismantling Information System generally applied in Europe in order to provide information about dismantling manuals for the European market.

Design

Promotion of Design with Recycling in Mind

The Recycling Design Project Team researches easy-to-dismantle parts and vehicles, easily recycled parts structure and materials. They give feedback on the development and design of future vehicles, and prevent ASR from being generated.

Recycling Market Research

The team members continuously visit dismantling companies, shredding companies, and waste disposers in various parts of Japan to exchange views on the current and future market trends for ELV treatment. The results are used to determine the principles for designing automobiles with due consideration for recycling and extract detailed subjects for future research.

Reduction of ASR

ASR includes a huge variety of materials and chemical substances used for manufacturing automobiles, and these materials consist of a complex mix.

Consequently, the team members completely dismantled, disassembled, analyzed vehicles to identify the reasons ASR is generated,and then created the ASR Calculation Guideline for calculating the amount of ASR generated from a vehicle. Next, the Recycling Design Guideline was drafted to prevent the generation of ASR. These guidelines are already utilized for the development of Subaru automobiles.

Improving Recyclability

●Improving the Ease of Detaching Alternators

For the minicar Pleo, we used to remove the headlamp, bumper, and air cleaner before removing the alternator belt, but we made it possible to access the belt without removing any of these for our new minicar, R2. This brought a marked improvement in the ease of detaching alternators.

●Improving the Ease of Disposing Airbags

Airbags and pretensioner belts significantly contribute to reducing the shock to drivers and passengers during accidents. At the same time, the large majority of automobiles are put out of service with unused airbags.

The Law on Recycling End-of-Life Vehicles asks automobile manufacturers to dispose of these airbags, but team members are researching the optimal structure, including related components, for a safer and easier way of activating airbags in automobiles and dismantling inflators.

For example, FHI applied disc type inflators for passenger seat airbags for easier disassembly of inflators.

●Reduction of Fluorocarbons

By 1994, FHI finished changing over from specified fluorocarbon CFC12 to HFC134a, substitute CFCs that do not harm the ozone layer. However, HFC134a is thought to influence global warming. We reduced the amount of HFC134a used by over 10% in both the new Legacy and the new minicar R2, and we are researching substitute refrigerants other than fluorocarbons.

●Improvement in the Ease of Dismantling Wire Harnesses

Most nonferrous metal, such as copper, has already been recycled. However, it is thought that it can be collected more effectively if it can be dismantled before shredding the ELVs. Since wiring harnesses are used in many parts of automobile bodies, FHI is considering a structure that makes it possible to collect more nonferrous metal in a short time.

Experiment of disassembling wiring harnesses

●Easier Material Indication

Most important is that the material in the parts can be seen easily when we recycle. FHI started to indicate the material on plastic parts in 1973 before guidelines of the industry were established. The indication was placed on the back side of the parts, but we solved the problem of confirming the material without dismantling the parts. FHI changed the indication position on the bumpers of all our vehicles.

Now the material can be seen without dismantling the bumpers. (Subaru R2)

An example of the material indication (">PP<": PP means polypropylene.)

Reducing Substances with Environmental Impact

We are committed to curtailing our use of substances that have an environmental impact as soon as possible, not only to reduce the damage to the global environment, but also to remove the need for complicated recycling equipment and operations for end-of-life vehicle treatment. While we are promoting the recycling of parts and materials, we think it is necessary to reduce substances that have an environmental impact.

Introduction of IMDS

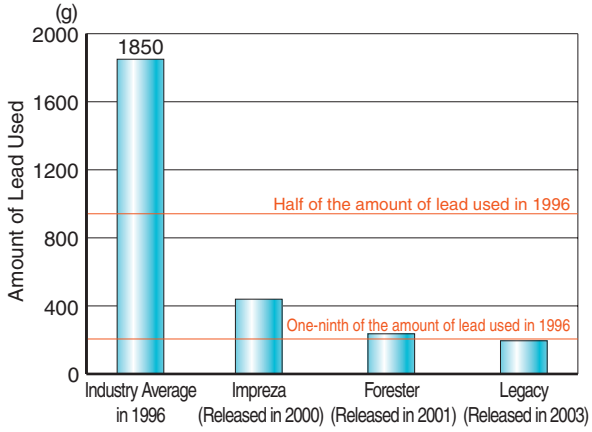
IMDS (International Material Data System) is a database system developed by a European automobile manufacturer to manage substances that have an environmental impact and to be used as data for calculating recyclable ratio. FHI introduced IMDS in 2003 and started to research some types of vehicles.

Reducing the Use of Lead

New model automobiles use no lead in the fuel tank, fuel hose, electrodeposition paint, window glass ceramics (black-tinted area), and wheel balancers. The amount of lead used in the new Legacy in 2003 was reduced to less than one-ninth of the industry average in 1996.

FHI, based on "Reduction of Substances with Environmental Impact –Self-activity by Japan Automobile Manufacturers Association, Inc." (issued by JAMA in December 2002), is promoting the reduction of lead aiming to achieve less than one-tenth in January 2006.

Reduction in Amount of Lead Used



Other Chemical Substances

FHI has worked to reduce its use of chemical substances. Those chemicals targeted for continued reduction are shown in the table below. In addition, the range of such targeted chemicals will be expanded.

Substances Subject to Ongoing Reduction Efforts

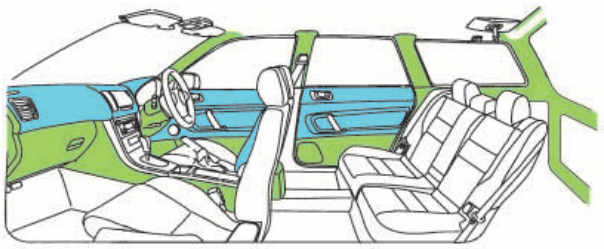
	Substance
1	HCFCs
2	Asbestos
3	Cadmium and its compounds
4	(Hexavalent) Chromium compounds
5	Mercury and its compounds

Production

System for Grade Integration of PP Plastic

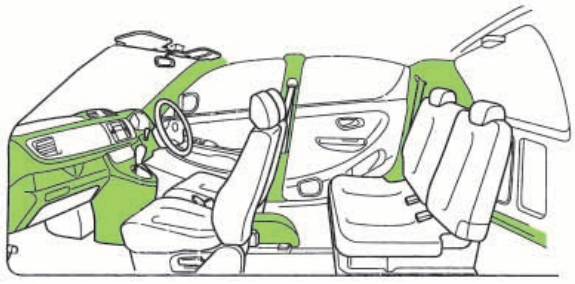
Previously, a great deal of waste was created in our material manufacturing, compounding, and parts mold-processing procedures since we had different mixes of materials depending upon the parts. In order to keep such waste to a minimum, we promoted the integration of materials. Each integrated material for bumpers and interior parts have been applied to most parts of vehicles. We are also going to further improve the efficiency of making plastic materials easier to recycle.

How Integrated Materials for Interior Parts are Used (Legacy)



Green parts: Integrated materials are used in these parts.
Blue parts: Integrated materials are used in decorated base materials.

How Integrated Materials for Interior Parts are Used (R2)



Green parts: Integrated materials are used in these parts.

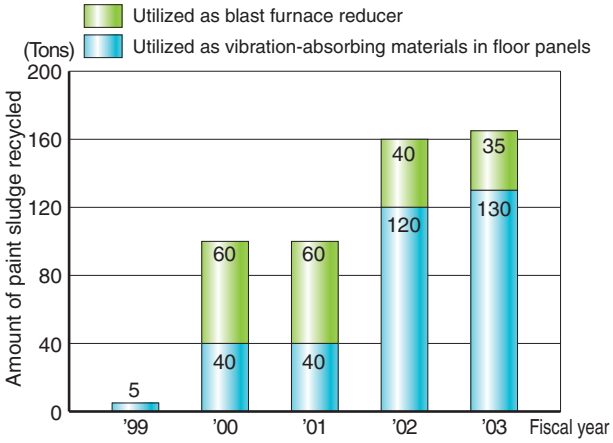
Recycling Waste Materials (Paint Sludge*1)

We found a way of recycling paint sludge given off from the paint factory. We are recycling paint sludge as vibration-absorbing materials in automobile floor panels and as blast furnace reducer. We are also considering recycling it for other uses.

As for recycling of paint sludge, the 2002 Environment Report, “Paint Sludge Recycling Plant” (see p. 30) explains in detail.

*1. Paint sludge: Waste produced during the surfacer and the top coat in the car painting process. (Waste paint that did not adhere to an automobile body)

Amount of Paint Sludge Recycled

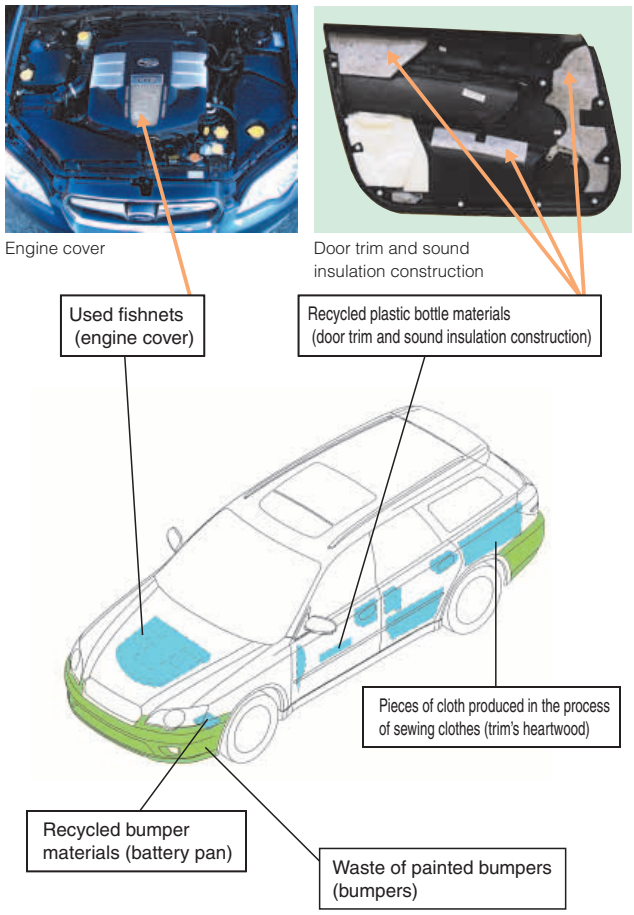


Note: The 2003 Environment Report (p. 35) had fewer figures on the vertical axis, so the values on this graph are the corrected ones.

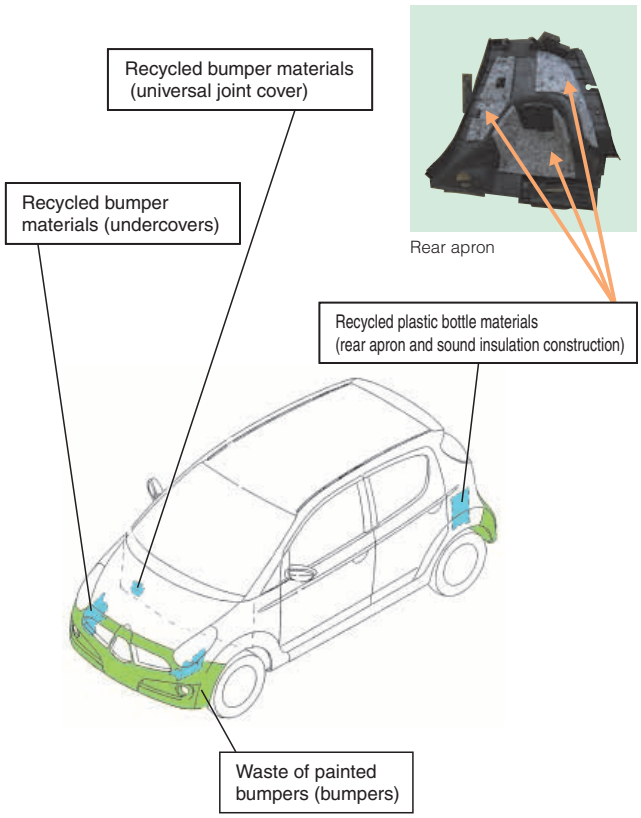
Utilizing Other Industrial Waste

FHI is going to actively utilize recycled materials discharged by industries other than the automobile industry. For waste materials generated in production plants, we are also promoting development of technology so that we can recycle and utilize the waste materials for automobiles, which are going to be produced. For example, we are recycling fishnets made of nylon resin used in the fishing industry as parts (engine covers) for the Legacy.

An Example of Utilizing Recycled Materials in the New Legacy



An Example of Utilizing Recycled Materials in the New Minicar R2



Sales and Services

Environmental Efforts of Subaru Dealers

FHI is working on environmental issues with Subaru dealers as the Subaru team. The Subaru team is sharing the following goals with all Subaru dealers.

- Comply with environmental laws and regulations, etc., and further contribute to the environment of the local community.
- Continue to improve the environmental management systems to create environment-friendly dealers.

In order to promote these activities, each Subaru dealer has a person in charge of promotion and the secretariat in charge of promotion. In December 2003, people in charge of promotion from all Subaru dealers got together to share information.

Since the Law on Recycling End-of-Life Vehicles is going to be enforced in the near future, FHI has been preparing so that Subaru dealers will not delay in dealing with the law by explaining the requirements at dealers' meetings and encouraging them to attend the explanatory meetings held by the Japanese government and groups concerned.

Subaru dealers' meeting for people in charge of the promotion of environmental activities (December 2003)

Iwate Subaru Inc. Acquired ISO 14001 Certification

Iwate Subaru Inc. acquired ISO 14001 certification at its headquarters, (sales, service, used car, and administrative department etc.) in March 2004. The company has a policy for environmental activities that "we make efforts to realize a safe, affluent society where people and automobiles are in good harmony" and implements corporate activities with priority for environmental issues.

Headquarters of Iwate Subaru Inc.

Note: Chiba Subaru Inc. already acquired ISO 14001 certification in fiscal year 2002, the first among Subaru dealers.

Subaru Fukuoka PDI Center Established

Subaru Fukuoka PDI Center, which started operations in August 2003, is a place where new Subaru cars dealt by seven Subaru dealers in Kyushu are maintained before delivery. City water is used for the automatic car wash, but the discharged water is collected and 90% of it is recycled after separating oil and water by precipitating and passing through a filter.

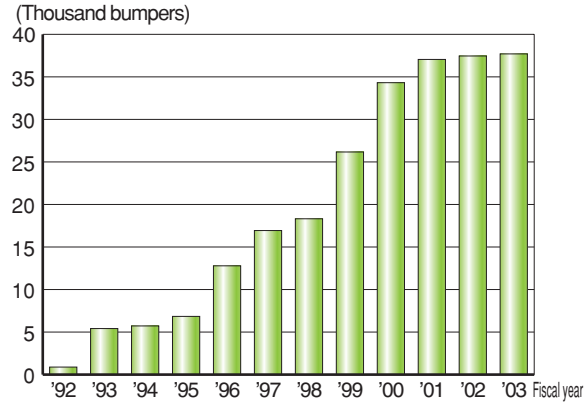
Discharged water recycling device (Subaru Fukuoka PDI Center)

Disposal

FHI established an in-house system in 1973 to identify the materials used in plastic parts, ahead of the timetable for industry guidelines for the establishment of such systems. This system is very helpful when the company collects scrapped bumpers to recycle for use in other parts of vehicles. In fiscal 2003, we collected 37,700 scrapped bumpers from all over Japan, which is a 1% increase from the previous year.

The scrapped bumpers were recycled for use in other parts of Subaru as shown in the chart below.

Progress Made in Scrapped Bumper Collection



Parts Produced from Scrapped Bumpers

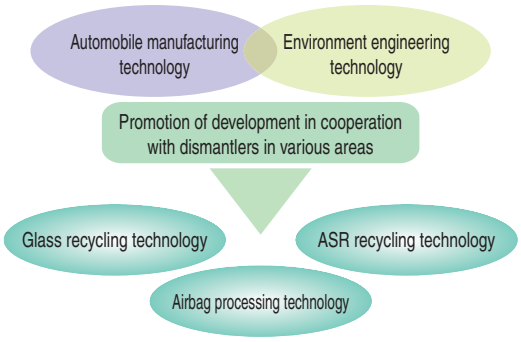
Model	Part
Legacy	Trim apron
	Battery pan
Impreza	Trim apron
	Rear gate trim
	Trunk trim
	Rear shelf
R2	Undercover
	Cover UJ
Pleo	Undercover
Sambar	Undercover
	Air guide

Disposal of End-of-Life Vehicles

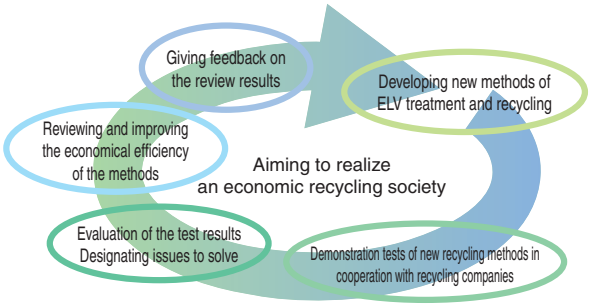
FHI is working with companies that process end-of-life vehicles to conduct research and development for the improvement of recycling processes. The results of joint development are made public in order to contribute to the realization of a recycling-oriented society. Of course, these automobile manufacturing processes are reflected in the next-generation automobiles currently in the development stages.

We are also a manufacturer that develops and sells recycling machines, as well as being an automobile manufacturer. We will continue to make a strong effort to develop more effective system in the field of automobile recycling technology. The main technologies we are working on include one for preventing noise when the airbags activate in vehicles, one for recycling auto window glass, and one for recycling ASR.

We are contributing to the coming recycling society by taking advantage of our technology.



In order to avoid a self-satisfied way of thinking, we aim to achieve the best recycling methods by making evaluations in cooperation with other recycling companies.



Airbag Activation in Vehicles

FHI is working toward the handling of airbags without dismantling. When airbags are activated in vehicles, noise of more than 100 decibels is usually created, which is equivalent to the sound of jet airplanes during takeoff. In order to protect the environment around the treatment plant and improve the working environment, we are developing a sound arrester.

To prevent the noise from leaking outside, a sound arresting sheet divided into seven parts for workability is glued with a rubber belt and made to cover a vehicle. The materials for the sound arresting sheet generally include lead, but FHI uses high-strength polyester for workability and recycling after use.

Airbag activation in vehicles

When sound arresting sheets are installed

Developing Auto Window Glass Recycling Technology

Most of the automobile shredder residue from scrapped automobiles is landfilled, but FHI believes that removing and recycling auto window glass, which currently accounts for approximately 20% of the shredder residue, will contribute greatly to waste reduction and bring certain advantages. In fiscal 2003, we collected about 78 tons of laminated windshield and door glass, and conducted experiments with higher accuracy than the previous year when we collected about 45 tons, in order to make materials for glass products.

FHI is also improving and developing tools for collecting glass and removing the plastic middle coat of laminated glass, which are essential for recycling, while considering a better method for collecting glass.

At present, we are working on an economical recycling system with the companies listed below. We will conduct joint studies with these dismantling companies, industrial tool manufacturers, and glass product manufacturers.

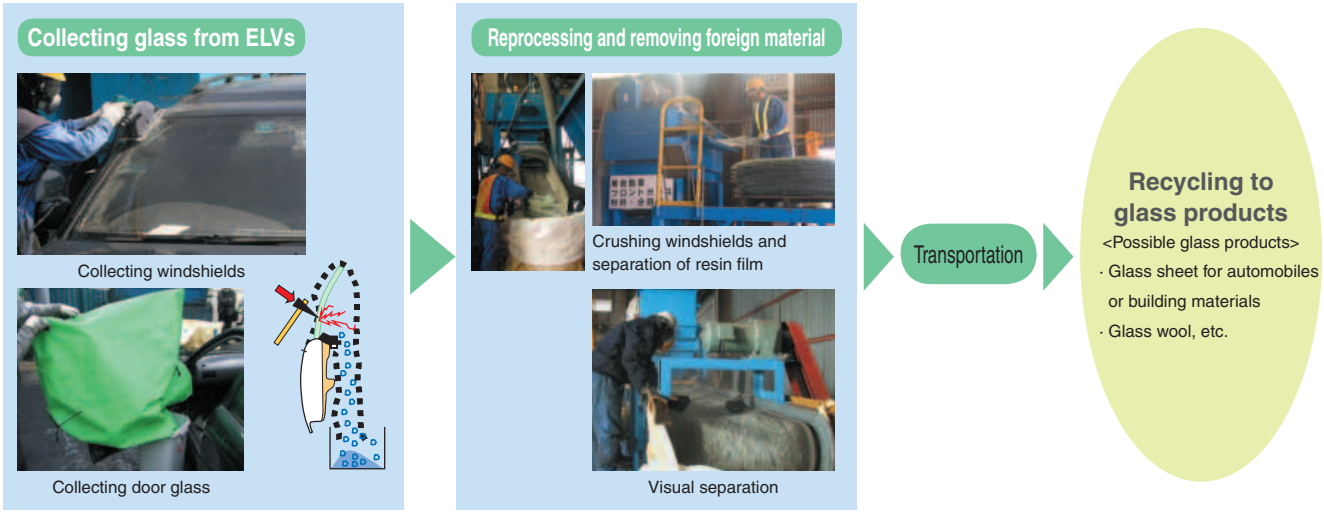
Dismantling Companies

Company Name	Location
Car Steel Co., Ltd	Maebashi City, Gunma
Nagano Automobile Recycling Center Co-op	Tobu Town, Nagano
Ibajihan Recycling Center Co., Ltd.	Minori Town, Ibaraki
Tsuruoka Co., Ltd.	Oyama City, Tochigi
Metal Recycling Co., Ltd.	Kawashima Town, Saitama
Showa Metal	Koshigaya City, Saitama
Keiaisha Co., Ltd.	Yokohama City, Kanagawa
Renaissance Co., Ltd.	Kimitsu City, Chiba
Nippon Auto Recycle Co., Ltd.	Toyama City, Toyama
Sanomaruka Co.	Fujinomiya City, Shizuoka
Mitsui Bussan Raw Materials Development Co.	Sakai City, Osaka
Shinsei Co., Ltd.	Minamikawachi-Gun, Osaka

Tool Manufacturers

Company Name	Location
Makita Corporation	Anjo City, Aichi
Lobtex Co., Ltd.	Higashi-Osaka City, Osaka

Glass Recycling Process



Developing ASR Recycling Technology

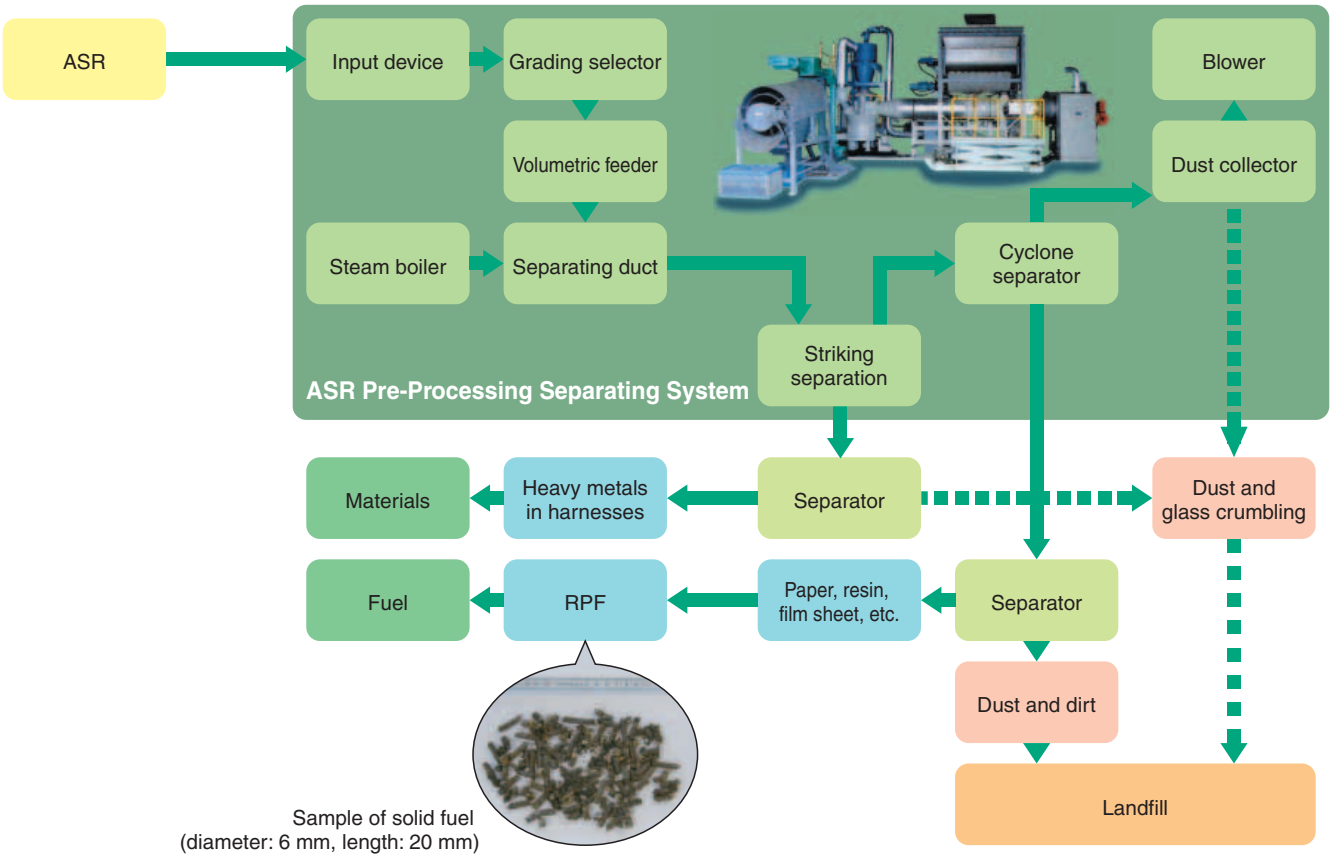
FHI is endeavoring to recycle shredder dust using the small, low-cost ASR Pre-Processing Separating System, which was developed and made practicable last year. We are developing technology for making solid fuel from light substances such as polyurethane foam, plastic and fiber, and for improving the heat efficiency of thermal recycling and security by effective cleaning and dust removal of the overheated steam used for separation.

Effects of Cleaning and Dust Removing of the Overheated Steam Used for ASR Separation

(Unit: mg/g, ICP analysis)

Substances measured	Amount included before separation	Amount included after separation	Amount removed	Removing ratio(%)
Natrium [Na]	0.48	0.20	0.28	53.8
Copper [Cu]	0.11	0.04	0.07	63.6
Zinc [Zn]	8.40	3.27	5.13	61.1
Iron [Fe]	7.49	2.12	5.37	71.7
Aluminum [Al]	1.13	0.37	0.76	67.3
Lead [Pb]	0.025	0.015	0.01	40.0

ASR Treatment Flow Chart



Logistics

FHI is working to improve transportation efficiency, reduce packaging materials, and promote recycling, as well as reduce the environmental impact in all areas of logistics, including the transportation of completed automobiles, service parts, and overseas knockdown parts. The transportation of completed automobiles is mainly done by Subaru Physical Distribution Company, one of our affiliates, and the shipping of parts assembled in overseas plants is done by Subaru K.D. Logistics Co., Ltd., which is also one of our affiliates.

Reducing Environmental Impact of Transportation of Completed Automobiles

(Subaru Physical Distribution Company)

Subaru Physical Distribution Company transports completed automobiles and parts, and inspects automobiles before delivery. "Care for the Global Environment" is one of its operational issues. The company acquired ISO 14001 certification in February 2004.

The company is promoting activities for energy saving and improving the quality of logistics in collaboration with Subaru transportation companies. Subaru transportation companies perform energy-saving activities from the sides of management and practice by means of controlling drive by operation reports, as well as actively working on energy-saving driving, stopping idling, and automobile maintenance.

Training for Energy-Saving Driving

In November 2003, the training for energy-saving driving was provided to 20 drivers from 12 companies under the joint sponsorship of Subaru transportation companies, Subaru Physical Distribution Company, and related manufacturers. After listening to an explanation about techniques for energy-saving driving, the participants practiced under the direction of instructors. Participants were told that energy-saving driving prevents traffic accidents, protects the global environment, and reduces costs.

Training for energy-saving driving

Joint Transportation

Joint transportation with other transportation companies reduces the number of trucks used. In fiscal 2003, the number of automobiles transported by other companies increased by 12% compared with the previous year.

Reducing Environmental Impact of Transportation of Service Parts

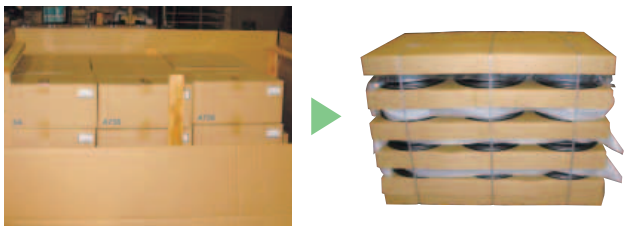
(Subaru Parts Center)

Reducing CO_2 Emissions by Changing Transportation Methods

The Subaru Parts Center reduced CO_2 emission by changing the mode of transportation of repair parts to the Hokkaido region from ship to train, and to the Kyushu region from truck to train.

Reducing the Amount of Packaging Materials by Changing Packaging Specifications

The Subaru Parts Center improved the packaging specifications for disc wheels to be shipped to foreign countries and eliminated 2,270 kg of cardboard boxes for packaging.



Disc wheel packaging before the action　　Disc wheel packaging after the action

Wooden boxes for engines and transmissions were changed to cardboard boxes and 7,860kg of wood was saved.

Before the action (wooden boxes)　　After the action (cardboard boxes)

Expansion of Reuse of Cardboard Boxes

Cardboard boxes for small parts are used repeatedly by Subaru dealers in regions where exclusive trucks deliver them. The number of dealers that reuse cardboard boxes increased.

Reducing Packaging Materials for Overseas Knockdown Parts

(Subaru K.D. Logistics, Co., Ltd.)

Changing Packaging Materials to Recyclable Ones

Cushioning materials (foam materials) for precision parts used to be buried in landfills. Subaru K.D. Logistics Co., Ltd., changed the cushioning materials for packaging large engine parts, such as engine cylinder blocks, cylinder heads and crankshafts, into recyclable ones and started recycling.

Reducing Rustproof Sheets and Dehumidifying Materials

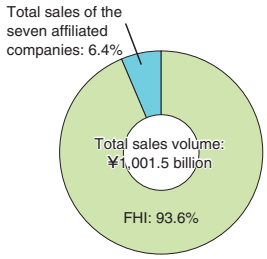
Since engine parts easily get rust, rustproof sheets and dehumidifying materials are used. Subaru Logistics tries to reduce these materials to the extent possible by repeatedly conducting antirust examinations.

Activities of Affiliated Companies —Domestic Companies—

Domestic Affiliated Company Subcommittee

FHI periodically convenes an Environmental Problems Meeting with seven of our affiliated companies*1 (excluding Subaru dealers) that have significant environmental impacts in their manufacturing or transport businesses as the Domestic Affiliated Company Subcommittee in the Production Environment Committee, one of the subcommittees in the FHI Corporate Environment Committee. We guide and support establishment of each company's environmental management system to reduce the environmental impact, which has brought results such as waste reduction and energy saving.

Sales Volume Breakdow



Greeting by Mr. Arasawa, executive vice president and chairman of Corporate Environment Committee

Environmental Problems Meeting held at Kiryu Industrial Co., Ltd. (February 2004)

These meetings have been held in the respective affiliated companies. The employees of other companies can learn from each other through presentations about each company's environmental preservation activities and see their plants. Meetings were held at Fuji Robin Industries Ltd. in June 2003; Subaru Physical Distribution Company and Subaru K.D. Logistic Co., Ltd., in September; Yusoki Kogyo K.K. in November; and Kiryu Industrial Co., Ltd., in February 2004, which means that the meetings have been held in all participating companies.

In April 2004, FHI had a liaison meeting with four relatively large affiliated companies, which were not related to manufacturing, and started working on environmental preservation activities as a group.

Meeting held in Yusoki Kogyo K.K. (November 2003)

Plant tour in Yusoki Kogyo K.K.

Acquiring ISO 14001 Certification

In fiscal 2003, Subaru Physical Distribution Company and Ichitan Co., Ltd., acquired ISO 14001 certification. This means four out of seven companies in the Domestic Affiliated Company Subcommittee have already obtained ISO 14001 certification and the rest of the companies are working to acquire ISO 14001 in fiscal 2004.

An Example of Activities by Affiliated Companies (Ichitan Co., Ltd.)

Ichitan Co., Ltd., is a forging manufacturer whose processing field includes hot forging, cold forging, hot-cold forging, and machine processing. In order to respond to increasing public concern for environmental issues, the company decided to play an active role in global environmental conservation and improvement of the environment in plants in October 2001.

Ichitan Co., Ltd.

The company acquired ISO 14001 certification in March 2004 and is now working on continuous improvement of environmental conservation activities including energy savings and zero emissions through four section meetings. The plant uses a huge amount of energy to heat steel products to about 1,250 degrees Celsius in the hot forging process. Heat consumption per production goals were set up for each press line, and all employees are working on energy saving activities. In the largest 4,500-ton press line, the company reduced the amount of electricity use by 10% compared with the previous year by reviewing heating conditions and by reducing facility shutdown due to problems. This is almost equivalent to the amount of electricity used in 200 homes every month.

Ex-waste station transformed into green space

Also, the company changed the location of the waste station, which used to be in the back of plants, and set up waste carriages that were directly linked to each workplace. This enabled easier transportation of waste and created green space, eventually contributing to environmental conservation. Based on the net navigation system possessed by the membership of professional institutions, the new environmental management system of Ichitan Co., Ltd., is rational and effective, including environmental education on the Net.

*1. Seven affiliated companies related to manufacturing and transportation
Yusoki Kogyo K.K.: Manufacture and sales of trailers, crane trucks, construction materials, and automobile parts
Fuji Robin Industries Ltd.: Manufacture, service, and sales of agricultural/forestry equipment, engines, and fire pumps
Fuji Machinery Co., Ltd.: Manufacture and sales of automobile parts, industrial machinery, and agricultural transmissions
Ichitan Co., Ltd.: Manufacture and sales of forged parts for automobiles and industrial machinery
Kiryu Industrial Co., Ltd.: Manufacture of Subaru specially equipped automobiles and logistics control of Subaru automobile parts
Subaru Physical Distribution Company: Shipping and land freight for automobiles and their parts
Subaru K.D. Logistic Co., Ltd.: Packaging and delivery of production machinery and parts for overseas

Actual Achievements of Seven Affiliated Companies in Fiscal 2003

Environmental Accounting and Environmental Performances

As for waste reduction, energy savings and reduction of CO_2 emissions, the environmental costs were reduced by about 10% compared to the previous year, and the environmental impact was also steadily reduced, which we believe is a good trend. The environmental costs were reduced by about 4% including prevention of pollution costs throughout the entire production stage. The amount of PRTR chemical substances used increased mainly due to increase in the amount of paints used for the growing production of trailers (51% increase compared with the previous year) at Yusoki Kogyo K.K. We are going to make efforts to reduce these substances.

(Actual achievements in fiscal 2003, from April 2003 to March 2004, were calculated based on the FHI's Environmental Accounting Guidelines. See p. 13–14 regarding FHI's environmental accounting.)

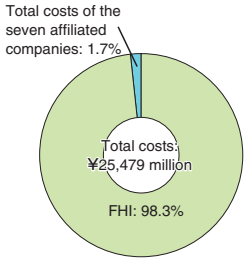
Environmental costs				Economic effects		
	Cost category Text in the [ ] is a cost category in "Guidelines by Ministry of Environment"*1	Amount (¥ million) Fiscal 2003	Amount (¥ million) Fiscal 2002	Details	Amount (¥ million) Fiscal 2003	Amount (¥ million) Fiscal 2002
Costs for reducing environmental impacts (production stage)	Waste treatment and recycling, waste reduction [①-3]	129	140	Reduced costs through waste control and treatment methods changes, profit from the sales of materials obtained from recycling	132	96
	Energy conservation, CO_2 emissions reduction [①-2]	33	37	Reduced energy costs	9	29
	Pollution control such as wastewater and exhaust gas treatment [①-1]	85	79	Reduced costs from replacing cleaning agents (chemical agents)	0	0
	Total costs to reduce environmental impacts	247	256	Total savings from environmental impact reduction effects	141	125
Investment costs	Education, ISO 14001 related matters, investigation, and others [③]	61	64	–	–	–
	Product research and development [④]	110	112			
	Total investment costs	171	176	(Total investment effects) N/A for the time being	0	0
Other costs	Cost increment for material changes, measures for end-of-life products, social contribution, environmental measures, and others [②⑤⑥⑦]	18	41	Reduced costs by changing raw materials Virgin material procurement costs reduced by using recycled materials	0	0
	Total other costs	18	41		0	0
Total cost		436	472	Total other effects	141	125

Environmental performance (quantitative effects)			
Category	Unit	Fiscal 2003	Fiscal 2002
Total amount generated	ton	12,787	14,692
Amount of waste generated	ton	914	1,307
Amount of landfill	ton	374	401
Amount of energy used (crude oil equivalent)	KL	17,857	18,562
Energy consumption per production	KL/¥100 million	36.91	43.48
CO_2 emissions	ton	30,271	31,548
PRTR chemicals*2			
Amount handled	ton	150	131
Amount released and transferred	ton	89	70

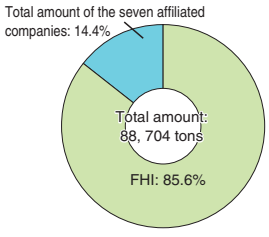
*1. Cost categories in "Guidelines by Ministry of Environment"
① Business area costs
①-1 Pollution control cost
①-2 Global environmental conservation cost
①-3 Resource circulation cost
② Upstream and downstream cost
③ Management activity cost
④ Research and development cost
⑤ Social activity cost
⑥ Environmental damage cost
⑦ Other costs

*2. PRTR chemical: Only amounts exceeding one ton a year were calculated (exceeding 0.5 tons a year for Specified Class 1 Designated Chemical Substances).

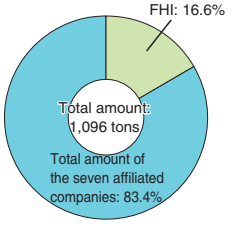
Environmental Cost



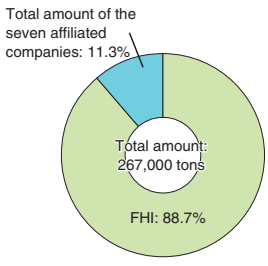
Total Amount Generated including Waste



Amount of Waste Generated



Amount of CO_2 Emitted

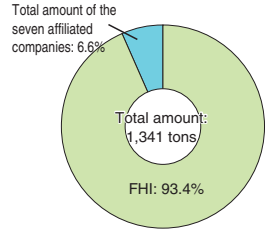


PRTR

Substances marked with ✻ are Specified Class 1 Designated Chemical Substances. (Unit: Tons per year)

Code	CAS No.	Name	Fiscal 2003 Amount handled	Fiscal 2003 Amount released	Fiscal 2003 Amount transferred
40	100-41-4	Ethylbenzene	6.39	3.53	0.07
63	1330-20-7	Xylene	61.89	35.64	0.92
68	103-23-1	Chromium(III) compounds	3.21	0.64	2.57
69*	none	Chromium(VI) compounds	4.45	0	0
227	108-88-3	Toluene	72.89	44.28	1.27
299*	71-43-2	Benzene	0.93	0	0
Total			149.76	84.09	4.83

Amount of PRTR Chemical Substances Released and Transferred



Note: Only amounts handled in each company subject to the PRTR Law and exceeding one ton a year were calculated (exceeding 0.5 tons a year for Specified Class 1 Designated Chemical Substances).

Activities by Affiliated Companies — Overseas Companies —

FHI and five affiliated companies in North America (SIA, SOA, RMI, SCI, SRD)*1 established the North American Environment Committee (current chairman: Mr. Oikawa, president of SIA) under the Corporate Environment Committee and held the first meeting at SIA in June 2003 with attendance of Mr. Hanada, senior executive vice president and chairman of the Corporate Environment Committee at that time. Since then, we have had meetings in October 2003 (second meeting) and February 2004 (third meeting) and started global environmental efforts such as reporting environmental conservation activities at each company and discussing future plans. The third committee meeting was held with Mr. Arasawa, executive vice president and chairman of the Corporate Environment Committee.

RMI has endeavored to construct its environmental management system just after the establishment of the North American Environmental Committee and obtained ISO 14001 certification in November 2003.

*1. SIA: Subaru of Indiana Automotive, Inc.
SOA: Subaru of America, Inc.
RMI: Robin Manufacturing U.S.A., Inc.
SCI: Subaru Canada, Inc.
SRD: Subaru Research and Development, Inc.
See p. 5 for locations and other information about these companies.

The third meeting of the North American Environment Committee (at SIA in February 2004)

Mr. Arasawa, executive vice president, attending the meeting of NAEC (listening to explanation of a plaque, which was presented to SIA when they got the award related to environmental activities)

Activities of SIA

SIA is a production base of Subaru automobiles in the United States and acquired ISO 14001 certification in 1998.

SIA also implements activities in consideration of natural environment in its factory. In 2002, the company was designated a Wildlife Habitat by participating in the Backyard Wildlife Habitat Program*2 sponsored by the National Wildlife Federation. The federation appreciates that the environment in the SIA factory contributes to the protection of wildlife such as wild birds.

*2. Backyard Wildlife Habitat Program: A program for households and companies promoted by the National Wildlife Federation. It encourages the environmental design of residential or business areas, which provides wildlife with places where they can feed and get water; thereby achieving an environment where human beings and wildlife can live together.

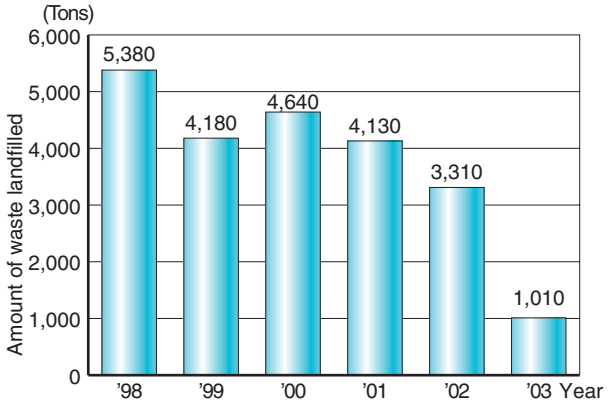
SIA (production base of Subaru automobiles)

Environmental Performances of SIA

Trends in Amount of Waste Landfilled

SIA has been conducting continuous recycling activities such as separation of waste. In 2003, a large amount of waste landfill was reduced by starting the recycling of paint sludge. (See p. 49 for details of paint sludge recycling)

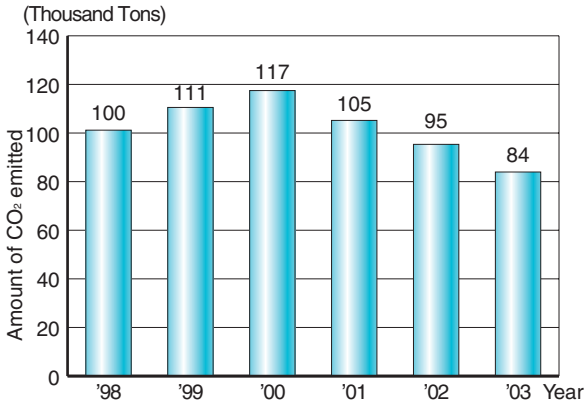
Trends in Amount of Waste Landfilled in SIA



Trends in Amount of CO_2 Emitted

SIA has conducted meticulous energy-saving activities such as reducing the number of lights in walkways. Furthermore, it has reduced the amount of CO_2 emitted by optimizing the operating hours of driers for paint sludge.

Trends in Amount of CO_2 Emitted in SIA



Activities to Reduce Waste

Paint Sludge Recycling

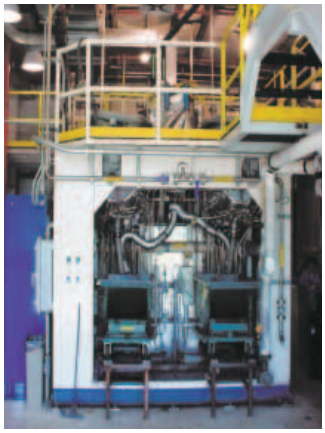
Paint sludge generated in the process of painting is generally landfilled, but SIA recycles it instead of burying it in landfills. Generated paint sludge is moved to the vendor to be dried and mixed with plastic and is then recycled as parking lot bumpers and guard rail block absorbers. Through recycling, SIA has prevented 709 tons of paint sludge from being disposed of in a landfill in 2003.

Parking lot bumpers made from recycled paint sludge

Recycling of Solvent

Solvent used in the process of painting is processed and recycled with a solvent recycling unit. This unit collects used solvent in a pot, separates the solvent from paints and foreign particulates by heating and vaporizing, and cools it into liquid to reproduce solvent ready for use. SIA is one of the few, unique companies in the United States which own this system.

The closed loop recovery unit eliminates any chance for fugitive emissions to escape while handling and transferring the solvent. SIA began using this system in 2002 and recycled 305 tons of solvent in 2003.



Solvent recycling unit

SIA received the Governor's Award for Environmental Excellence in Indiana

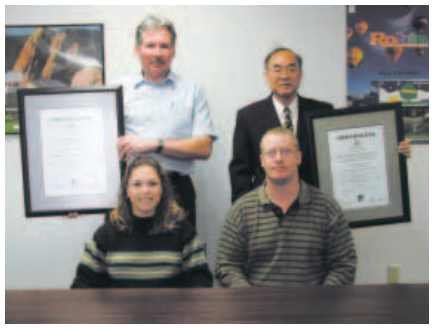
SIA received the Governor's Award for Environmental Excellence 2003 for Recycle and Reuse from the Indiana Department of Environmental Management. The state government of Indiana appreciated the fact that SIA contributed to a reduction in the amount of landfill by recycling about 87% of waste (55,000 tons) generated within the company from 2001 to 2002.

Mr. Kernan, governor of Indiana (center) and SIA staff responsible for the environment

Activities of RMI

RMI assembles multipurpose engines, ATV engines and processes parts. RMI acquired ISO 14001 certification in November 2003.

Staff worked to acquire ISO 14001 certification (right in the second line: Mr. Toda, president of RMI)



Energy Saving Activities by Improving Thermal Protection System on the Roof

RMI installed thermal protection layers, which is about 2 inches thick and coated white, on the thermal protection materials of the plants' roof. The thermal protection layers keep the building cool in the summer and reduce the amount of gas consumed for heaters in the winter. It is expected that this improvement will reduce 15% of gas consumed at RMI.

Installing the 2-inch thick thermal protection layers on the roof

Introduction of Returnable Cardboard Boxes

Cardboard boxes used for packaging of knockdown parts sent from Japan were changed into returnable boxes. Also, RMI started using returnable pallets as well as changing wall surfaces, partitions, and inner sheets of the box into reusable plastic.

Returnable cardboard box

Returnable pallet (wall surfaces can be used repeatedly)

Activities of SOA

SOA is a sales base for Subaru automobiles in the United States. SOA and the Subaru of America Foundation have been working on social contribution activities on environmental issues.

Wall Painting in Camden City, New Jersey

The picture below is a mural called "I Saw a City Invincible" in Camden City, New Jersey. Cesar Viveros, a mural painter, painted it for a project of the Perkins Center for the Arts. Landscaping activities such as creating wall painting works in selected sites are conducted in Camden City every year. Another new wall painting was finished in 2003 with the financial support of the Subaru of America Foundation.

Wall Painting in Camden City

Green Reach Activity

Green Reach is an outreach program of Denver Botanic Gardens (Denver, Colorado). It encompasses three programs: Cultivation Cruiser, Growing Classroom, and Wintergreen. The Cultivation Cruiser outreach program is geared toward grades K–12 and is sponsored by SOA. The program is offered free of charge to schools in the Denver Metro area and offers hands-on learning, discussions, and planting activities to teach students a particular theme and green activities. Since its inception in February 2002, more than 500 classroom visits have been made, reaching more than 11,000 students.

Subaru automobiles for social contribution activities of the Denver Botanical Garden

Activities of SCI

SCI is a sales base for Subaru automobiles in Canada. The company started rebuilding engines and automatic transmissions in 1996, and has promoted recycling of resources and cost reduction. Rebuilt transmissions used to be transported in wooden crates, but the crates could be used only once or twice. Then, SCI chose plastic containers which can be used twenty to twenty-five times and consequently reduced the amount of scrapped wooden crates. SCI is now developing plastic containers for rebuilt engines that will be made practicable soon.

Introduced containers for rebuilt transmissions

Activities of SRD

SRD is a research base for Subaru automobiles in the United States. SRD set up goals of 2003 environmental activities, and worked on improvement in the recycling ratio and reduction of landfills by further separating waste, optimizing preset temperatures for air conditioners in the office, and reducing energy used by reviewing exhaust emission measuring devices. As a result, SRD successfully reduced the total amount of waste from 7.1 tons to 1.8 tons.

Mugs are used instead of paper cups to reduce waste.

II Social Report

Compliance

In order to become a company trusted and supported by society, FHI makes group-wide efforts to ensure compliance with laws and regulations. Our basic compliance policy is provided for by the Compliance Regulations, as follows.

We regard corporate compliance as one of the most important tasks for management. We strongly recognize that our company-wide efforts toward regulatory compliance make for a solid management foundation, and therefore, we carry out open and fair corporate activities in compliance with social norms, as well as all laws and regulatory requirements and internal regulations for corporate activities.

Basic Concepts

Corporate Code of Conduct/Conduct Guidelines

FHI has established the Corporate Code of Conduct (see p. 7) and Conduct Guidelines (23 items in total) as the standards to ensure compliance with laws and regulations. These are described in detail in the Compliance Manual, which all company officials and employees carry, in order to ensure legal and regulatory compliance in their daily actions.

Compliance Manual

Compliance Declaration

In May 2003, FHI President, Kyoji Takenaka issued a message titled “Toward further enhancement of company-wide compliance activities.” In the message, he declared that he would take the initiative to ensure that he and all employees will comply with laws and regulations in order that FHI will continuously grow to become a company trusted by society.

Organization and Operation

Compliance Regulations

FHI established the Compliance Regulations in 2001. These regulations contain basic compliance policies, which provide for the system, organization, and operational methods related to corporate compliance. The Compliance Regulations are established with the approval of the Board of Directors.

FHI’s Compliance System/Organization and Operation

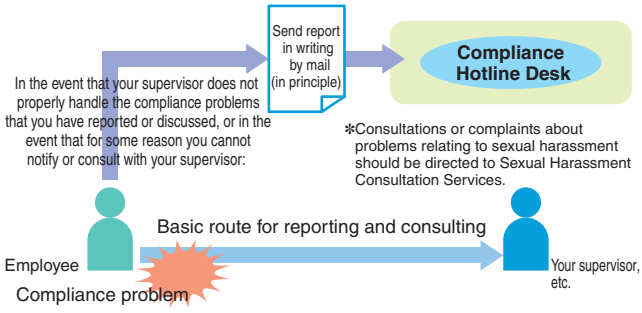
A Compliance Committee has been established as a company-wide committee organization to promote corporate compliance. The committee conducts deliberations and discussions, renders determinations, and exchanges information on key compliance issues. The director responsible for the legal affairs department serves as chairperson

of the committee, and the committee members are officials responsible for management of the respective departments. Every year, each department devises a compliance implementation plan (Compliance Program) to enhance corporate compliance, and takes the initiative to advance continuous and systematic implementation activities.

Compliance Hotline System

In February 2003, FHI established the Compliance Hotline System as a bypass communication route, providing employees with a direct route for reporting any detected problems with compliance. Within organizations, the basic flow for reporting, communications, and consultations is supposed to be from the bottom up. However, if the communication flow does not work well under some circumstances, the Hotline System can be used as a supplementary communication route. The Compliance Hotline Desk that is set up in the company receives the report directly from the employee, and investigates and handles the matter. The name and department of the employee who reported the matter are processed with strict confidentiality, unless the employee agrees otherwise. Due consideration is given to ensure that the employee does not suffer any disadvantage by reporting compliance problems.

Compliance Hotline



Fiscal 2003 Results of Activities

Examples of FHI Efforts to Ensure Corporate Compliance

Providing Compliance Education and Training Programs

Compliance education and training must be provided continuously and systematically so that each official and employee maintains a high level of awareness of compliance and ensures compliance with laws and regulations in his or her daily actions.

Again in fiscal 2003, we offered to each level and department educational training for compliance and an education program of legal practice, through a variety of educational courses organized by our legal department and personnel/training department. More than 3,700 officials and employees in group companies took these courses throughout the year. In addition, as voluntary activities for each department, we provided further practical training tailored to the actual work of each department, such as courses on the labor laws, the antimonopoly act, and tax and accounting rules.

Training program

Providing Compliance Information/Education Activities

Our legal department, environmental department, and personnel department actively distribute a wide variety of information to help raise awareness of corporate compliance. Such information includes an explanation of laws and rules and information on revised rules, as well as examples of incidents and accidents involving corporate ethics either within or outside the company. In fiscal 2003, we continued to provide information via company newsletters and our intranet, and introduced more accessible compliance information and more practical information on revised laws.

Development and Distribution of Compliance Education Tools

As a new compliance promotion tool, we compiled a book by choosing issues that must be handled carefully, issues requiring difficult judgment, and matters that you should be aware of as an individual and as an employee in your everyday work situation. This booklet, titled 100 Cases of Compliance Issues, presents questions and answers for cases that could be happening around you. These booklets were distributed to all officials and employees of the group companies. The 100 cases have been introduced to companies outside our companies, in order to make a contribution to raising awareness of compliance with laws and regulations in society.

100 Cases of Compliance Issues

Compliance with Antimonopoly Act

The revised version of our Antimonopoly Act Compliance Manual was issued and explained to all employees. This manual, which was issued for the first time in 1991, provides an explanation of the antimonopoly act and instructions for business operations. With regard to the Act against Delay in Payment of Subcontracts, which was revised in April 2004, we reported the revised details to all employees and prepared to ensure compliance with the act.

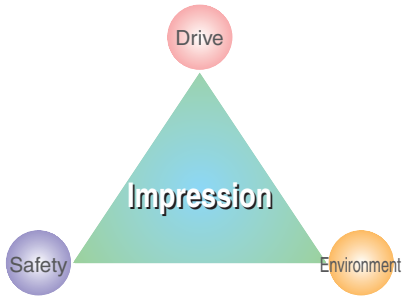
Activities toward Group Compliance

In order to ensure compliance with laws and regulations, FHI and affiliated companies and dealers must make systematic, group-wide efforts. FHI offers group companies assistance and guidance to proceed with compliance activities. For example, we send our employees as trainers for compliance training to each company, and prepare and provide handbooks and textbooks. Thus, FHI group companies make group-wide efforts to ensure compliance with laws and regulations.

Relationship with Customers

Developing Safe Automobiles

Subaru's Development Philosophy



High-level integration of "drive," "safety," and "environment" will create a product that will touch your heart.

Policy of Developing Safe Automobiles

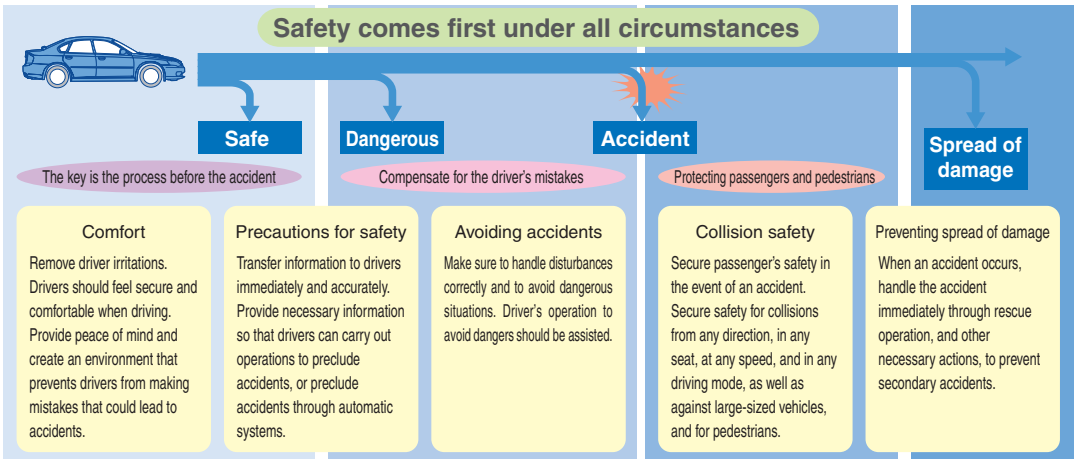
When developing automobiles, Subaru makes safety number one on our priority list. On the basis of our philosophy, "Think. Fee. Drive." we aim to succeed in developing human-friendly cars. Subaru has established its own safety standards based on our policies:1) active adjustment to the social environment, 2) investigation of accidents and customer needs, and 3) pursuit of state-of-the-art safety technologies. With these policies, we approach development of safety systems from both the standpoint of active safety to avoid accidents and the standpoint of passive safety to minimize damage.

Pursuing the Development of Safe Automobiles

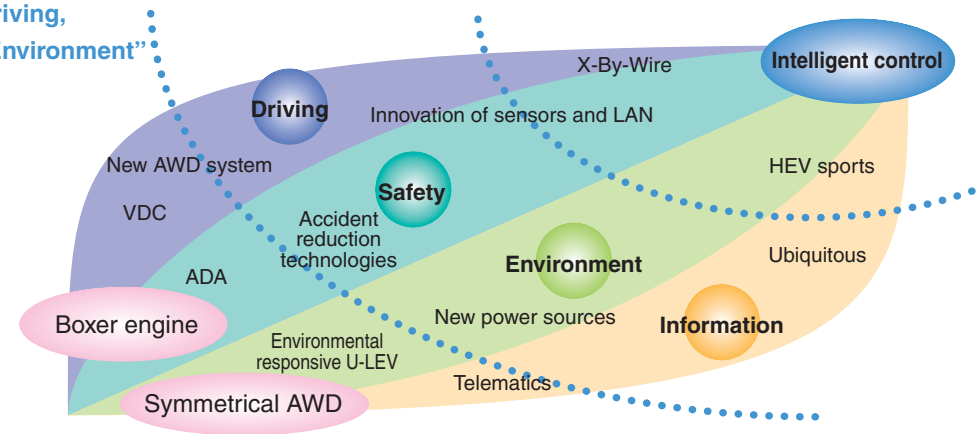
With the concept of "active driving, active safety," Subaru has been advancing high-performance AWD that can provide drivers with safe, comfortable, and fun driving on any road. With our belief that attaining ideal driving dynamics will lead to safety, Subaru has developed passive safety technologies to ensure safety in the event of an accident, as well as sophisticated active safety technologies to prevent accidents.

With its state-of-the-art technologies, Subaru is pursuing development of automobiles, aimed at enhancing total safety performance through working on both environmental conservation and safety issues.

Subaru's Concepts of Safety



"Subarus' Driving, Safety, and Environment" Road map



Active Safety

Subaru values driving dynamics, not simply because we want to drive faster, but because we aim to improve the driver's ability to avoid accidents and preclude accidents by improving on our automobile's basic performance: drive, turn, and stop. With our own technologies, such as ADA, Subaru is working to develop systems that will contribute to reducing accidents, through which the automobile warns the driver to watch out for imminent danger. Thus, Subaru offers performance called "safety" to our customers, through our continued efforts to improve the basic performance of automobiles and through active pursuit of advanced technologies.

●Subaru ADA*1

The Subaru ADA, an integrated system consisting of a stereo camera and a millimeter wave radar, recognizes a wide variety of traffic conditions in front of the driver, even in bad weather.

The ADA provides on-target assistance to the driver's recognition and judgment, and helps the driver feel more comfortable and less fatigued.

Millimeter wave radar

Stereo camera

*1. ADA: Active Driving Assist

Passive Safety

Subaru's concept of passive safety is to help ensure passenger safety inside the car, and also to minimize the damage that automobiles inflict on society. Giving extra consideration to protecting oncoming cars, bicycles and motorcycles, and pedestrians, Subaru develops cars on the basis of our safety concept of "Compatibility," allowing Subaru's automobiles to attain safety in a wide range of aspects.

●Frontal Collision Compatibility

If your vehicle crashes with a larger or heavier vehicle, your car tends to receive greater impact. To ensure safety for both sides even in such a case, Subaru has been developing automobiles from broad perspectives: a body structure that effectively absorbs impact, a strongly constructed cabin that protects the passenger compartment, and a restraint system that safely restrains passengers.

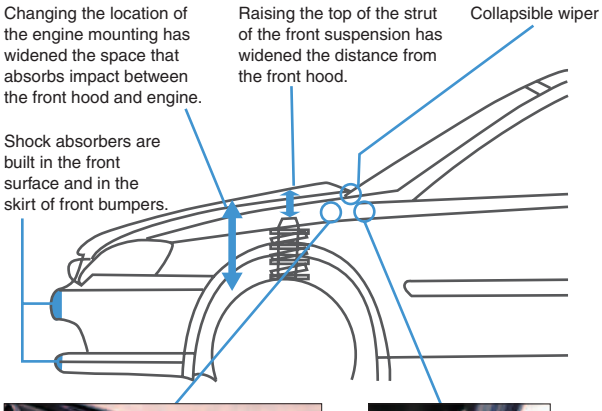
Frontal collision compatibility

Frontal collision compatibility (overhead photograph)

●Pedestrian Protection

Pedestrians are in the vulnerable position in the automobile-dependent society. Subaru first recognized this issue, and has been pursuing the development of vehicles, especially bumpers, hoods, and fenders, that take pedestrian safety into consideration.

Consideration for Pedestrian Safety



Shock absorbing Structures are built into the upper parts of fenders.

The front hood hinges are designed to absorb shocks.

Development of Human-Friendly Automobiles

TransCare Series

Subaru has been manufacturing and selling vehicles called "TransCare," vehicles for the disabled, since 1982. "TransCare," a word coined from "Transportation" and "Care," was registered in 1997 as the trademark for Subaru's vehicles for the disabled. Subaru will focus its effort to develop laborsaving devices that can be easily used by both caregivers and care-receivers.

Outline of Vehicles for the Disabled

Subaru offers a wide selection of TransCare automobiles, from the zippy Sambar, a van-type minicar, to the Legacy, a standard car for enjoying long-range drives. In fiscal 2003, Subaru released TransCare Wing Seat*1 series for the Legacy and the R2 (minicar) simultaneously with launch of their new models.

*1. Wing Seat: A rotating front passenger seat to allow for easy loading and unloading of passengers.

Legacy TransCare Wing Seat: The Legacy Wing Seat and the R2 Wing Seat place emphasis on providing a comfortable seating area, with an electrically operated seat slide.

Also, in response to the increasing demand for wheelchair accessible vehicles, our van type minicar Sambar offers an electrically operated wheelchair lifter*2 that allows for loading and unloading of passengers in wheelchairs. We also offer a type equipped with a stretcher,*3 which allows for loading and unloading of passengers who are lying down.

*2. Wheelchair lifter: This is Japan's first wheelchair lift that uses the "Side-lifting System" (introduced in November 2003). This Wheelchair Lifter is an electrically operated lift that provides passengers security and safety by loading and unloading them from the side of the car, instead of from the road.

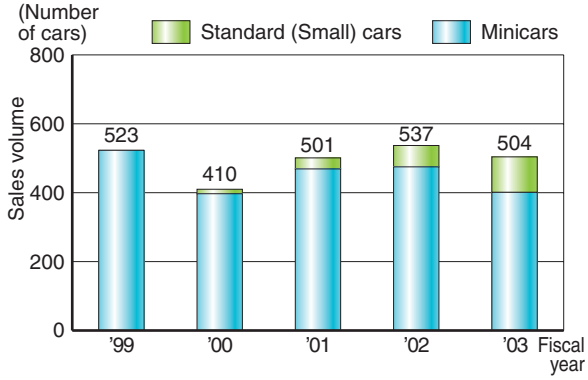
*3. Stretcher: This is a bed with wheels to carry patients who are lying down. Subaru's Sambar is Japan's first van type minicar that is equipped with a stretcher (introduced in November 2003).

Sambar Van, Dias: Side-lifting System is used.

Sales Results of TransCare Series

With an aim of "sharing the happiness of living with cars with all people," Subaru develops and distributes vehicles for the disabled so that disabled and aged people can enjoy a safe, comfortable ride. Our sales results are shown below.

Sales Results of Subaru TransCare Series



For Customer Satisfaction

Subaru Customer Center is where Subaru provides customer services under FH's quality policy.

The Subaru Customer Center consists of a customer relations department where we receive questions and suggestions from customers, a CS promotion department for ensuring a high level of customer satisfaction, a service department, where a variety of service plans are developed to secure comfortable driving for customers who have purchased Subaru cars, and the Fuji Training School, which serves to provide education for Subaru dealers.

Quality Policy

FHI considers customer satisfaction as the first priority and will work constantly to improve products and services to provide world-class quality.

Customer Relations Department

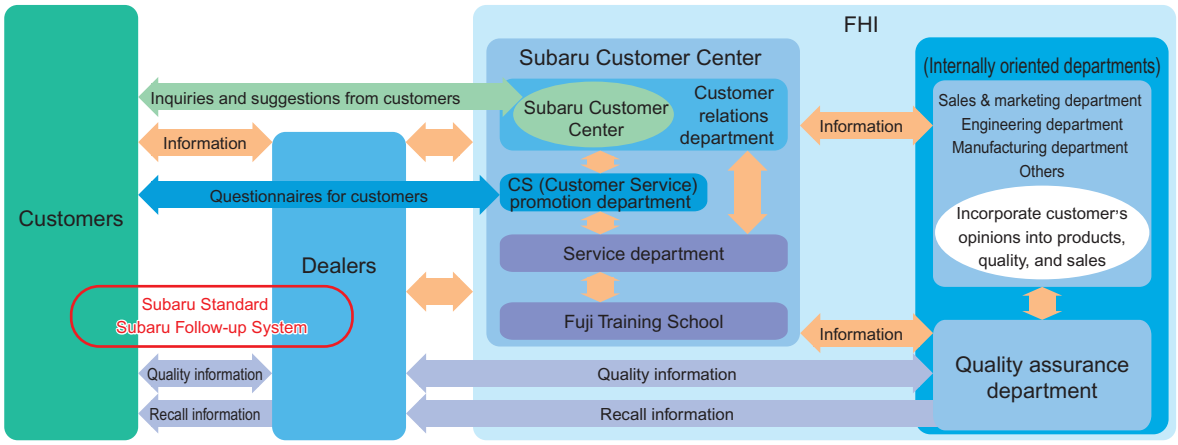
Within the customer relations department, the Subaru Customer Center has been established to gather the firsthand views of our customers. Since communication is exchanged mainly by means of telephone and letters, we ensure quick and on-target responses to inquiries and consultations from our customers, based on our action policy of promptness, sincerity, attentive listening. In the case of questions that cannot be handled immediately, we provide responses after consulting with related departments and Subaru dealers.

Market phenomena and requests and suggestions from our customers are released in internal reports issued weekly/monthly/semi-annually/annually. We believe that making use of feedback from our customers for corporate activities eventually leads to development of products and services that satisfy our customers. We believe that customers' voices represent their expectations for Subaru. Therefore, we would like to continue to serve our customers through good communication with each one and to be a company that makes our customers feel great about our relationship.

Results of Fiscal 2003 Activities

The team dedicated to customer consultation services has been providing services since its establishment in May 1982. In fiscal 2003, the number of consultations we received drastically increased, due to introduction of the new models of Legacy and R2 into the market. We received a total of 46,000 inquiries, and among them, 5,600 items were problems that were pointed out. A total of 42,000 inquiries (90%) were made by telephone, and 2,000 (5%) were made through letters. Since we began receiving inquiries by e-mail this May, 2,000 (5%) inquiries have been made by e-mail.

Relationships with Customers (Domestic)



CS (Customer Service) Promotion Department

We, as the Subaru team that includes dealers, as well as all divisions and departments within the company, aim to provide the highest level of satisfaction to our customers. Customers' opinions that we have received through dealers and market trend surveys are incorporated into products, quality, and sales via related departments. When we receive particularly notable opinions through surveys on products and quality, we may send engineers to visit the customer to gather more details in an interview.

Fiscal 2003 Results of Activities

●Domestic Dealers

Immediately after the Legacy was launched, we began to conduct customer satisfaction surveys every year to listen sincerely to the voices of our customers, and we have incorporated the results of the surveys into the improvement activities of customer services and equipment at dealers. In response to establishment of the Subaru Standard, an action standard for dealers, all dealers are committed to providing equal quality services with customers, anytime and anywhere. The results of surveys that have been conducted for more than ten years show that we have steadily increased customer satisfaction. After the launch of the new models, Legacy and R2, in fiscal 2003, we conducted surveys among an extensive scope of customers who bought minicars and customers who went through the first car inspection, and as a result, we found new challenges.

Also, in order to further enhance our customer services, we are providing all dealers with educational activities through an information journal "COMPASS," and are developing the Good Smile CS Campaign.

●Dealers in the U.S.

In order to raise the service level of dealers, Stellar Performers have been developed, which is a system for evaluating the performance standards that each dealer has established for items in categories such as sales, services, and facilities. FHI has been conducting its own customer service surveys in order to enhance improvement activities at each branch and providing customer service training for employees of dealers.

From the Information Journal COMPASS

Report from the Branch That Came Out on Top in Customer Satisfaction Surveys

～ Nagoya Subaru Odaka Branch ～

Our turning point was a meeting that we held after receiving severe evaluations;

"What was wrong?" As we were talking about it, we were all blaming other people or the work environment. After the branch manager said, "It's not that. Customer service equals people. We are to blame for this!" we started openly discussing "what we have to do now," and continued through the middle of the night.

Good Smile CS Campaign

From the moment we welcome customers to the moment we see them off, Subaru staff serves our customers in a cheerful and brisk manner.

CS Action Card

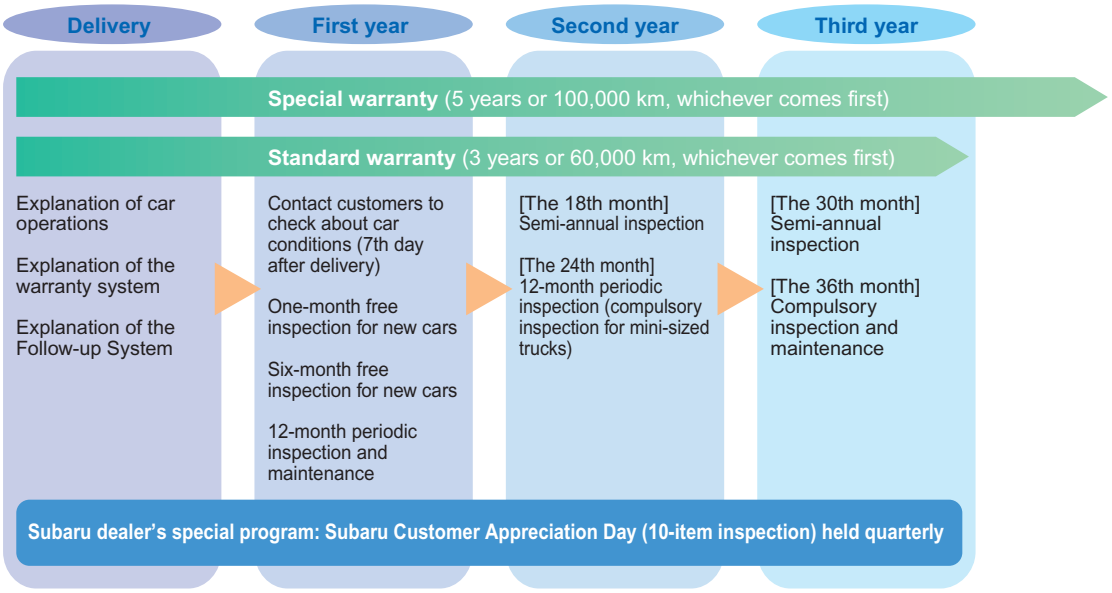
We carry the CS Action Card, which contains seven basic action items. We always keep these action items in mind when serving our customers.

Service Department

Follow-up Service Program Including Inspections (Domestic)

●Subaru Follow-up System

Subaru Follow-up System is our service system that ensures a safe, secure, and comfortable life with your car, with coverage from the delivery of the car to the third-year compulsory inspection.



●Subaru Customer Appreciation Day

The most popular event in the Subaru Follow-up System is Subaru Customer Appreciation Day, which 53 Subaru dealers in Japan have held simultaneously each quarter for more than ten successive years. Four times a year, all employees in the sales, service, parts, and administrative departments make combined efforts to prepare for this event. During the event, we thank our loyal customers by providing an enjoyable time and space for all our customers to share, including children, women, and the aged.

Subaru strongly supports our customers' lives with cars by providing a variety of service programs, including Subaru Customer Appreciation Day, in the hope of hearing our customers say, "I'm happy that I chose Subaru," or "I'm happy that I drive Subaru."

●Approaches to Product Recall

Our efforts to improve the quality of Subaru products based on the information from customers all over the world can contribute to product improvement and can further polish the Subaru brand. Quality information about Subaru automobiles is collected from global dealers through our dedicated Internet network, by fax and phone. Based on the information collected and investigation on vehicles and parts, we handle problems as follows:

(1) Our number one priority is to provide customers with security while driving their cars. Problems are handled in accordance with domestic and overseas laws and regulations.

(2) Announcements of product recall are made to customers through newspapers, direct mail, and the FHI website*1.

*1. FHI website: http://www.fhi.co.jp/recall/main.htm (for domestic customers)

Relationship with Employees

FHI has traditionally maintained a corporate culture of respect for people.

We are currently seeking to reinvigorate our corporate culture, focusing on development of a free, open-hearted, and aggressive creative group. Aiming at establishing a highly original, vigorous organization, we approach the development of systems from a wide range of standpoints, including the wage system, career planning programs, training programs, and benefit programs, so that employees can take on a higher level of challenges.

Employment

Employee Data

The number of employees over the last five years is shown below. After re-evaluating the manufacture of bus bodies and railway cars in fiscal 2002, FHI discontinued manufacturing new units as of the end of fiscal 2002. However, workers who were involved in the business were secured employment within the company or group firms.

Employee Data

Month/Year		April/2000		April/2001		April/2002		April/2003		April/2004	
		Number	%	Number	%	Number	%	Number	%	Number	%
Regular employees (including temporary and trial employees)	Male	14228	93.2	13972	93.1	13689	93.1	13448	93.1	13242	93.1
	Female	1040	6.8	1030	6.9	1009	6.9	990	6.9	984	6.9
	Total	15268		15002		14698		14438		14335	
New employees (among regular employees)	Male	313	82.4	301	85.5	292	86.4	242	86.4	276	86.0
	Female	67	17.6	51	14.5	46	13.6	38	13.6	45	14.0
	Total	380		352		338		280		321	

Employment of People with Disabilities

When the Law for Employment Promotion etc. of Persons with Disabilities was revised in 1976, we began employing people with disabilities in fulfillment of our social responsibility. In order to enhance the employment activities of the disabled, FHI organized the universal project team in the Gunma Manufacturing Division in 1999 to incorporate the concept of normalization*1 into the system. Currently, employment activities have been developed into the activity of creating an attractive corporation where all motivated and competent people are given opportunities to contribute.

The proportion of FHI employees with disabilities was 1.9% in March 2003 and 2.0% at the end of March 2004. In the Gunma Manufacturing Division, employees with disabilities accounted for 2.3% of all employees in March 2003 and 2.4% at the end of March 2004.

*1. Normalization: One of the concepts for a welfare society: All disabled people should be given the same living opportunities as those enjoyed by people without disabilities.

Labor-Management Relations

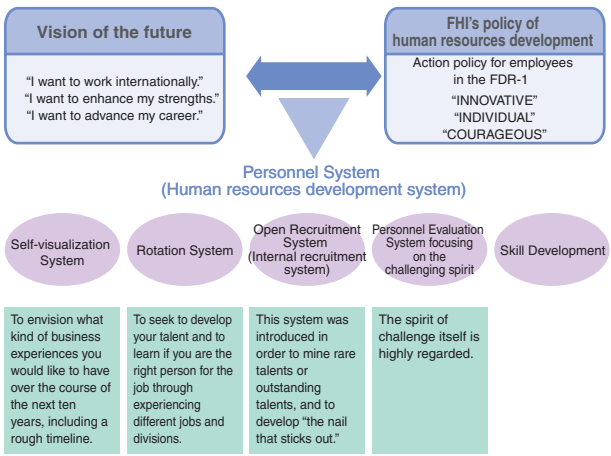
FHI and the FHI Workers' Union have established a labor-management council for promoting smooth business operations and mutual communication. In recent years, labor and management have maintained good relations. No disputes between labor and management have arisen during the past three years. The FHI Workers' Union is a member of the Confederation of Japan Automobile Workers' Union, through the Federation of FHI Labor Unions.

Development of Human Resources

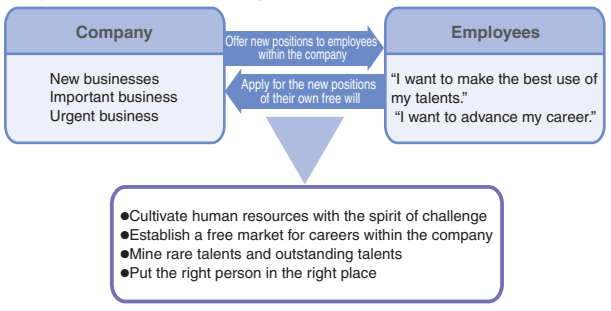
FHI aims to develop personnel who, with a clear awareness of their missions and responsibilities, can take the initiative in developing their own future career plans with self-actualization.

The development of human resources is based on OJT (On-the-job Training), which is training conducted through actual job experience. However, combining OJT with OFF-JT (Off-the-job Training) and self-development programs on a voluntary basis enables more effective and efficient development of human resources. Furthermore, FHI pursues comprehensive development of human resources by adopting the self-visualization system, the rotation system, the open recruitment system, and the personnel evaluation system.

Providing Motivated Employees with Opportunities to Grow



Open Recruitment System



Employment of People with Disabilities

In fiscal 2003, FHI's Gunma Automobile Division received two awards for its outstanding performance in employment of people with disabilities: the "Award of Association President for Excellent Performance" from the Gunma Prefectural Association for Employment of Disabled Persons, and the "Award for Excellent Performance of Improved Employment of Disabled Persons" from the Japan Association for Employment of the Disabled Persons. We believe that these awards represent the high evaluation of the combined efforts of the Gunma region's manufacturing and development divisions to create an attractive corporation where all motivated and competent employees are given opportunities to contribute with an emphasis on working together. Subaru hopes to become a highly flexible, diverse creative group by working together with employees with disabilities and thus achieving mutual improvement, instead of giving disabled employees special treatment.

Mr. Kondo, chief general manager of the Gunma Manufacturing Division(at that time), was honored by Gunma Prefectural Association for Employment of Disabled Persons.

Yajima Plant – Working Together with the Hearing Impaired

The Yajima Plant, which took the initiative in receiving employees with disabilities, currently has more than 30 employees with hearing disabilities. The voluntary efforts of plant employees were the key to improving their work environment for smooth communication by setting up whiteboards and communication lamps to be used in the event of emergency. The improved environment has allowed all employees with disabilities to contribute to the company in the same way as other employees contribute. Also, the Yajima Plant offers assistance in facilitating communication among employees by providing sign language classes, among other efforts.

Sign language class

Oizumi Plant – Human-Friendly Factory

The Oizumi Plant, which manufactures car engines and transmissions, has more than 20 employees with hearing or lower-limb disabilities. Taking advantage of the opportunity to upgrade its facilities, the Oizumi Plant established a comfortable workplace for wheelchair-bound employees by adopting universal-access designs. Precise care and consideration were taken from the viewpoints of wheelchair users; the new design improved the convenience of opening and closing doors, as well as the convenience of negotiating small steps in hallways, and using toilets and rest areas.

The entrance of the Oizumi Plant, equipped with a wheelchair ramp and an automatic door

"Start from Zero"- FHI's Core Development Division Employs the First New Graduate with Hearing Disabilities (Interview with recruitment manager)

Mr. Shimanoe, deputy general manager of the general administration department, Gunma Manufacturing Division, responsible for recruitment

FHI hired the first new graduate with hearing disabilities for the Subaru engineering division in April 2003. He was assigned to the Model Section of the Prototype Department, which is the core production site in Subaru. His assignment was an extremely technical job. Before he joined, all members of the department had some concerns and tried their best to prepare to receive him by reading a book of sign language to learn some words. However, on his first day, while spreading a large piece of paper with his profile on it, he introduced himself energetically. This made all his co-workers realize that most of their concerns were not justified. In the first three months after he joined, we provided a sign language interpreter for him and used whiteboards and computers as communication tools. With this minimal assistance, he handles almost the same amount of work as other new employees who joined the company at the same time.

The most important factors are his motivation and his co-workers' thoughtfulness. We are beginning to establish a barrier-free workplace where all employees can naturally support each other.

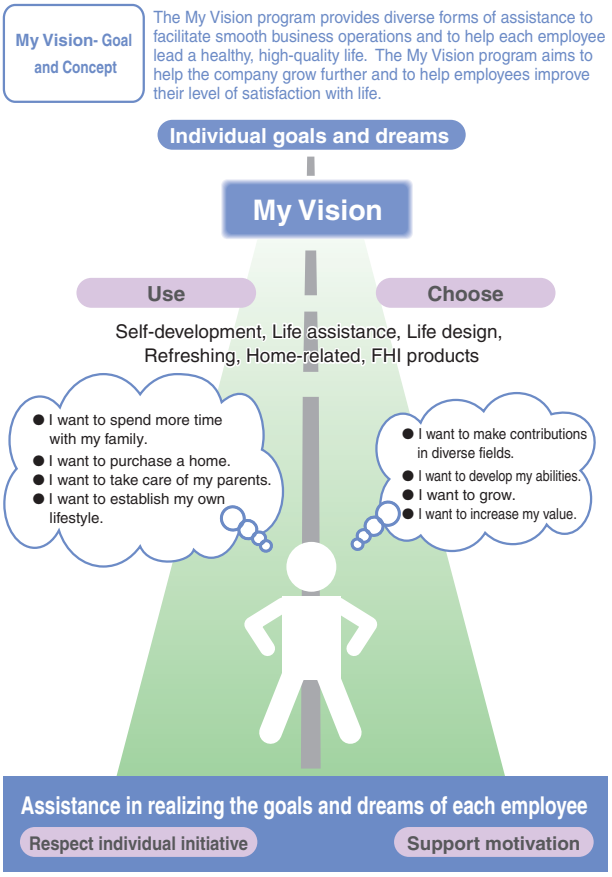
"Do whatever you are supposed to do." "Be sincere, even if in an unsophisticated manner." Based on these concepts, Subaru is just beginning to face the challenges of seeking universal-access designs for all its facilities in our own way to allow disabled employees to work together comfortably.

Benefits Package

My Vision

FHI introduced a new program for the benefits package called "My Vision." The My Vision program provides assistance in diverse forms that facilitate smooth business operations and help each employee to lead a healthy, high-quality life. The main concept of the package is creation of tangible and intangible assets.

The My Vision program consists of My Vision Standard and My Vision Select. My Vision Select is a newly introduced program which allows each employee to choose a menu of benefits that help him/her attain personal goals or dreams. In particular, we have enhanced the self-development menu, which helps develop individual abilities, and the childcare and elderly care menu, which helps an employee handle both the demands of his/her job and the demands of family life. The company bears more costs for this menu than for regular benefit package menus.



Data of Childcare Leave during the Last Five Years

A total of 226 FHI employees used childcare leave during the last five years (from April 1, 1999 to March 31, 2004)

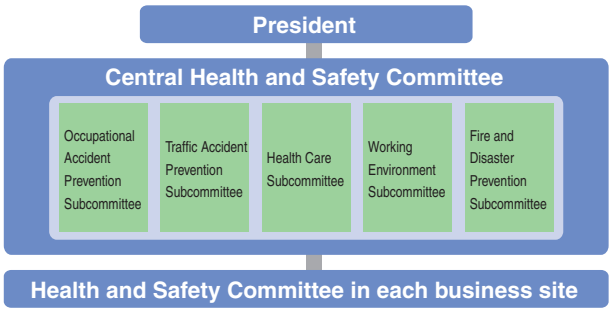
Health and Safety

FHI strives to create safe and comfortable workplaces for employees, and continuously carries out activities to prevent employee's traffic accidents and to support employees' physical and mental health.

Basic Philosophy, Basic Policy and Promotion Organization

Basic Philosophy of Health and Safety
Health and Safety take priority in any business

Basic Policy of Health and Safety
Aiming at no disasters regarding occupational accidents, traffic accidents, diseases, and fire disasters, all employees recognize the importance of health and safety, improve the equipment, environment and working methods, and improve management and awareness in order to create safe and comfortable workplaces.



Occupational Accident Prevention

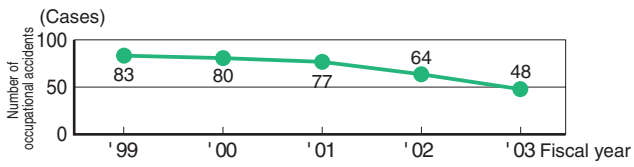
FHI has been conducting activities to help raise each employee's safety awareness, improve management of the workplace, and eliminate risks.

To raise awareness, KYT*1 and Hiyari Hatto Activity were implemented. To improve management of the workplace, a self-management activity called TSZ*2 was introduced at an early stage in each workplace. In addition, in 2000, FHI introduced a unique small-group risk assessment system to improve each employee's safety and to eliminate risks.

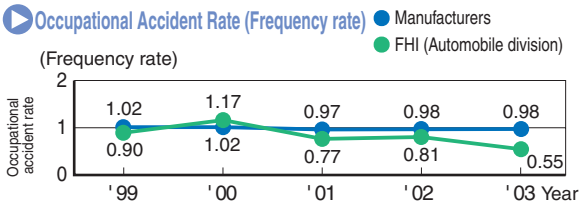
As shown in the chart below, the number of accidents is on the decrease. We will continue to focus our efforts on improvement, aiming at attaining zero disasters.

*1. KYT: Training for predicting dangers K: Kiken (Danger) Y: Yochi (Prediction) T: Training
*2. TSZ: Total Section Zero (Related departments and sections make combined efforts to attain zero disasters).

Number of Occupational Accidents



Occupational Accident Rate (Frequency rate)



Health Care

It is important for employees to always be in good physical and mental condition, and to take full advantage of their skills and abilities, in order to contribute to the invigoration of business activities. To help reduce the amount of employees' sick leave, we have been working on early detection and treatment of diseases by adding extra examination items to the legal diagnostic items for ensuring employees health. In the area of mental health care, we provide care services in accordance with the four care items suggested by the government. One of the care services we provide to employees is a counseling service.

Full-Scale Development of Counseling Service

Starting in the Gunma Manufacturing Division in 2003, FHI began to assign psychotherapists specializing in mental health care as clinical staff members. We expect that facilitating early detection of diseases will allow for the creation of a workplace with excellent health care for the mind.

Lecture by a psychotherapist (Utsunomiya Manufacturing Division)

Creation of a Comfortable Working Environment

In order to effect guidelines for a comfortable workplace provided by the government, FHI has been systematically working to improve every item in the guidelines, including working environment, working methods, and environmental equipment. Also, in order to create a more comfortable workplace, we have been working on improving lounges, rest rooms, and dining halls, and adopting universal-access designs in our facilities.

In 2003, FHI started a revision of its working environment standard by addressing the revision of laws and regulations and reviewing the standard from the workers' standpoint. FHI set a standard for every item, and for some items the FHI standards are five times as stringent as those required by the law.

Prevention of Fire and Disasters

Disasters including fires and explosions would negatively influence our business activities, employee safety, and local communities. In order to eliminate disasters, or to minimize the damage in the event of a disaster, we make efforts to improve facilities and equipment, to enhance management, and to perform emergency drills repeatedly.

Prevention of Traffic Accidents

FHI undertakes various efforts to prevent any traffic accidents, which could occur in the course of business activities, commuting, and private time. One of the activities that all employees are involved in is Safe Driving Card (SD Card). Each employee was issued this card, in order to increase awareness of traffic safety by keeping track of the employee's history of traffic accidents and traffic violations, along with a record of participation in in-house training programs and workshops. FHI has also established a system to honor groups for outstanding performance. Thus, we approach both individuals and workplaces, in order to develop traffic accident prevention as part of our corporate culture. In fiscal 2003, we launched the first traffic safety lecture meeting in all our offices to enhance understanding of drivers' mentality and human behavior.

Safe driving workshop presented by specialists (Utsunomiya Manufacturing Division)

"Creating Comfortable Workplaces" Is Underway

In January 2004, the Utsunomiya Manufacturing Division received the certification of the program for Promotion of a More Comfortable Workplace from the Health, Labor and Welfare Ministry. This certification represents government recognition that the company's own targets are set at more stringent levels than required by laws and regulations, in light of national guidelines. In connection with this certification, our efforts to improve the front gate and toilets and smoking rooms were highly evaluated.

Certificate, and a plaque with emblem

The Utsunomiya Manufacturing Division Won the Award for Contributions to Fire Department

In November 2003, at the award ceremony to commemorate the 55th anniversary of municipal fire department sponsored by the Japan Firefighters Association, the Utsunomiya Manufacturing Division was recognized as a company which made contributions to local disaster prevention, by assisting employees' participation in the activities of the local fire department.

Mr. Hoshi, chief general manager of the Utsunomiya Manufacturing Division, received a certificate of commendation.

Social Involvement

As a member of society, FHI recognizes the importance of living and growing in harmony with local communities and the society around our factories. We actively promote exchanges with community and cleanup activities, contribution to funds and participation in environmental events. We are also committed to contributing to sound, sustainable development through our business activities.

Social Contributions

Establishing the Subaru Visitor Center

Automobile factories receive inquiries about plant tours from many elementary schools, since children learn about automobile factories in social studies class at school. In response to such requests, and to fulfill our responsibilities as a member of society, we opened the Subaru Visitor Center at the Yajima Plant of Gunma Manufacturing Division in July 2003, as one of a number of projects to commemorate the 50-year anniversary. The completion of the Subaru Visitor Center upgraded our facilities, and the annual capacity of plant tour visitors to the Yajima Plant increased from the current 60,000 to 100,000.

The first floor of the Subaru Visitor Center houses an entrance atrium, which expresses a wonderful encounter between people and cars created by Subaru technology, and an exhibition hall. In the exhibition hall, you can see a Subaru 360, which played a role in the start of Japan's motorization, and the Impreza WR car, which participated in the World Rally Championship recognized as the summit of motor sport competition just like Formula 1 (F1). On the second floor, there are technology and recycling laboratories where Subaru's future-oriented technologies and environmental efforts are exhibited.

Subaru Visitor Center (external view)

Subaru Visitor Center (exhibition hall)

FHI's Contributions to Development and Promotion of the Automotive Culture

In Europe, where the automotive culture was born, motor sports are very popular and are a part of people's lives. In order to further develop and promote the automotive culture in Japan, we are involved in many activities at home and abroad, and participate in the World Rally Championship (WRC) and the Japan GT Championship.

World Rally Championship

Assisting Development of Human Resources for Manufacturing

The Gunma Manufacturing Division invites elementary school children for plant tours to help them understand the relationship between society and automobiles—how automobiles are made and work. We also have a website accessible for children to study, called "Subaru Virtual Land Plant Tour." (http://www.fhi.co.jp/child/index.html)

Children on a plant tour

FHI's Contributions to Sports Development

Our baseball team represented Ohta City in the Intercity Baseball Tournament and made it to the quarterfinals in 2003. With appreciation for the public support of our team, we organized baseball classes for children in order to make a contribution to the development of children's sports within the community. In October, we held the First Subaru Cup Baseball Tournament for Children in Gunma. Our track and field team entered the New Year Ekiden Road Relay for the fourth consecutive year. The New Year Ekiden Road Relay is held for all Japanese company teams on New Year's Day in Northern Kanto Area. As a company from Gunma Prefecture, we received enthusiastic support from local residents.

Children taking a baseball class

Cheering people on the street for the New Year Ekiden

Regional Activities

Cleanup Activities

Saitama Manufacturing Division participates in the "Adoption Program" planned by Kitamoto City.

This program was set up to boost the combined efforts of the administration and the public to promote cleanup activities in the city by getting rid of all the litter on public streets and parks and by maintaining the plants and flowers. It is also called the Pikapika Kitamoto Omakase Program (Kitamoto-city Voluntary Cleanup Program). The Saitama Manufacturing Division registered as the first participant in the program and began its activities in October. Other manufacturing divisions also conduct unique cleanup activities every year.

Mr. Ishizu, Kitamoto city mayor (right,) and Mr. Sumi, chief general manager of the Saitama Manufacturing Division (at that time), have agreements for the Pikapika Kitamoto Omakase Program (Kitamoto-city Voluntary Cleanup Program).

Major Cleanup Activities in Fiscal 2003

Production Base	Cleanup Activity
Gunma Manufacturing Division	May 24: Cleanup of Kanayama, Ohta City (organized by the Subaru Community Exchange Association; about 400 people participated) Sep. 7: Cleanup of Kanayama, Ohta City (organized by Ohta City; about 300 people participated from the Subaru Community Exchange Association)
Utsunomiya Manufacturing Division	June 14: Cleanup Campaign (about 280 labor union members and employees participated) with cooperation of the Environment Division of the Utsunomiya city government, cleanup activities on the streets around the factories were undertaken.
Saitama Manufacturing Division	June 5: The streets in front of the factories were cleaned during the environment campaign month (about 180 people participated).

Cleanup of Kanayama, Ohta City (May)

Cleaning streets around the factories (Saitama Manufacturing Division)

Annual Cleanup Campaign by the Utsunomiya Manufacturing Division

Cleaning streets around the Test & Development Center (Kuzuu machi, Tochigi)

Involvement in Local Events

FHI promotes exchanges with the people of the community by participating in a variety of local events and by holding annual events for the public. The Gunma Manufacturing Division holds the Subaru Friendship Concert organized by the Subaru Community Exchange Association. This annual concert is free of charge, but people who come to the concert are requested to bring household commodities such as towels, tea, soap, or detergents for donation to local welfare institutions. In fiscal 2003, we had three concerts: the 25th Concert on July 27; the 26th on September 26; and the 27th on February 27. 500 people came to the 27th Friendship Concert and many commodities were donated. At our Flower Planting Activities that the Gunma Manufacturing Division held in fiscal 2003, 22,000 seedlings were distributed to people. At the Utsunomiya Manufacturing Division, employees gave a karate class (customs and manners) to 30 mentally disabled people of high school and junior high school age.

The 50th Anniversary Subaru Appreciation Festival

The 27th Friendship Concert (February 2003)

Major Events in Fiscal 2003

Division	Events
Gunma Manufacturing Division	May 30: Friendship and Appreciation Festival for locals and employees' families was held at the Oizumi Plant (about 3,000 people visited).
	July 20: Subaru Mikoshi (portable shrine) joined in the Ohta Festival (about 1,200 people in total)
	July 26: Participated in the Oizumi Festival (about 600 people in total)
	Oct. 5: The 50th Anniversary Subaru Appreciation Festival for locals and employees' families was held at the Yajima Plant (about 30,000 people visited).
Utsunomiya Manufacturing Division	Aug. 30: An annual event, the Bon Dance Festival was held (many people participated, including the Community Association, Child-rearing Association, and employees).
Saitama Manufacturing Division	Nov.1–2: Participated in the Kitamoto Festival (sections of Evening Festival and Industrial Festival).

Cooperation/Donation/Support to Special Events

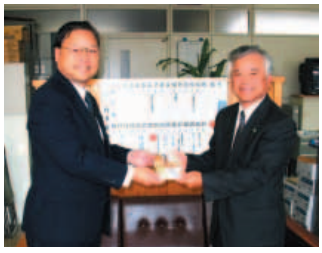
FHI Automotive Business Unit participated in such special events as the low pollution vehicle fairs, which allow visitors to have a firsthand look at low pollution vehicles. The Eco Technologies Company has shown wind power generation systems and other environment-related products at environmental exhibitions in many areas of Japan.

Participations in Exhibitions

Date/Exhibition	Venue	Organizer
May 21 (Wed) – May 23 (Fri) Automotive Engineering Exposition 2003	Pacifico Yokohama	Society of Automotive Engineers of Japan
May 31 (Sat), June 1 (Sun) Eco Car World 2003	Yoyogi Park	Ministry of Environment, etc.
June 2 (Mon) – June 4 (Wed) World Gas Conference Tokyo	Tokyo Big Sight Outdoor Exhibition Area	International Gas Union
July 16 (Wed) The Low Pollution Vehicle Exhibition	Joint Government Building 3 First Floor Parking	Ministry of Land, Infrastructure and Transport
Aug. 24 (Sun) Yamagata Environment Festival	Mogami Wide-area Exchange Center "Yumeria"	NHK Yamagata, etc.
Sep. 3 (Wed) – Sep. 6 (Sat) 2003 NEW Environmental Exhibition	Intex Osaka	Nippo Co., Ltd.
Sep. 6 (Sat), Sep. 7 (Sun) Low Pollution Vehicle Fair in Nagoya 2003	Tsurumai Park	Nagoya City
Sep. 19 (Fri), Sep. 20 (Sat) Osaka Low Pollution Vehicle Fair	Osaka Business Park Twin 21	Osaka Prefecture
Oct. 22 (Wed) – Nov. 5 (Wed) 37th Tokyo Motor Show	Makuhari Messe	Japan Automobile Manufacturers Association
Oct. 25 (Sat), Oct. 26 (Sun) Cleanup Fair 2003	Tochigi Science Museum	Tochigi Prefecture
Nov.16 (Sun) Ohta City Environment Fair	Ohta City Hall	Ohta City
Nov. 21 (Fri) – Nov. 23 (Sun) Low Pollution Vehicle Fair in Osaka	Asia Pacific Trade Center	Osaka City
Dec. 11 (Thu) – Dec. 13 (Sat) Eco Products 2003	Tokyo Big Sight	New Energy and Industrial Technology Development Organization

As for employee volunteer activities, we continue donations by collecting used stamps, prepaid cards, and bellmarks, and participate in the Green Fundraising campaign. This year again, the FHI Head Office donated used stamps and prepaid cards to JOICEF (Japanese Organization for International Cooperation in Family Planning) and sent bellmarks to the Bellmark Education Foundation through the Sankei Living Shinbun Inc. The Utsunomiya Manufacturing Division conducts the Green Fundraising campaign every year. This year, the collected funds were given to the Tochigi Green Promotion Committee and turned into 3,000 seedlings.

5,000 prepaid cards collected (Head Office)



Green Fundraising (Utsunomiya Manufacturing Division)

Awards

The Aerospace Company Received the Boeing 2002 Supplier of the Year Award

In April 2003, at the Utsunomiya Manufacturing Division, there was an award ceremony for the Boeing 2002 Supplier of the Year (the ceremony had originally been held in Seattle, the United States, in March and was successively held in Japan). Boeing , one of our clients, awarded FHI among their 11,300 business partners in the field of aircraft major structures.

The awards ceremony of Boeing 2002 Supplier of the Year

Polaris Received the ATV of the Year Award

The ATV of Polaris "ATP (All Terrain Pickup)," which is equipped with the Industrial Products Company's engines (EH50PL/ES32), received the ATV of the Year award. This award is given to the ATV with the most outstanding performance and rating in North America.

Award winning Polaris's four-wheel buggy, the ATP

Note: See p. 22 in the 2003 Environmental Report for Polaris and ATV

"A Study on Homogeneous Charge Compression Ignition Gasoline Engines" Received the Award of the Society of Automotive Engineers of Japan for an Excellent Paper

The Homogeneous Charge Compression Ignition (HCCI) combustion technology is drawing attention as an ultimate, ideal system for internal combustion engines. FHI researchers were recognized for demonstrating the operation of a gasoline engine in HCCI mode, using commercial gasoline as fuel. Their research suggested the possibility of engines with almost the same fuel efficiency as direct injection diesel engine, which also enable NOx-free and PM-free combustion.

Researchers received the award

The Aerospace Company Received the Special Award of Japan Aeronautical Engineers' Association

The Aerospace Company's research titled, "Development of Pollution-Free Paint Remover for Regular Servicing of Airplanes," won a special award of Japan Aeronautical Engineers' Association. This research aims to replace organic solvent used for aircraft maintenance, which contains environmentally hazardous substances by developing an alcohol-based nonpolluting release agent. With this development, we have attained the target of total elimination of chlorinated organic solvent such as dichloromethane.

Plant Site Data

Gunma Manufacturing Division

Gunma Manufacturing Division

Gunma Manufacturing Division, Main Plant

[Location] 1-1, Subaru-cho, Ohta, Gunma [Site area (building area)] 590,000 m² (320,000 m²)
[Products manufactured] Automobiles (R2, Pleo, Sambar models) [Number of employees] 3,279

● Water Pollution Data (Discharge: Public rivers Regulation: Water Pollution Control Law, Gunma Prefectural Ordinances)

Substance	Regulated values	Maximum	Minimum	Average
pH	5.8～8.6	7.65	6.75	7.2
BOD	25	21.1	0.9	3.1
SS	50	10.6	1.2	4
Oil content	5.0	1.0	0	0.4
Cadmium	0.1	0.01	0.001	0.007
Lead	0.1	0.01	0.005	0.008
Hexavalent chromium	0.5	0.05	0.04	0.045

● Air Pollution Data (Regulation: Air Pollution Control Law)

Substance	Facilities	Regulated values	Maximum	Average
NOx	Boiler	150	118	106.0
		180	58.0	58.0
		230	123.0	111.0
		250	89.0	68.2
	Dry-off oven	230	38.0	28.2
PM	Boiler	0.25	0.035	0.021
		0.3	0.190	0.089
	Dry-off oven	0.20	0.013	0.010
		0.35	0.003	0.002

Gunma Manufacturing Division, Yajima Plant

[Location] 1-1, Shoya-machi, Ohta, Gunma [Site area (building area)] 550,000 m² (230,000 m²)
[Products manufactured] Automobiles (Legacy, Impreza, Forester models) [Number of employees] 2,762

● Water Pollution Data (Discharge: Public rivers Regulation: Water Pollution Control Law, Gunma Prefectural Ordinances)

Substance	Regulated values	Maximum	Minimum	Average
pH	5.8～8.6	7.48	6.7	7.19
BOD	25	6.6	2.5	4.1
SS	50	7	2.3	4.5
Oil content	5.0	1.0	0	0.5
Cadmium	0.1	0.01	0.001	0.006
Lead	0.1	0.01	0.005	0.008
Hexavalent chromium	0.5	0.05	0.04	0.045

● Air Pollution Data (Regulation: Air Pollution Control Law)

Substance	Facilities	Regulated values	Maximum	Average
SOx	Boiler	49	1.20	0.8
NOx	Boiler	70	2.60	2.20
		150	117.0	117.0
		230	111.0	112.0
	Dry-off oven	230	46.0	14.8
		250	16.0	9.0
PM	Boiler	0.05	0.001	0.001
		0.25	0.031	0.016
		0.30	0.072	0.072
	Dry-off oven	0.2	0.032	0.009
		0.35	0.017	0.007

Gunma Manufacturing Division, Ohta North Plant

[Location] 27-1, Kanayama-machi, Ohta, Gunma [Site area (building area)] 40,000 m² (30,000 m²)
[Products manufactured] Automotive parts [Number of employees] 118

● Water Pollution Data (Discharge: Public rivers Regulation: Water Pollution Control Law, Gunma Prefectural Ordinances)

Substance	Regulated values	Maximum	Minimum	Average
pH	5.8～8.6	7.77	7.06	7.46
BOD	25	10.7	0.7	2.6
SS	50	9.6	1.1	5
Oil content	5.0	1.0	0	0.5
Cadmium	0.1	0.01	0.001	0.007
Lead	0.1	0.01	0.005	0.008
Hexavalent chromium	0.5	0.05	0.04	0.045

● Air Pollution Data (Regulation: Air Pollution Control Law)

Substance	Facilities	Regulated values	Maximum	Average
Nox	Boiler	250	78.0	67.6
	Dry-off oven	230	16.0	11.0
PM	Boiler	0.3	0.089	0.039
	Dry-off oven	0.35	0.015	0.013

Gunma Manufacturing Division, Oizumi Plant

[Location] 1-1-1, Izumi, Oizumi-machi, Oura-gun, Gunma [Site area (building area)] 400,000 m² (180,000 m²)
[Products manufactured] Automotive engines, transmissions [Number of employees] 1,612

● Water Pollution Data (Discharge: Public rivers Regulation: Water Pollution Control Law, Gunma Prefectural Ordinances, Pollution Control Agreement with Ohta-city and Oizumi-machi)

Substance	Regulated values	Maximum	Minimum	Average
pH	5.8～8.6	7.3	6.87	7.14
BOD	10	5.7	0.2	2.4
SS	10	4.3	0.6	2.3
Oil content	3.0	0.3	0	0.7
Cadmium	0.1	0.01	0.001	0.006
Lead	0.1	0.01	0.005	0.008
Hexavalent chromium	0.5	0.05	0.04	0.045

● Air Pollution Data (Regulation: Air Pollution Control Law, Pollution Control Agreement with Ohta-city and Oizumi-machi)

Substance	Facilities	Regulated values	Maximum	Average
NOx	Boiler	150	100.0	92.6
	Melting furnace	180	61.0	32.4
PM	Boiler	0.25	0.057	0.024
	Melting furnace	0.2	0.068	0.023
Dioxins	Dry-off oven	5	0.032	0.017

[Data measurement] April 2003–March 2004
● Water Pollution [Notations] —pH: Hydrogen-ion concentration, BOD: Biochemical oxygen demand, SS: Concentration of suspended solids in water
[Units] —mg/l, except pH
● Air Pollution [Notations] —HCL: Hydrogen chloride
[Units] —SOx: m³N/h, NOx: ppm, PM: g/m³N, HCL: mg/m³N, Dioxins: ng-TEQ/m³N

Gunma Manufacturing Division, PRTR (All plants total)

●PRTR

(The substances, whose amounts were one ton and over per year, are written below. The substances marked with ✻ are Specified Class 1 Designated Chemicals.) [Units: Tons/year, Dioxins: mg-TEQ/year]

Code	CAS Number	Chemical Substance	Amount handled	Air release	Water release (public water)	Transfer	Consumption	Solvent wiping Removal	Recycle	Landfill
1	none	Zinc compound (Water soluble)	24.01		0.26	4.82	18.94			0
9	103-23-1	Bis (2-ehtylhexyl) adipate	1.28				1.26	0.01		0
16	141-43-5	2- Aminoethanol	4.30		0.35	0.04		3.91		0
30	25068-38-6	Chloro-2,3-epoxypropane	16.49			2.30	14.02	0.17		0
40	100-41-4	Ethylbenzene	435.44	244.82	0.44		48.53	8.66	132.98	0
43	107-21-1	Ethylene glycol	795.66				795.66			0
63	1330-20-7	Xylene	1,091.54	550.33	0.97		218.54	20.75	300.96	0
176	none	Organotin compound	2.79		0.01	0.13	2.65			0
179*	–	Dioxins	0.51	0.51						0
224	108-67-8	1,3,5-trimethylbenzene	29.79	17.71			2.19	1.01	8.87	0
227	108-88-3	Toluene	751.62	353.22	1.64		292.30	40.26	64.21	0
232*	none	Nickel compound	5.26		0.23	3.83	1.20			0
272	117-81-7	Bis (2-ethylhexyl) phthalate	80.71	0.001		3.64	77.07			0
283	none	Hydrogen fluoride and water-soluble salts	6.62		1.15	5.46				0
299*	71-43-2	Benzene	17.32	0.02			17.30			0
309	9016-45-9	Poly (oxyethylene) =nonylphenyl ether	1.19		0.09	0.92	0.09	0.10		0
310	50-00-0	Formaldehyde	1.66	1.66						0
311	none	Manganese and its compounds	8.11		0.21	3.95	3.96			0
Total			3,273.77	1,167.77	5.36	25.07	1,493.69	74.87	507.02	0

Utsunomiya Manufacturing Division

Utsunomiya Manufacturing Division

Utsunomiya Manufacturing Division, Main Plant

[Location] 1-1-11, Yonan, Utsunomiya, Tochigi [Site area (building area)] Eco Technologies Company : 170,000 m² (50,000 m²), Aerospace Company: 190,000 m² (90,000 m²)
[Products manufactured] Eco Technologies Company: Refuse collection vehicles, environmental equipment, Aerospace company: Aircraft, unmanned aircraft, space-related equipment
[Number of employees] Eco Technologies Company: 251, Aerospace Company: 1,642

● Water Pollution Data (Discharge: Public sewage works Regulation: Sewerage Law and the Utsunomiya City Ordinances)

Substance	Regulated values	Maximum	Minimum	Average
PH	More than 5, less than 9	8.4	6.3	7.4
BOD	Less than 600	308.0	0.5	49.6
SS	Less than 600	406.0	＜1.0	＜62.4
Oil content	5	3.8	＜1.0	＜1.27
Fluorine compounds	8	1.2	＜0.2	＜0.46
Cadmium	0.1	0.03	＜0.005	＜0.009
Cyanide	1	0.1	＜0.1	＜0.1
Hexavalent- chromium	0.1	0.03	＜0.002	＜0.018
Total chromium	2	0.16	＜0.01	＜0.029

● Air Pollution Data (Regulation: Air Pollution Control Law)

Substance	Facilities	Regulated values	Maximum	Minimum	Average
SOx	Boiler	8	3.39	0.04	0.49
	Oven	8	0.20	0.05	0.11
NOx	Boiler	250	73	58	66
		230	85	66	73
		180	136	30	65
		150	60	60	60
	Oven	230	68	25	45
PM	Boiler	0.3	0.008	0.002	0.005
		0.25	0.007	0.002	0.004
	Oven	0.2	0.006	0.001	0.003

Utsunomiya Manufacturing Division, South Plant

[Location] 1388-1, Esojima, Utsunomiya, Tochigi [Site area (building area)] 140,000 m² (30,000 m²)
[Products manufactured] Aircraft [Number of employees] 514

● Water Pollution Data (Discharge: Public sewage works Regulation: Sewerage Law and the Utsunomiya City Ordinances)

Substance	Regulated values	Maximum	Minimum	Average
pH	More than 5, less than 9	7.8	6.8	7.2
BOD	Less than 600	226	2.7	＜50.8
SS	Less than 600	118	＜1.0	＜43.1
Oil content	5	3.8	＜1.0	＜1.29
Cadmium	0.1	＜0.005	＜0.005	＜0.005
Cyanide	1	＜0.1	＜0.1	＜0.1
Hexavalent- chromium	0.1	＜0.02	＜0.002	＜0.017
Total chromium	2	0.05	＜0.01	＜0.014

● Air Pollution Data (Regulation: Air Pollution Control Law)

Substance	Facilities	Regulated values	Maximum	Minimum	Average
SOx	Boiler	8	0.74	0.11	0.26
NOx		180	100	76	88
PM		0.3	0.005	0.002	0.004

[Data measurement] April 2003–March 2004
● Water Pollution [Notations] —pH: Hydrogen-ion concentration, BOD: Biochemical oxygen demand, SS: Concentration of suspended solids in water
[Units] —mg/l, except pH
● Air Pollution [Notations] —HCL: Hydrogen chloride
[Units] —SOx: m³N/h, NOx: ppm, PM: g/m³N, HCL: mg/m³N, Dioxins: ng-TEQ/m³N

Utsunomiya Manufacturing Division, South No. 2 Plant

[Location] 2-810-4, Miyanouchi, Utsunomiya, Tochigi [Site area (building area)] 100,000 m² (20,000 m²)
[Products manufactured] Aircraft [Number of employees] 139

● Water Pollution Data (Discharge: Public sewage works Regulation: Sewerage Law and the Utsunomiya City Ordinances)

Substance	Regulated values	Maximum	Minimum	Average
pH	More than 5, less than 9	7.9	6.8	7.2
BOD	Less than 600	203	0.8	28.8
SS	Less than 600	223	<1.0	<30.0
Oil content	5	3.2	<1.0	<1.15
Fluorine compounds	8	0.9	<0.2	<0.29
Cadmium	0.1	<0.005	<0.005	<0.005
Cyanide	1	<0.1	<0.1	<0.1
Hexavalent- chromium	0.1	0.05	<0.02	<0.022
Total chromium	2	0.25	<0.01	<0.062

● Air Pollution Data (Regulation: Air Pollution Control Law)

Substance	Facilities	Regulated values	Maximum	Minimum	Average
SOx	Boiler	8	1.54	0.27	0.67

Utsunomiya Manufacturing Division, Handa Plant

[Location] 1-27, Shiohi-cho, Handa, Aichi [Site area (building area)] 50,000 m² (5,000 m²)
[Products manufactured] Aircraft [Number of employees] 75

● Water Pollution Data (Discharge: Public rivers Regulation: Water Pollution Control Law, Aichi Prefectural Ordinances, Handa City Ordinances, and Pollution Control Agreements with Handa City)

Substance	Regulated values	Maximum	Minimum	Average
pH	6～8	7.4	6.6	7.2
BOD	25	4.2	1.6	2.2
COD	25	13	2.4	5.1
SS	25	8	3	4
Oil content	5	<0.5	<0.5	<0.5
Cadmium	0.1	<0.005	<0.005	<0.005
Cyanide	1	<0.1	<0.1	<0.1
Hexavalent- chromium	0.5	<0.04	<0.04	<0.04
Total chromium	2	<0.04	<0.04	<0.04

●Air Pollution Data (Regulation: Air Pollution Control Law)

Substance	Facilities	Regulated values	Maximum	Minimum	Average
SOx	Boiler	1.5	0.25	0.14	0.19
NOx		180	98	82	92
PM		0.1	0.002	0.002	0.002

Utsunomiya Manufacturing Division, PRTR (All Plants Total)

●PRTR

(The substances, whose amounts were one ton and over per year, are written below. The substances marked with ✻ are Specified Class 1 Designated Chemicals.) [Units: Tons/year, Dioxins: mg-TEQ/year]

Code	CAS Number	Chemical Substance	Amount handled	Air release	Water release (Public water)	Transfer	Consumption	Solvent wiping Removal	Recycle	Landfill
63	1330-20-7	Xylene	30.96	17.83	0	6.73	2.98	0	3.42	0
69*	none	Hexavalent chromium compound	2.07	0	0	0.71	0.17	1.18	0	0
227	108-88-3	Toluene	24.80	17.42	0	4.18	2.93	0	0.27	0
311	none	Manganese and its compounds	1.78	0	0	0.55	1.23	0	0	0
Total			59.62	35.25	0	12.18	7.32	1.18	3.69	0

Saitama Manufacturing Division

Saitama Manufacturing Division

[Location] 4-410, Asahi, Kitamoto, Saitama [Site area (building area)] 140,000 m² (90,000 m²)
[Products manufactured] Multipurpose engines (Robin engines), engine generators, engine pumps [Number of employees] 604

● Water Pollution Data (Discharge: Public sewage works Regulation: Kitamoto City Ordinances)

Substance	Regulated values	Maximum	Minimum	Average
pH	5.0～9.0	8.5	6.3	7.6
BOD	600	180	57	94
SS	600	445	133	245
N-Hexane	30	12.6	1.4	6.5

● Air Pollution Data

Though the intended facility is the incinerator, it was eliminated on September 28, 2001.

●PRTR

(The substances, whose amounts were one ton and over per year, are written below. The substances marked with ✻ are Specified Class 1 Designated Chemicals.) [Units: Tons/year, Dioxins: mg-TEQ/year]

Code	CAS Number	Chemical Substance	Amount handled	Air release	Water release (Public water)	Transfer	Consumption	Solvent wiping Removal	Recycle	Landfill
40	100-41-4	Ethylbenzene	1.95	0.02	0	0	1.93	0	0	0
43	107-21-1	Ethylene glycol	2.68	0	0	0	2.68	0	0	0
63	1330-20-7	Xylene	10.19	0.08	0	0	10.11	0	0	0
224	108-67-8	1,3,5 –trimethylbenzene	1.36	0.01	0	0	1.35	0	0	0
227	108-88-3	Toluene	16.82	0.20	0	0	16.62	0	0	0
299*	71-43-2	Benzene	0.70	0.03	0	0	0.67	0	0	0
Total			33.69	0.33	0	0	33.36	0	0	0

[Data measurement] April 2003–March 2004
● Water Pollution [Notations] —pH: Hydrogen-ion concentration, BOD: Biochemical oxygen demand, SS: Concentration of suspended solids in water
[Units] —mg/l, except pH
● Air Pollution [Notations] —HCL: Hydrogen chloride
[Units] —SOx: m^3N/h, NOx: ppm, PM: g/m^3N, HCL: mg/m^3N, Dioxins: $ng\text{-}TEQ/m^3N$

Isesaki Plant


Isesaki Plant

[Location] 100, Suehiro-cho, Isesaki, Gunma [Site area (building area)] 150,000 m² (110,000 m²)
[Products manufactured] Automobile repair parts, prefabricated houses [Number of employees] 152

● Water Pollution Data (Discharge: Public sewage works Regulation: Isesaki City Ordinances)

Substance	Regulated values	Maximum	Minimum	Average
pH	More than 5.7, less than 8.7	7.8	6.1	7.0
BOD	Less than 300	150	45	108
SS	Less than 300	82	6	30
Oil Content	5	2	2	2
Zinc	5	3.8	0.12	1.65
Soluble iron	10	0.08	0.01	0.04
Total Nitrogen	150	21.0	5.4	10.52
Total Phosphorus	20	11.0	1.3	5.62
Chromium	2	0.01	0.01	0.01
Lead	0.1	0.01	0.01	0.01

●Air Pollution Data (Regulation: Air Pollution Control Law)

Substance	Facilities	Regulated values	Maximum	Average
SOx	Boiler	6.2	0.044	0.033
NOx		180	120	89
PM		0.3	0.021	0.012

●PRTR

(The substances, whose amounts were one ton and over per year, are written below. The substances marked with ✻ are Specified Class 1 Designated Chemicals.) [Units: Tons/year, Dioxins: mg-TEQ/year]

Code	CAS Number	Chemical Substance	Amount handled	Air release	Water release (Public water)	Transfer	Consumption	Solvent wiping Removal	Recycle	Landfill
63	1330-20-7	Xylene	9.31	3.48	0	0	5.44	0	0.39	0
227	108-88-3	Toluene	8.91	2.37	0	0	6.27	0	0.26	0
272	117-81-7	Bis (2-ethylhexyl) phthalate	1.94	0	0	0.06	1.88	0	0	0
Total			20.15	5.86	0	0.06	13.59	0	0.65	0

Tokyo Office


Tokyo Office

[Location] 3-9-6, Osawa, Mitaka, Tokyo
[Site area (building area)] 160,000 m² (90,000 m²) [Number of employees] 997

● Water Pollution Data (Discharge: Public sewage works Regulation: Mitaka City Ordinances)

Substance	Regulated values	Maximum	Minimum	Average
pH	More than 5.7, less than 8.7	8.4	7.6	8.2
BOD	Less than 300	140	18	61
SS	Less than 300	97	12	43
Oil content	5	ND	ND	ND
Manganese	10	0.12	ND	0.05

● Air Pollution Data (Regulation: Tokyo Pollution Control Ordinances)

Substance	Facilities	Regulated values	Maximum	Average
SOx	Boiler	0.263	0.055	0.037
NOx		90	71	62
PM		0.3	0.015	0.006

●PRTR

(The substances, whose amounts were one ton and over per year, are written below. The substances marked with ✻ are Specified Class 1 Designated Chemicals.) [Units: Tons/year, Dioxins: mg-TEQ/year]

Code	CAS Number	Chemical Substance	Amount handled	Air release	Water release (Public water)	Transfer	Consumption	Solvent wiping Removal	Recycle	Landfill
40	100-41-4	Ethylbenzene	19.32	0.001	0	0	19.32	0	0	0
63	1330-20-7	Xylene	93.77	0.004	0	0	93.76	0	0	0
224	108-67-8	1,3,5 - trimethylbenzene	12.48	0	0	0	12.48	0	0	0
227	108-88-3	Toluene	212.32	0.035	0	0	212.29	0	0	0
299*	71-43-2	Benzene	6.44	0.004	0	0	6.432	0	0	0
Total			344.32	0.044	0	0	344.28	0	0	0

[Data measurement] April 2003–March 2004
● Water Pollution [Notations] —pH: Hydrogen-ion concentration, BOD: Biochemical oxygen demand, SS: Concentration of suspended solids in water
[Units] —mg/l, except pH
● Air Pollution [Notations] —HCL: Hydrogen chloride
[Units] —SOx: m³N/h, NOx: ppm, PM: g/m³N, HCL: mg/m³N, Dioxins: ng-TEQ m³N

Product Data

Automobiles

Model				Legacy Outback	Legacy B4 (Sedan)	Impreza Sedan	Forester	R2	Sambar Van
				3.0R	2.0i	1.5i	XT	R	VC
Date sales began				2004/2	2004/2	2003/9	2004/2	2004/2	2004/1
Vehicle type				CBA-BPE	CBA-BL5	LA-GD3	TA-SG5	CBA-RA1	LE-TV2
Drive train	Drive system			AWD	AWD	AWD	AWD	2WD	4WD
	Transmission			5AT	4AT	5MT	4AT	CVT	5MT
Engine	Model			EZ30	EJ20	EJ15	EJ20	EN07	EN07
	Displacement (l)			2.999	1.994	1.493	1.994	0.658	0.658
	Type			Horizontally opposed 6-cylinder 3.0 L, DOHC, 24-valve, variable valve timing + direct variable valve lift	Horizontally opposed 4-cylinder 2.0 L, SOHC, 16-valve	Horizontally opposed 4-cylinder 1.5 L, SOHC, 16-valve	Horizontally opposed 4-cylinder, 2.0 L, DOHC, 16-valve,air-cooled intercooler turbo (variable valve timing)	In-line 4-cylinder, DOHC 16-valve (variable valve timing)	Water-cooled in-line 4-cylinder, SOHC
Weight (kg)				1520～1570	1330～1360	1230	1420～1440	810	930～940
Environmental Information	Law on Promoting Green Purchasing adopted			○	○	○	○	○	○
	Fuel consumption rate	10-15 mode fuel economy (km/l)		11.0	14.0	16.0	13.0	24.0	16.6
		CO_2 emissions (g/km)		214.4	168.5	147.4	181.4	98.3	142.1
		Ref.	FY 2010 fuel economy standard achieved	○	○	○	○	○	○
	Exhaust emissions	Regulations adopted		Year 2005 Standards	Year 2005 Standards	Year 2000 Standards	Year 2000 Standards	Year 2005 Standards	Year 2002 Standards
		Certification level of low emission vehicles		U-LEV	U-LEV	Excellent low emission vehicle	Good low emission vehicle	U-LEV	Excellent low emission vehicle
		10-15 mode or 10-15 + 11 mode regulation figures	CO (g/km)	1.15	1.15	0.67	0.67	1.15	3.30
			HC (g/km)	—	—	0.04	0.06	—	0.07
			NMHC (g/km)	0.025	0.025	—	—	0.025	—
			NOx (g/km)	0.025	0.025	0.04	0.06	0.025	0.07
		Ref.	Low-pollution vehicle system designated by seven Kanto area prefectures and cities	○ (50% reduction in emissions from 2005 standards)	○ (50% reduction in emissions from 2005 standards)	○ (Excellent low pollution vehicle)	○ (Good low pollution vehicle)	○ (50% reduction in emissions from 2005 standards)	○ (Excellent low pollution vehicle)
			LEV-6 designation by six Keihanshin area prefectures and cities	○(17ULEV)	○(17ULEV)	○(LEV)	○(TLEV)	○(17ULEV)	○(LEV)
	Noise	Regulations adopted		Year 1998 Standards	Year 1998 Standards	Year 1998 Standards	Year 1998 Standards	Year 1998 Standards	Year 2000 Standards
		Acceleration noise regulation figures (dB-A)		76	76	76	76	76	76
	Air conditioner	Type of refrigerant		HFC134a	HFC134a	HFC134a	HFC134a	HFC134a	HFC134a
		Amount of refrigerant used (g)		400	400	500	600	400	400
	Amount of lead used			JAMA year 2005 target achieved (less than one-third of year 1996 levels)	JAMA year 2005 target achieved (less than one-third of year 1996 levels)	JAMA year 2005 target achieved (less than one-third of year 1996 levels)	JAMA year 2005 target achieved (less than one-third of year 1996 levels)	JAMA year 2005 target achieved (less than one-third of year 1996 levels)	JAMA year 2005 target achieved (less than one-third of year 1996 levels)
	Recycling	Design to improve recyclability		Display of material symbols on plastic and rubber parts over 100 g. Facilitation of removal of air bags and rear lamp	Display of material symbols on plastic and rubber parts over 100 g. Facilitation of removal of air bags and rear lamp	Display of material symbols on plastic and rubber parts over 100 g. Easier to dismantle seats, instrument panel, and others	Display of material symbols on plastic and rubber parts over 100 g	Display of material symbols on plastic and rubber parts over 100 g	Display of material symbols on plastic and rubber parts over 100 g
		Use of recycled materials		Use of materials from used fishnet for intake mechanism parts and from clothing scraps for interior parts	Use of materials from used fishnet for intake mechanism and from clothing scraps for interior parts	Use of materials recycled from PET bottles for insulators and from used paper for vibration absorbing materials	Use of materials from clothing scraps for interior parts and from used paper for vibration absorbing materials	Use of materials recycled from collected bumpers, PET bottles, and clothing scraps for interior parts	Use of materials recycled form clothing scraps for sound insulators and from collected bumpers for covers
		Matters for special mention		Expand the use of easily-recycled olefin resin such as PP, TPO, and others	Expand the use of easily-recycled olefin resin such as PP, TPO, and others	Use of easily-recycled TPO plastic for instrument panel, door trim, and others	Polyurethane seat pad is placed on top of the pan frame facilitating disengagement	Frequent use of easily-recycled PP plastic for instrument panel, door trim, and others	Fit-in type glove box is fitted in the instrument panel facilitating disengagement

Generators

		Portable generator	Gasoline soundproof inverter generator			Gasoline inverter generator	
Major foundation	Model	SGi14	SGi25S	SGi28SE	SGi38SE	SGi25	SGi28
	Length × width × height (mm)	490 × 295 × 445	537 × 482 × 583		573 × 527 × 618	487 × 432 × 475	
	Dry weight (kg)	20.5	54	59	74	37	38
	Equipped engine	EH09	EX17	EX21	EX27	EX17	EX21
	Total displacement (mL)	85.8	169	212	265	169	212
Major ability	50Hz rating (kW)	1.35	2.5	2.8	3.7	2.5	2.8
	60Hz rating (kW)	1.35	2.5	2.8	3.7	2.5	2.8
	Rated load noise level (50/60) (dBA)	59	58	58	62	67	67
	Rated continued operation time (50/60) (HR)	3.5	7.6	6.5	5.3	7.6	6.5
	Generation method	Inverter	Inverter	←	←	Inverter	←
	Starting method	Recoil	Recoil	Cell/ Recoil	←	Recoil	←
Response to regulations	Conformity to EPA 2005 regulations	Conforms	Conforms	←	←	Conforms	←
	Conformity to CARB 2005 regulations	Conforms	Conforms	←	←	Conforms	←
	Conformity to EU exhaust emission regulations	Conforms	Conforms	←	←	Conforms	←
	EU noise regulations Stage II sound guarantee values (dBA)	90	90	91	93	95	96

(Reference) Exhaust Emissions Regulations

US exhaust emissions regulations	Category	Class	Emission amount (mL)	CO (g/kW·h)	HC+NOx (g/kW·h)
EPA after 2005 Regulations (Phase II)	Non-handheld	Class I-B	66≦mL＜100	610	40
	Non-handheld	Class I	100≦mL＜225		16.1
	Non-handheld	Class II	225≦mL		12.1
CARB after 2005 Regulations	Small off road	Horizontal	80＜mL＜225	549	16.1
	Small off road		225≦mL		12.1

EU exhaust emissions regulations	Category	Class	Emission amount (mL)	CO (g/kW·h)	HC+NOx (g/kW·h)
EU 97/68/EC-2002/88/EC	Non-handheld	Stage II	66≦mL＜100	610	40
	Non-handheld	Stage I	100≦mL＜225	519	16.1
	Non-handheld	Stage I	225≦mL		13.4

(Reference) Noise Regulations

EU noise regulations	Generator output (kW)	Stage II regulations (dBA)
EU 2000/14/EC	P≦2 kW	95+logP
	2 kW＜P≦10 kW	96+logP
	10 kW＜P	95+logP

Other Data

Qualified Personnel in Pollution Control Management

Qualification type			Total number of personnel holding qualifications
Pollution control managers	Chief managers		4
	Air-related	Type 1	6
		Type 2	7
		Type 3	36
		Type 4	14
	Water-related	Type 1	10
		Type 2	36
		Type 3	12
	Noise-related		48
	Vibration-related		41
	Tokyo Pollution Control Managers		2
Energy management experts	Heat management		20
	Electronic management		15
Working environment measurement experts			8
Technical managers for industrial waste			15
Management representatives for industrial waste subject to special control			37
Internal environmental auditors (internal qualification)			497

As of March 31, 2004

Number of Employees Receiving Environmental Education by Level

Type of education or training	Number of employees receiving education
Education for new employees	248
Education for persons newly promoted	1,461
Total	1,709

Between April 2003–March 2004

FHI Environmental Chronology

Note: As for railway cars and bus bodies, please see p. 58–59 in 2003 Environmental Report

	Management Division	Automobile Division	Other Divisions
Mar. 1962			Developed and manufactured the Load-Packer refuse collection vehicle in technological cooperation with Garwood Industries Inc; the name was later changed to Fuji Mighty
May 1966		Introduced an all-aluminum block engine	
Aug. 1973		Established standards for making resin ingredients (automobile industry guidelines were determined in 1991)	
Mar. 1977		Developed the Subaru Exhaust Emission Control-Thermal (SEEC-T) system, to comply with 1978 exhaust emissions regulations, in the new Subaru Leone	
Sep.		Began recycling by mixing wastepaper in anti-vibration sheets	
Jan. 1985			Began sales of three types of CHV engine (EH11, EH15, EH21)
Oct.			Began sales of the electric refuse collection vehicle EV405
Nov. 1986		Began sales of the lightweight plastic valve rocker cover	
Feb. 1987		Introduced the Subaru ECTV, the first electro-continuously variable transmission in the world	
Aug. 1990	Established an Environmental Issues Improvement Measures Project	Began setting up facilities at Subaru dealers for collection and reuse of CFCs used in air conditioners	
Apr. 1991	Established the Safety, Emission, Fuel Economy (SEF) Committee		
Oct.	Established the Recycling Committee (in 1997, the name was changed to the Recycling Engineering Development Committee and, in 1999, to the Recycling Promotion Committee)	Announced a Flexible Fuel engine at the Tokyo Motor Show	
Apr. 1992	Established the Environmental and Safety Technology Department		Began sales of three types of generators installed with OHV engines (2 kW, 2.8 kW, 4.1 kW)
May		Became the first in the automobile industry to recycle painted bumpers for use in interior and exterior parts	
Sep.		Developed the first plastic intake manifold in Japan	
Nov.		Completed installation of fluorocarbon collection and reuse equipment for car air conditioners at Subaru dealers	
Jan. 1993		Began collecting scrapped bumpers in the Tokyo and Kanagawa areas in cooperation with a distribution company	
Mar.	・Established the Voluntary Environmental Protection Plan ・Set up the Corporate Environment Committee ・Set up the Engineering Environment Committee and the Plant Environment Committee developed from the SEF Committee		
Apr. 1994		Completed replacement of air conditioner refrigerants from CFC12 to HFC134a	
Jan. 1995			Began manufacturing multipurpose engines that met the California Air Resources Board (CARB) emission regulations
Feb.	The Saitama Manufacturing Division in a rural area completed and operations began in April		
Apr.		Began sales of the electric vehicle, Sambar EV	
Jun.		Developed a new environment-friendly protective coating film and adopted it for the Legacy and Impreza models	
Aug.			Began delivering a low-pollution CNG refuse collection vehicle
Sep.			Delivered Japan's first container for refuse transportation by railroad freight car and a container transport vehicle for transportation to Kawasaki City
Oct.		Displayed a direct gasoline injection engine and a hybrid electric vehicle at the Tokyo Motor Show	
Feb. 1996		Developed and implemented the Roller Press method, a new technique for removing the coating film, and began bumper-to-bumper recycling	
Mar.			Made the first successful flight of a helicopter equipped with the new main rotor system, Fuji Bearingless Rotors, developed independently
Apr.	Established the Environment Plan for 2000		
Oct.			Developed and began sales of the container collection and measurement system for refuse collected for a fee
Jul. 1997	Set up the Environmental Affairs Promotion Office		Developed a solid waste ash melting furnace
Sep.			Delivered the first Fuswton, high-rise building waste management system
Feb. 1998	Established the Recycling Initiative for End-of-Life Vehicle Voluntary Action Plan for Automobile Recycling		
Apr.	Established Environmental Policy		
Jun.	Published the environmental pamphlet " For Harmony between People, Society, and the Earth"		
Oct.		Completed nationwide extension of JAMA's CFC12 collection and destruction system	Began sale of the four-stroke OHV engine (EH09D) used in rammers, an alternative to the two-cycle engine

	Management Division	Automobile Division	Other Divisions
Nov.	SIA in the U.S.A. acquired ISO 14001 certification		
Mar. 1999	Gunma Manufacturing Division acquired ISO 14001 certification		
May	Saitama Manufacturing Division acquired ISO 14001 certification		
Jun.		Began recycling PET bottles for use in interior parts	
Jul.	・Transportation and Ecology Systems Division in the Utsunomiya Manufacturing Division acquired ISO 14001 certification ・Hosted first Affiliated Companies Environmental Problems meeting		
Oct.	Started the General Managers' Meeting on the Environment at the Gunma Manufacturing Division		
Jan. 2000		Began reuse of painted bumper scrap from production process for the Pleo's mass-produced bumpers	
Mar.	Eliminated the incinerator at the Tokyo Office	Expanded the scrap bumper collection system to the Tohoku area and built a nationwide system in Japan	Fuswton won the Resource Recycling Technology System Award for fiscal 1999 from the Ministry of International Trade and Industry's Environment and Industrial Location Bureau
Aug.		Began sales of the new Impreza, and all models met authorized low emission standards	
Sep.	Published the 2000 Environmental Report, aggregating results of all environmental activities for fiscal 1999		
Oct.		Began recycling of auto window glass recovered from ELVs as glass wool soundproofing material	
Nov.			•Unveiled the Subaru Small Wing Turbine Generator System •Began sales of the new LP0 low-noise refuse collection vehicle
Dec.	Eliminated the incinerator at the Gunma Manufacturing Division, Yajima Plant		
Mar. 2001	Achieved zero emissions at the Gunma Manufacturing Division		
May			Began sales of the multipurpose Robin EX series engine in order to lower exhaust emissions, lower the level of noise, and lower the level of vibration
Jun.	Published the 2001 Environmental Report, aggregating results of all environmental activities for fiscal 2000		
Sep.	•Eliminated the incinerator at the Utsunomiya Manufacturing Division • Eliminated the incinerator at the Saitama Manufacturing Division		
Oct.		Exhibited the next generation hybrid minicar, HM-01 at the Tokyo Motor Show	
Jan. 2002			The Subaru Small Wind-Power Generation System won the New Energy Grand Prize for fiscal 2001 from the Agency for Natural Resources and Energy
Feb.		Began sales of the new Forester. All models met the fiscal 2010 fuel economy standards and were accepted as good low emissions vehicles (G-LEV)	
Mar.	Utsunomiya Manufacturing Division and Saitama Manufacturing Division achieved zero emissions		
May	Established the Environmental Conservation Program (fiscal 2002 through 2006)	The company for the development of automobile batteries was jointly established by NEC Corp. and FHI	
Jun.	Published the 2002 Environmental Report		
Jul.		Consigned matters involving the collection and destruction of CFCs to the Japan Automobile Recycling Promotion Center	
Oct.		Limited marketing of the Legacy B4, CNG (Compressed Natural Gas) Vehicle	
Nov.			Research on switching to pollution-free paint remover for regular servicing of airplanes won an award from Bouei Choutatsu Kiban Seibi Kyoukai (Defense Procurement and Infrastructure Association)
Apr. 2003	Saitama Manufacturing Division received a regular assessment for ISO 14001		Developed ASR Pre-Processing Separating System
May		•Full model change of Legacy to launch the New Legacy •All models met the fiscal 2010 fuel economy standards except for 2.0 GT spec.B. 2.0L SOHC engine equipped cars achieved a 75% reduction in emissions from the 2000 standards	"Development of Pollution-Free Paint Remover for Regular Servicing of Airplanes" won a special award from the Japan Aeronautical Engineer's Association
Jun.	•Published 2003 Environmental Report •Utsunomiya Manufacturing Division received a regular assessment for ISO 14001		
Jul.	•Set up the six star *mutsuraboshi* corporate symbol •Established the Subaru Visitor Center at the Gunma Manufacturing Division, Yajima Plant		Solid waste ash melting furnace developed jointly with Ogihara Co., Ltd., acquired technology authorization from the Japan Waste Research Foundation
Aug.		•Legacy B4 CNG challenged to go around Japan •Conducted the presentation of Subaru Mobility techniques	
Sep.	Achieved zero emissions at the Tokyo Office		
Oct.	The Gunma Manufacturing Division won the fiscal 2003 3Rs Promotion Association Chairman's Award	•Disclosed the system of sequential hybrid series •Set up the Subaru brand message "Think. Feel. Drive."	
Nov.		The Legacy won the 2003–2004 Japan Car of the Year Award	
Dec.		•Developed a new processing technology for automotive parts, "hard broaching method" •Launched the new minicar, Subaru R2 and achieved fuel economy of 24.0 km/L (10-15 mode) (R) and a 75% reduction in emissions from the 2000 standards (R and i)	
Jan. 2004	The Head Office and the Tokyo Office acquired ISO 14001 certification		

Glossary

3Rs (Reduce, Reuse, Recycle)
As waste material countermeasures, the 3Rs require reductions in the volume of waste through product resource conservation, longer life of products, and reduced generation of by-products in production processes (Reduce); reuse of components (Reuse); and recycling of components (Recycle).

ASR (Automobile shredder residue)
After disposal of fuel, oil, and the like by end-of-life vehicle dismantlers, the engines, transmission, tires, batteries, and other parts are separated and the remaining bodies and other parts are dispatched to a shredding facility. They are turned into shredder residue after steel and nonferrous metal particles are separated out for recycling. Recycling technology for this residue is now under development.

Compatibility
When a large car collides with a small car, generally the small car suffers greater impact. Therefore, the idea of compatibility is to optimize weight, rigidity, and height of the cars in order to reduce the impact from a large car as well as to reduce the damage on a small car.

Dioxins
This is a generic term that denotes polychlorinated dibenzo-p-dioxin (PCDD) and polychlorinated dibenzofuran (PCDF). Depending on the location and number of occurrences of chlorine, there are many types whose degree of harmfulness varies. There are some that cause deformities and some that are carcinogenic. Dioxins appear unnoticed in the manufacture and combustion of chemical substances. In the Law Concerning Special Measures against Dioxin (promulgated in July 1999), PCDD and PCDF, including coplanar PCB, are defined as dioxins.

Directive 2000/53/EC of the European Parliament and of the Council on ELVs
This directive regulates policies to improve the environmental conservation ability of automobile manufacturers and other related companies. It aims for reuse and recycling in order to prevent the waste generated from ELV (End-of-life Vehicles) and reduce waste disposal.

End-of-life vehicles
Automobiles, including motorbikes, whose use for transportation has ended, are disposed of by dismantling, destroying, burning, or burying in landfills.

Environmental impact
In the Environment Basic Law, this is “that which, as a result of human activity, affects the environment and is a cause of interference in environmental conservation.”

Environment management system (EMS)
Environment management system positions environmental conservation measures as one link in the corporate activity and involves the planning, implementation, and evaluation. Depending on the type of evaluation, measures are implemented to achieve certain objectives. The organizational set-up for administering these operations is the EMS.

Greenhouse gases
These are gases (CO_2, methane, CFC alternatives, and others) that absorb the heat (infrared rays) released by the sun-warmed surface of the earth and cause global warming. Green house gases absorb heat and warm the air but as their density increases as more heat is absorbed and the air temperature rises, resulting in global warming.

Law on Recycling End-of-Life Vehicles
The law obligates automobile manufacturers and other related companies to share the responsibility for recycling and handling end-of-life vehicles appropriately. Automobile manufacturers are obliged to recycle or appropriately handle CFCs used for air conditioners, shredding dust, and air bags. The law was established out of the need to 1) reduce the amount of shredding dust because of a shortage of dump yards of waste materials; 2) to prevent illegal dumping and improper treatment; and 3) to work on environmental issues, such as depletion of the ozone layer and global warming. This is thought to be an important law to create a recycling-based society in Japan. (This law was promulgated in July 2002.)

Law Promoting Green Purchasing
This law aims to promote procurement of environmentally aware products (products and services contributing reduction of environmental impact) by ministries, agencies and other central governmental bodies. It also aims to promote the creation of a society able to sustain development by shifting demands through promotions to provide adequate information on environmentally friendly products. (The law went into force in April 2001.)

Normalization
This is the vision of an ideal society where disabled and elderly people can live and act in the same way as others. Also, it means creating an environment aiming at such a society.

PRTR Law (Law Concerning Reporting of the Release into the Environment of Specific Chemical Substances and Promoting Improvements in Their Management)
This legislation requires ascertaining the situation of chemical substance emissions and reporting to the central government via local governments. The amount of pollutants emitted into the environment or the amount transferred as waste is registered, tabulated, and made public by the government. Class 1 Designated Chemical substances number 354. (The law went into effect in April 2001.)

Recycling-based society
As an alternative to the existing high-consumption, high-waste society, this is an economic society that aims at the simultaneous achievement of environmental consideration and the pursuit of economic reason through the reduction, reuse, and recycling of waste material, restricting as much as possible the use of new resources and minimizing the volume of emissions.

Stratospheric platform
The stratosphere generally means the atmospheric region from the troposphere at about 11 kilometers in altitude to about 50 kilometers in altitude. It has a thermal gradient opposite to the troposphere that the temperature rises as the altitude increases, and the air layers do not mix. Weather phenomena, such as typhoons and clouds, occur in the troposphere and hardly influence the stratosphere. The stratospheric platform is a flying body that stays in the stratosphere with the characteristics shown above. There are two types, the airship type and the airplane type.

Thermal recycle
This means not only simply incinerating waste but also collecting and utilizing them as thermal energy. For example, the thermal heat produced by incinerating waste is generally used for thermal resources such as air conditioners and hot water. Furthermore, they can be used as fuels by converting them into solid fuels such as refuse derived fuel (RDF) refuse paper and plastic fuel(RPF) and oil.

VOC (Volatile organic compounds)
This is a generic name for organic compounds that exist in the form of gas in the air. It includes trichloroethylene, tetrachloroethylene, formaldehyde, toluene, benzene, and xylene. VOCs have an ability to dissolve fats and oils, and they have characteristics that make them hard to decompose and burn. Consequently, VOCs were used as an ideal cleansing agent in the industry in 1970s, but they could be harmful (causing headaches and dizziness after suctioning) and carcinogenic.

Zero emissions
This aims at building a recycling-based society in which the recycling of waste from industrial and other activities and the prevention of waste generation results in a society with no waste. Zero emissions have a variety of meanings, but for FHI, it is the activities that bring a zero level of waste material disposed of in landfills.

Please Give Us Your Opinions and Thoughts.

Thank you for reading Fuji Heavy Industries' Year 2004 Environmental & Social Report.

This report is about measures for environmental conservation and social contributions implemented in fiscal 2003 focusing primarily on FHI. Going forward, environmental & social reports will be published annually. We believe that your opinions and thoughts will help make them more complete. So please take a moment to fill in the questionnaire on the reverse side and fax it to us at the number shown. Thank you for your cooperation.

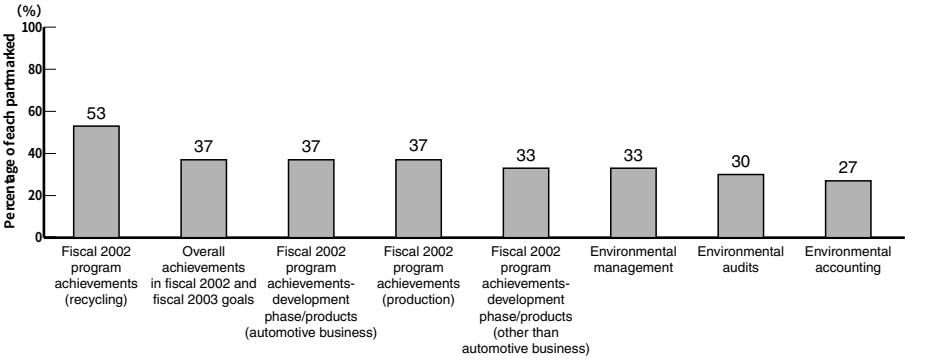
Reports on the results of the questionnaire for our Year 2003 Environmental Report

Our sincere thanks to the many that completed last year's questionnaire (published in June 2003). These are the results.

1. About the 2003 Environmental Report

(1) Were the contents of this report sufficient and suitable for an environmental report?

(2) What parts impressed you most? (Mark all that apply.)



2. About what topics you would like more detailed information?

(1) It would be better if more detailed examples and explanations on recycling were indicated.
(2) It would be better if the methods for ELV recycling techniques/research to be penetrated into scrappers are clearly explained.
(3) Please introduce the detailed contents about development of the fuel battery and the hybrid car.
(4) I almost understand the environmental audit but would like to know more.
(5) Since the environmental issues are difficult, the report should be written with easier terms and clearer designs to be more easily understood.
(6) It would be better if you could introduce important themes and achieved topics in more detail by highlighting, etc.

3. Please let us know your frank opinions about the environmental report and our environmental activities.

(1) Your approaches of working sufficiently on environmental conservation based on the corporate philosophy seem favorable. Please go forward with ELV recycle continuously (in cooperation with companies in other businesses).
(2) I would like you to further develop automobiles (hybrid, natural gas, electric cars, etc.) under current measures for environmental conservation. In addition, please make electric/natural gas cars more accessible to the general public.
(3) As one of the important issues for reducing chemical substances, enormous efforts should be put into cutting down the use of organic solvents in the painting process.

We received many valuable ideas in addition to those presented here. To the extent possible, we have incorporated those ideas in our Year 2004 Environmental & Social Report including:

(1) We indicated concrete examples on the automobile recycling.
(2) We introduced the current status of the implementation of the environmental risk assessment in more detail.
(3) When creating the report, we have always been concerned about the color use for diagrams, size, and expressions and incorporated articles explained by highlighting.

However, there is always room for improvement, and we again solicit the opinions and guidance of our readers.

QUESTIONNAIRE FAX FORM

Q1. How did you come to know abut the 2004 Environmental & Social Report?

☐Newspaper article ☐Magazine article ☐FHI's Web site ☐Other website
☐FHI employee ☐FHI business partner/supplier ☐Subaru dealers ☐Friend or acquaintance
☐Other (Please specify)

Q2. Were the contents of this report sufficient and suitable for and environmental & social report?

☐Definitely ☐Very much ☐Fair ☐Not very much ☐Not at all
Please state your reasons.

Reasons:

Q3. What do you think of FHI's activities?

[Environmental aspect] ☐Definitely sufficient ☐Sufficient ☐Acceptable ☐Not sufficient ☐Definitely not enough
[Social aspect] ☐Definitely sufficient ☐Sufficient ☐Acceptable ☐Not sufficient ☐Definitely not enough
Please state your reasons.

Reasons:

Q4. What parts impressed you most? (Please mark all that apply.)

☐New Voluntary Plans for the Environment ☐Environmental audits ☐Environmental accounting
☐Overall achievements in fiscal 2003 and fiscal 2004 plans ☐Development phase/products (automotive business unit)
☐Development phase/products (aerospace, industrial products, eco technologies company) ☐Production ☐Recycling
☐Logistics ☐Activities of affiliated companies (domestic/overseas) ☐Compliance ☐Relationship with customers
☐Relationship with employees ☐Social involvement ☐Plant site data ☐Product data
☐FHI environmental chronology ☐Glossary

Q5. Please tell us what topics you would like more detailed information on.

Q6. What is your opinion of FHI's environmental activities based on this report?

Q7. What is your relationship with FHI?

☐Customer ☐Resident of an area neighboring FHI installation ☐Engaged in government administration ☐FHI shareholder
☐News media-related ☐Related to an environmental NGO or NPO ☐Finance- or investment-related
☐Business partner/supplier ☐Employee or family member of employee
☐Other (Please specify)

Thank you for your cooperation. If you wish, please provide some information about yourself (optional).

Name Male/Female Age

Occupation Employer Department/Title

Address (workplace or home) Telephone

To: Environmental Affairs Promotion Office, Fuji Heavy Industries Ltd.

FAX : 03 3347 2530

The picture on the cover of the 2004 Environmental & Social Report shows the Pleiades star cluster, “Subaru” in Japanese (the image was partially processed for the cover use), based on which our six-star *mutsuraboshi* corporate symbol is designed.

In Japan, the Pleiades star cluster appears like fireflies flying in flocks above your head at dusk in winter. We can see the stars in the winter night sky even in cities when the air is clear.

We can count 6 to 7 stars of the Pleiades star cluster with the naked eye. In order to enjoy the beautiful stars forever, we need to continue to protect the precious global environment.

Please contact Fuji Heavy Industries’ Environmental Affairs Promotion Office with questions or comments about this report.

FAX 03-3347-2530

This environmental & social report is also available on the FHI’s Web site:

http://www.fhi.co.jp/english/index.html

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Published in September 2004