



Environmental Report

Current global environmental issues have diversified while increasing in significance year by year, particularly in global warming, wastes and recycling, and chemicals. Perceiving the environmental impacts produced through its business activities, FHI has been actively tackling prevention of global warming, conservation of resources and recycling, and chemical-related management. Toward a prosperous future where the global environment will be preserved and sustainable development will be actualized, FHI will continue doing its best to conserve the global environment. FHI aims to become *an eco-friendly, excellent company* that is respected and supported by customers throughout the world, as well as by the local communities.

Environmental Management

FHI started the Environmental Action Project in 1990 and has since taken advanced measures to protect the environment. Currently, we are working harder toward achievement of the goals specified in the FHI Environmental Conservation Program (Fiscal 2002–2006) (New Voluntary Plan for the Environment formulated and released in May 2002). In addition to developing the activities for our domestic and overseas affiliated companies, FHI is trying to reduce the environmental burden as one 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. FHI has also established guidelines for specific actions—the Operating Criteria for Environmental Conservation—in order to promote the Policy. Involving all of the employees, FHI is moving its activities forward.

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.

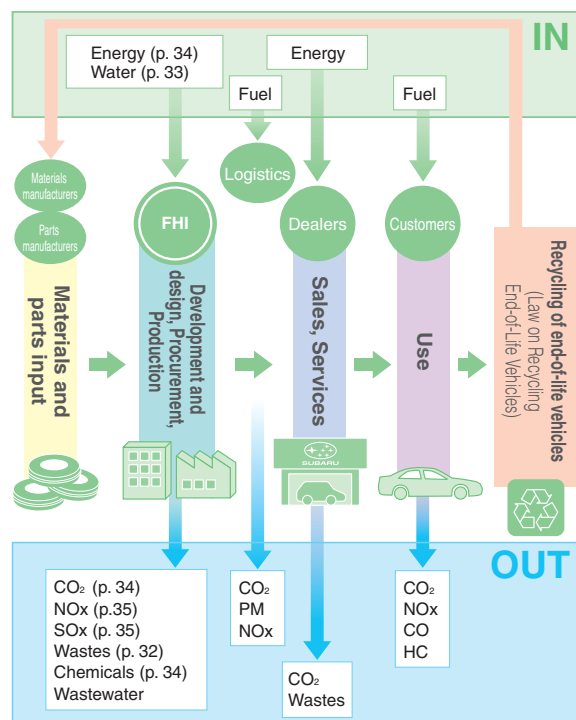
Operating Criteria for Environmental Conservation

- 1) FHI is committed to environmental conservation and gives consideration to environmental impacts at every step of product development, design, manufacture, sales, service, and disposal.
- 2) FHI observes 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 conservation.

Corporate Activities and Environmental Impacts

FHI is a transportation manufacturer focusing on automobiles. Automobiles, which are a convenient and comfortable form of transportation, are now indispensable for living in a modern society. On the other hand, however, automobiles require limited global resources as materials and fuels. Consequently, they emit CO₂, which causes global warming, as well as carbon monoxide (CO), hydrocarbons (HC), and nitrogen oxides (NO_x) that pollute the air. We believe that automobiles make life more pleasant and reflect an affluent society but fully understand that automobiles have such disadvantages, as well as advantages. With these in mind, we must work hard for a better future. FHI accepts the task of conserving both the global environment and the benefits of automobiles by considering the environmental impacts and reducing the environmental burden through the lifecycle of development, production, use, disposal, and recycling of automobiles.

Overall Environmental Burden 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 the ideal for FHI, which aims to become a company with a strong, appealing presence. Our goals are to offer our customers clean products from a system of environmentally clean factories, logistics networks, and dealers, 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 2004 are indicated in the table below.

Goals and Achievements in Fiscal 2004

Item	Goals	Achievements	Evaluation	Page in this report
(Clean factories) Green procurement activities	[Automobile Business Unit] Establish EMS at 95% or more of the suppliers	96%	○	p.35

Organization

FHI sets the Corporate Environment Committee, which is chaired by the senior executive vice president and operated by representatives from all of the offices as the core of its environmental conservation activities. The organization determines policies and plans, ascertains results and achievements, and is actively involved in a variety of activities to reduce the environmental burden. The Corporate Environment Committee is composed of specialized committees, the Environment Committees for individual Companies, and the North American Environment Committee. Specialized committees have the necessary subcommittees for promotion of practical activities.

Environmental Management System

FHI acquired ISO 14001 certification in all of its main businesses. In fiscal 2004, the applicability of the certification was expanded to the Subaru Parts Distribution Center (Ohta City) and the Subaru Parts & Accessories Div. (Saitama City). Overseas FHI-affiliated companies, Subaru of America, Inc. (SOA), and Subaru Canada, Inc. (SCI), acquired ISO 14001 certification (see p. 50 for reference). Domestic Subaru dealers, Aomori Subaru Co., Ltd., and Fuji Subaru Co., Ltd., also acquired certification. Including Chiba Subaru, Inc., and Iwate Subaru, Inc., four dealers have now acquired the certification on the Subaru team. FHI will further promote establishment of the EMS.

Acquired ISO 14001 Certification

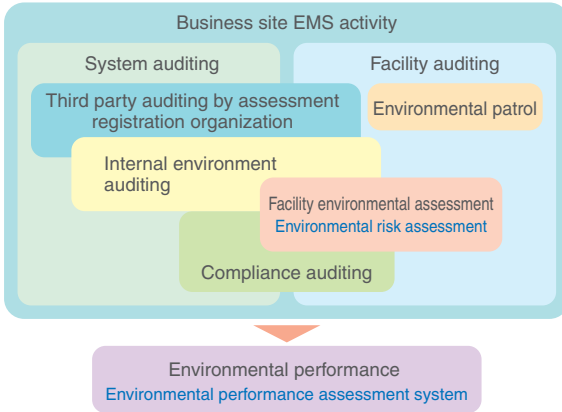
Business site		Certification date
Gunma Manufacturing Division	Main Plant	March 24, 1999
	Yajima Plant	
	Ohta North Plant	
	Oizumi Plant	
	Subaru Test & Development Center	
	Isesaki Plant	
	Subaru Parts Distribution Center	
Industrial Products Company		May 21, 1999
Utsunomiya Manufacturing Division (Aerospace Company Eco Technologies Company) Head Office	Main Plant	July 2, 1999
	South Plant	
	South No. 2 Plant	
	Handa Plant	
Head Office	Shinjuku Business Site	January 19, 2004
	Ohmiya Business Site	
Tokyo Office		January 29, 2004



Environmental Audits

FHI implements checks from different aspects to see whether we are progressing toward our voluntary environmental goals as planned and how our activities are going on to achieve the goals.

Environmental Auditing System



Auditing at Each Business Site

At each business site, we implement internal auditing, and third party auditing by the assessment and registration organization while operating ISO 14001. We also check the environment-related facilities through environmental patrols conducted at the Manufacturing Engineering, Maintenance, and Environment departments.

Assessments by External ISO 14001 Assessment and Registration Organization

(*)	Type of assessment	Assessment date	Assessment
1)	Regular assessment	May 19–21, 2004	As a result of the follow-up assessment together with ISO 9001, the EMS was regarded as renewable for ISO 14001 certification, although there were minor nonconformities.
	Renewal assessment	February 15–18, 2005	As a result of the assessment, there were no nonconformities. The EMS was regarded as renewable.
2)	Regular assessment	June 21–24, 2004	As a result of the assessment, there were no nonconformities. The achievements of the environmental activities conducted within each department were acceptable so that the EMS was regarded as renewable.
3)	Regular assessment	December 2–3, 2004	As a result of the assessment, there were nonconformities, which did not influence the reliability of the effectiveness of the entire EMS. By taking corrective measures, the EMS was regarded as renewable.
4)	Regular assessment Site expansion assessment	February 2–4, 2005	As a result of the assessment, there were no nonconformities. The EMS was regarded as renewable and expandable to the Ohmiya Business Site (Subaru Parts & Accessories Div.).
5)	Renewal assessment Site expansion assessment	January 24–28, 2005	As a result of the assessment, there were no nonconformities. The EMS was regarded as being operated properly and expandable to the Subaru Parts Distribution Center.

Company-wide Unified Auditing

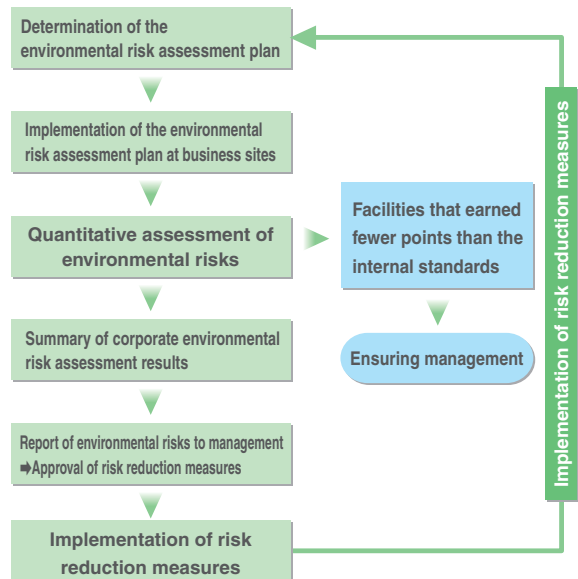
Environmental Risk Assessment

Oil fuels and chemical materials are used in the manufacturing process and the R&D stage. These, if mistakenly handled or managed, might not only contaminate water and pollute the air, but also harm human health and affect the animal and plant ecosystems. Since fiscal 2001, FHI has implemented the Environmental Risk Assessment under our original assessment criteria for the facilities where these materials are used and stored. By identifying the risks numerically through the assessment, facilities with higher figures are being improved in terms of equipment and management to reduce potential risks. By fiscal 2003, large facilities had been assessed, and their improvements had almost been completed. In fiscal 2004, the risk assessment was conducted, focusing on management of equipment, for an upgrade of standards and education.

Environmental Risk Assessments and Improvements

Fiscal	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	59
2004	290	18	13

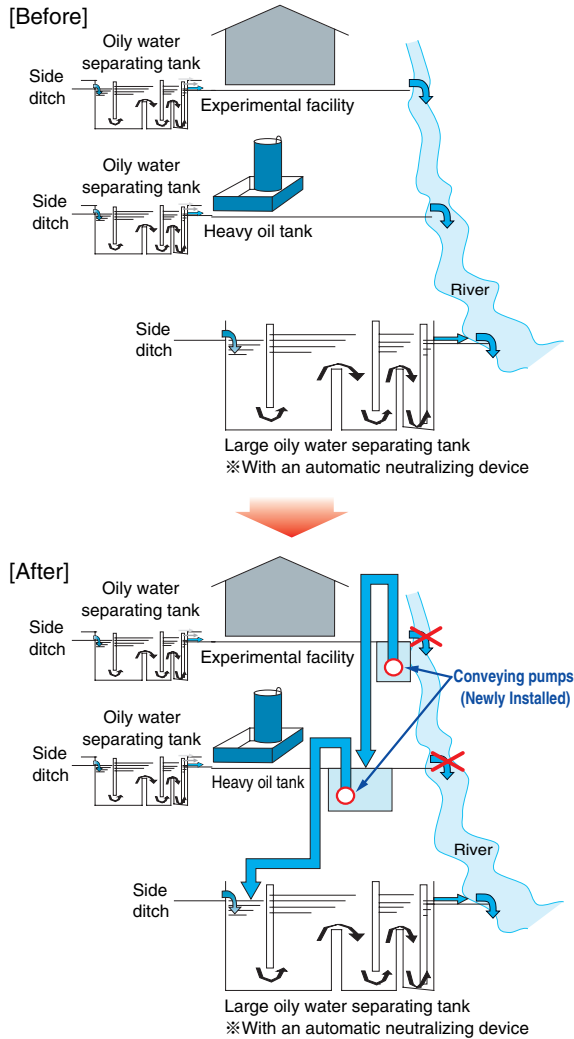
Risk Reduction Process Using Environmental Risk Assessment



Improved Case

The effluent and rainwater of plants where automobiles have been produced since the time of the Subaru 360 (a mini car called the Ladybug), are released into rivers by way of the separating tank, which has the ability to separate oil from water and to check the pH level. However, there were an experimental facility and a heavy oil tank downstream of some of the separating tanks. If any substance that contaminates the river should leak, it will easily flow out into the river.

Therefore, a conveying pump was installed at the end of each conduit in order to convey water to the large oily water separating tank having the automatic neutralizing function. Thus, environmental risks were reduced by this modification.



Environmental Risk Assessments at Affiliated Companies

We think that the environmental burden will be reduced drastically by involving affiliated companies of the group in the activities of FHI. Since acquisition of ISO 14001 certification, the related manufacturing affiliates have been making improvements continuously. In fiscal 2004, they introduced our Environmental Risk Assessment to reduce environmental risks in the levels common to the group. This year, 24 environmental facilities were assessed so that 31 improvement items were detected in management and 6 items in facilities. We will constantly implement the assessment for reduction of environmental risks in the entire Subaru Group.

Environmental Risk Assessment Conducted at an Affiliated Company

The following photo shows the checking of environmental risks in the effluent treatment facility at Fuji Robin Industries Ltd., where fire pumps equipped with Robin engines are manufactured. In accordance with the flow of the wastewater treatment, facility risks are

assessed, while management risks are checked based on management criteria, records of inspections, emergency measures, and education systems. Consequently, the significance, management factors, and facility factors are assessed with values. To eliminate arbitrariness, the assessment was conducted by three people: one from Fuji Robin Industries Ltd., one from the Industrial Products Company, and one from the Head Office.



Checking the pH meter and the level sensor.



Referring to drawings and data, marks are given.

Environmental Performance Assessment System

The Environmental Performance Assessment System was introduced in fiscal 2002. After each business site and specialized committee implements self-assessment, the officer in charge of the environment, Mr. Suzuki, senior executive vice president, visits each business site to conduct a hearing (and an audit) about the progress of the activities. Thus, we unify our activities with confirmation of the achievements and identification of the measures to take. In fiscal 2004, the assessment was implemented in 292 items. As the radar chart of assessment results shows, improvement has been

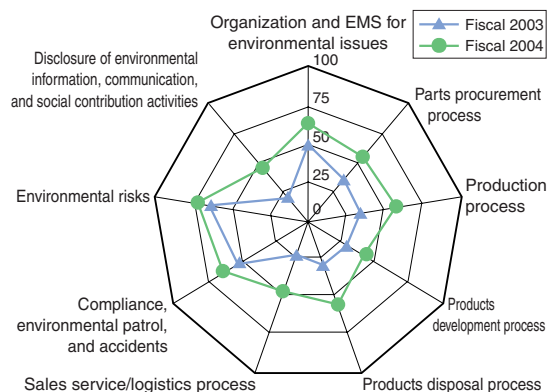


made since fiscal 2003. We are promoting the activities for further betterment.

Mr. Suzuki, senior executive vice president (second from the front on the left side) visited Industrial Products Company for a hearing.

Environmental Performance Assessment Results*1

In fiscal 2004, the environmental performance was improved company-wide by about 50% (36.1%→56.6%) as compared with the results of the previous year. While achieving the goals of each department as planned, we will have to tackle the following issues: improvement of environmental activities at affiliated companies and dealers, social contributions, communication, reduction of CO₂ in the logistics stage, decrease in environmental complaints and accidents, and conservation of paper.



*1. Environmental Performance Assessment Results: Regarding the most advanced activity levels as 100% by benchmarking the environmental activities implemented at leading environmental companies at home and abroad, we assess our activity levels objectively and relatively.

Environmental Education

Our business activities are closely related to global warming, as well as the environmental problems of wastes, 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 emergency drilling based on the Environmental Management System (EMS), education for different levels of employees ranging from new recruits to those receiving promotions by acquiring certification, using company-wide unified textbooks, and specialized education for management. In addition, we utilize all opportunities to carry out instructive activities, including environmental campaign months and environmental lectures.

Educational Activities through Lectures and Presentations

In June 2004, when an environmental campaign was implemented, the Gunma Manufacturing Division gave an environmental lecture to its executives, inviting Mr. Hashimoto, Manager of the Environmental Affairs



Environmental lecture by Mr. Hashimoto, Manager of the Environmental Affairs Department (at that time) of Bridgestone Corporation

Department, Bridgestone Corporation, as the lecturer.

The Utsunomiya Manufacturing Division holds environmental case study presentations twice a year, where sixteen teams participated in fiscal 2004. In March 2005, the Gunma Manufacturing Division



Chief General Manager Tamura (at that time) at the Energy Conservation Case Study Presentation at the Gunma Manufacturing Division

conducted the Energy Conservation Case Study Presentation for the tenth time, where ten teams, including the engineering and indirect divisions, participated.

The First Operations Improvement Case Study Presentation Held at Head Office

In June 2004, as a part of an environmental campaign month, the head office conducted the First EMS Operations Improvement Case Study Presentation. Eight teams mainly from the automobile sales department participated in the presentation in order to present the daily measures and achievements related to improvement of environmental impacts based on original operations in the indirect department.



The First EMS Operations Improvement Case Study Presentation at Head Office



Adoption of e-learning

The head office is composed of the automobile sales and many other divisions. Therefore, education on environmental conservation by e-learning over the intranet was introduced in fiscal 2003 for better understanding of the EMS because of the difficulty in providing lectures directly to employees. In fiscal 2004, education on compliance, as well as the EMS, was implemented through e-learning. In fiscal 2005, education by e-learning will be developed in the Tokyo office, which has the Automobile Development Division, and the Gunma Manufacturing Division as the manufacturing division.

Subaru Safety Environment Association

At the Gunma Manufacturing Division, the Subaru Safety Environment Association was established for the improvement of the environmental activities of its local suppliers. Through the conference, the Association exchanges information on environmental conservation such as energy conservation, waste reduction, and pollution control. The Association also supports environmental



education to new recruits of the member companies (implemented in April 2004).

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

Stickers that Say Stop Idling

The Gunma Manufacturing Division prepared stickers that say "Stop Idling" with an illustration of the famous old car, the Subaru 360, representing safe driving that is friendly to the environment. The stickers were affixed to company-owned cars at the



manufacturing division. All departments are working on "Safe Driving, Eco Driving, and Driving without Idling."

Emergency Drills based on EMS

At every worksite of each manufacturing division, we regularly conduct a drill according to specific procedures so



Emergency drill in case hazardous material (gasoline) should leak from a pipe (1st Engineering Sec, 3rd Production Dept, Gunma Plant).

We are well prepared for an emergency by conducting drills for checking the flow direction and using sandbags and oil fences.

that we can take appropriate action to prevent or minimize the impact of an accident or emergency if it should happen.

Environmental Accounting

Concept and Calculation of Environmental Costs and Economic Effects

With reference to the guidelines of the Ministry of the Environment (year 2000, 2002, and 2005 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 affiliated companies are also calculated on the basis of our guidelines. See p. 46.)

Definition and Categorization of Environmental Costs

1) Costs for reducing the environmental burden	1. Costs for reducing the environmental burden during the production process	
2) Investment costs	2. Costs for obtaining environmental conservation effects that continue for several terms	
3) Other costs	3. Costs not belonging to the above categories	
※ Investments in environmental facilities	For reference (facilities are included in the depreciation cost, and the declining balance method is adopted)	

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 conservation in a production facility is calculated as follows.

Environmental costs = $K \times$ (Depreciation costs, maintenance and management costs, and other costs of the facility) where K , coefficient of environmental impact, is calculated as follows:

$$K = (\text{Total amount of investment} - \text{Cost of investment without energy conservation purpose}) / (\text{Total amount of investment})$$

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 the environmental burden. 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.

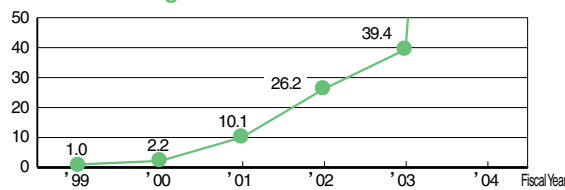
Results of Aggregated Environmental Costs and Effects in Fiscal 2004 (Subject: FHI (nonconsolidated) Period: April 2004 through March 2005)

Cost Categories in [] at the right bottom is based on the Guideline by the Ministry of Environment*1		Environmental costs			Main activities ★: New measures in fiscal 2004	Detailed pages	Costs (¥ million)		
		Costs (¥ million)					Fiscal 2004	Fiscal 2003	Fiscal 2002
		Fiscal 2004	Fiscal 2003	Fiscal 2002					
Costs for reducing the environmental burden (Production stage)	Waste treatment and recycling				Paint sludge recycling plant				
	Waste reduction [①-3]	629	701	948	☆Maintenance of the recycling center ☆Introducing electrostatic coating for bumpers	32	19	45	80
	Energy conservation and CO ₂ emissions reduction [①-2]	383	376	295	☆Introduction of the cogeneration system (ESCO style) ☆Introducing the use of natural gas for boilers	34	494	336	968
	Reduction of CFC alternative discharge [①-2]	5	6	8	Introduction of energy-saving compressors, robots, and high-efficiency transformers Recovery of air conditioner refrigerants	35	0	0	0
	Pollution control such as wastewater and exhaust gas treatment [①-1]	991	1,034	893	☆Partial renewal of wastewater treatment ☆Measures to address coating odors ☆Rainwater final treatment tank and modification of the coating facility	35	473	430	552
	Reduction of VOC discharge [①-1]	71	70	83	☆Introducing electrostatic coating for bumpers ☆Facilities for collecting washing thinner	35	74	144	0
	Total costs to reduce the environmental burden	2,079	2,187	2,228			1,059	955	1,599
Investment costs	Education and ISO 14001 related matters [③]	429	476	465	Environmental education, training, and environmental improvement activities at the worksites Maintaining ISO 14001 certification (application cost, internal auditing and assessment, labor costs)	14	—	—	—
	Product research and development [④]	16,892	20,088	21,766	Improvement of fuel economy, cleaner emissions, and better recycling efficiency Development of eco products	22	973	1,973	2,594
	Total investment costs	17,321	20,563	22,232			973	1,973	2,594
Other costs	Measures for end-of-life products [②]	579	259	146	Collection of used market bumpers → recycling Measures to cope with the Law on Recycling End-of-Life Vehicles	37	525	—	—
	Social contribution and other environmental measures [③⑤⑥⑦]	1,067	2,034	1,504	Preparation of environmental reports and cleaning around plants Environment-related projects by the Japan Automobile Manufacturers Association, Inc. Planting trees, measures for environmental discrepancies, etc.	63	0	7	323
	Total other costs	1,645	2,292	1,650			525	7	323
Total cost		21,045	25,043	26,109			2,557	2,936	4,516

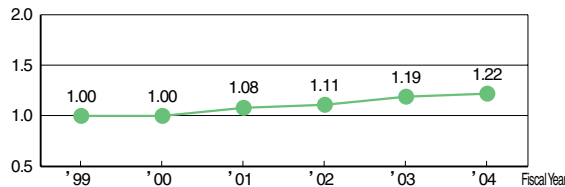
Environmental Costs and Economic Effects in Fiscal 2004: Environmental Performance Improved

Environmental costs were ¥21 billion, a reduction of ¥4 billion (16%) from the previous year. This was because enhanced efficiency in product research and development decreased the costs. On the other hand, economic effects totaled ¥2.3 billion, which was an increase of ¥0.3 billion (16%). This was mainly because valued materials were sold, the usages of painting and solvent were reduced, and energy costs were decreased. With fewer costs than the previous year, the environmental burden was reduced further by recycling the full amount of generated materials in all the manufacturing divisions (zero level waste generation). In addition, ISO 14001 certification was expanded to the Subaru Parts Distribution Center and other divisions, outflow risks were reduced, and the good results of development and the implementation of the system responding to the Law on Recycling End-of-Life

Sales/Waste generation



Sales/CO₂ emissions Fiscal Year

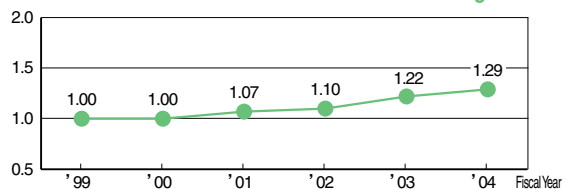


Vehicles were accomplished. The Utsunomiya Manufacturing Division introduced the ESCO-method natural gas cogeneration system. Without initial investment and risk taking, good results were produced mainly in conservation of energy and reduction of CO₂ emissions. (For more information, see p.36.)

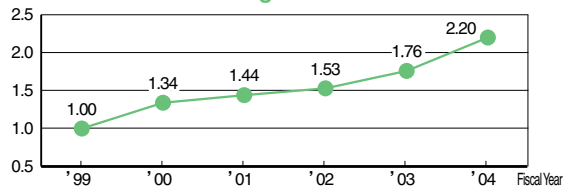
Environmental Management Indexes

Environmental efficiency of business activities, which is one of the environmental management indexes, was regarded as [sales ÷ environmental burden]. They are calculated with the environmental burden in the production process by regarding the fiscal 1999 levels as the standard. The results are indicated in the following graphs. Environmental efficiency has improved well for each item. Particularly, a zero waste generation level was reached in fiscal 2004 with maximum efficiency, which is impossible to indicate in the graph.

Sales/Total amount of waste and other materials generated



Sales / PRTR discharge moved



Economic effects				Environmental performance (quantitative effects)					
	Effects (¥ million)			Category	Unit	Fiscal 2004	Increase/Decrease from fiscal 2002	Fiscal 2003	Fiscal 2002
	Fiscal 2004	Fiscal 2003	Fiscal 2002						
Reduced costs through waste control and treatment method changes	1,370	1,199 *2	675	Amount of matter generated	ton	73,024	-2,893	75,917	82,325
Profit from the sales of valued materials obtained through recycling				Amount of waste generated	ton	0	-182	182	267
Reduced energy costs	524	465	257	Amount of landfill	ton	0	-6	6	13
Reduced virgin material purchasing costs by reusing recovered air conditioner refrigerants	3	3	2	Energy consumption (Crude oil equivalent)	1,000 kL	134.8	-0.5	135.3	138.2
Reduced costs by replacing cleaning agents (chemical agents)	8	9	8	Energy consumption per production	kL/¥100 million	14.3	-0.3	14.5	15.2
Reduced paint and solvent usage	374	282	264	CO ₂ discharge	10,000 tons-CO ₂	23.3	-0.4	23.6	24.7
Total savings from the effects of reducing the environmental burden	2,278	1,958	1,205	Discharge of greenhouse gases other than CO ₂	ton-CO ₂	395	16	379	368
—	—	—	—	PRTR chemicals *3	ton				
(Total investment effects) N/A for the time being	0	0	0	Amount handled	ton	4,285	411	3,874	3,860
Reduced virgin material purchasing costs by using recycled materials	20	22	20	Amount released and transferred	ton	1,013	-239	1,252	1,403
Reduced costs by changing raw materials	0	0	0	VOC discharge (automobiles only)	g/m ²	46.4	-0.8	47.2	49.5
Total of other effects	2,298	1,980	1,226						

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

Rates of Environmental Conservation Activities in FHI Business Activities

	Fiscal 2004	Fiscal 2003	Fiscal 2002
Proportion of the R&D cost for environmental conservation to the test and research costs	32%	35%	36%
Proportion of the investment for environmental conservation to capital investment	10%	9%	13%

*2 There was an error in counting the amount of waste-related effects in fiscal 2003. Against the amount mentioned in the 2004 report, the amount in this report is reduced by ¥64 million.
 *3 PRTR (Pollutant release and transfer register) chemicals: Totaling the chemicals, of which annual amounts handled are one ton or more (0.5 tons or more for Class I Designated chemical substances).

Overall Achievements under the Fiscal 2004 and Fiscal 2005 Plans

Environmental Management

Fiscal 2004		Fiscal 2005 goals
Goals	Achievements	
Promote the establishment of environmental management systems	The Subaru Parts Distribution Center (Ohta City) and the Subaru Parts & Accessories Division (Saitama City) acquired ISO 14001 certification.	Further promote establishment of EMS
Further improve information in the 2004 Environmental Report (environmental achievements in fiscal 2003)	In the 2004 Environmental Report (environmental achievements in fiscal 2003), the report on social activities was independently sectioned as the "Social Report," the contents of which have been improved from last year's report.	Further improve information in the 2005 Environmental Report (environmental achievements in fiscal 2004)

Development Process and Products

Category	Fiscal 2004		Fiscal 2005 goals
	Goals	Achievements	
Fuel economy	<ul style="list-style-type: none"> Continue fuel economy improvement for every full model change and annual model change Satisfy fiscal 2010 fuel economy standards earlier by fiscal 2006 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> From 2003, start introducing ultra low emissions vehicles, cars with exhaust emissions 75% reduced beyond 2000 standards, and aim to introduce cars with emissions reduced 50% beyond 2005 standards; by 2005, the goal is to have 80% or more of all passenger cars be low emissions vehicles. 	<ul style="list-style-type: none"> Introduced low emission vehicles, the "Forester NA" and the "R1", with exhaust emissions reduced 50% beyond 2005 standards. 	The goal is to have the exhaust emissions of 80% of the cars sold be either 50% or 75% reduced beyond 2005 standards (out of this 80% figure, half should be vehicles with emissions reduced 75% beyond 2005 standards) by 2006
Noise	Further reduce all noise levels of the automobile	Developed low-noise power units, exhaust systems, and other components during Subaru's annual vehicle improvement period.	Reduce all noise levels of the automobile for further reduction of environmental noise
Clean energy vehicles	<ul style="list-style-type: none"> 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: Develop the next-generation FCVs 	<ul style="list-style-type: none"> Hybrid vehicles: Continue development toward introduction to the market Natural gas vehicles: Introduced NGVs based on the new "Legacy" to the market Fuel cell vehicles: Continued development toward the next-generation FCVs 	<ul style="list-style-type: none"> Hybrid vehicles: Continue development for introduction to the market, and aim at limited introduction to the market in fiscal 2007 Natural gas vehicles: Continue market expansion of NGVs based on the new "Legacy" Fuel cell vehicles: Continue development toward next-generation FCVs

Production Stage

Category	Fiscal 2004		Fiscal 2005 goals
	Goals	Achievements	
Waste reduction	<ul style="list-style-type: none"> Control amount of waste generated. 	<ul style="list-style-type: none"> Reached zero waste generation level 	<ul style="list-style-type: none"> Control amount of waste generated Maintain zero waste generation level
Energy conservation	<ul style="list-style-type: none"> Work to accomplish the goal for energy consumption per production (28% reduction compared with the fiscal 1990 level by fiscal 2006) Work to accomplish the CO₂ discharge reduction goal (6% reduction compared with the fiscal 1990 level by fiscal 2006) 	<ul style="list-style-type: none"> Improved energy consumption per production by 1.9% from the previous year Reduced CO₂ discharges by 15% compared with the fiscal 1990 level 	<ul style="list-style-type: none"> Work to accomplish the energy consumption per production goal (28% reduction compared with the fiscal 1990 level by fiscal 2006) Work to accomplish the CO₂ discharge reduction goal (6% reduction compared with the fiscal 1990 level by fiscal 2006)
Reduction of substances with environmental impact (Automotive Business Unit)	Work to accomplish the paint VOC reduction goal (45g/m ² or less by fiscal 2006)	Reduced generation of paint VOC (per unit area) to 46.4g/m ² , a 57.4% reduction compared with the fiscal 1995 level	Work to accomplish the paint VOC reduction goal (45g/m ² or less by fiscal 2006)

Category	Fiscal 2004		Fiscal 2005 goals
	Goals	Achievements	
Green procurement	<ul style="list-style-type: none"> Automotive Business Unit: Establish EMS at 95% or more of the suppliers Industrial Products Company: Maintain EMS established at all suppliers Aerospace Company: Encourage suppliers to establish EMS Eco Technologies Company: Encourage suppliers to establish EMS Expand green procurement. Promote purchasing of eco products in the Head Office area. 	<ul style="list-style-type: none"> Automotive Business Unit: Established EMS at 96% of the suppliers Industrial Products Company: Maintained the EMS established at all suppliers Aerospace Company: Held explanatory meetings for suppliers on establishment of EMS, and conducted questionnaires about research and reduction of substances with environmental impact Eco Technologies Company: Held explanatory meetings for suppliers on establishment of EMS Achieved 100% purchasing of eco products in the Gunma region Expanded green procurement in the Head Office area 	<ul style="list-style-type: none"> Automotive Business Unit: Have more suppliers establish EMS Industrial Products Company: Proceed with reduction of substances with environmental impact Aerospace Company: Encourage suppliers to establish EMS Eco Technologies Company: Encourage suppliers to establish EMS Try to achieve 100% eco product purchasing of consumable office supplies in the Head Office area, and promote eco products at each company

■ Recycling

Category	Fiscal 2004		Fiscal 2005 goals
	Goals	Achievements	
Improvement of recycling efficiency	<ul style="list-style-type: none"> Continue to incorporate technologies developed for easier dismantling and higher recycling efficiency into vehicles under development Complete the establishment of the recycling system, and respond to the Law on Recycling End-of-Life Vehicles enforced on January 1, 2005 Continuously proceed with studies of the practical applications of ELV (End-of-Life Vehicle) recycling 	<ul style="list-style-type: none"> Incorporated a recycling design for easier dismantling and higher recycling efficiency into the R1 Established Automotive Recycling System of Subaru (ARSS), and smoothly coped with the Law on Recycling End-of-Life Vehicles Promoted study of practical applications of ELV recycling, particularly glass recycling and harness recovery. Expanded adoption of PP-grade integrated materials 	<ul style="list-style-type: none"> Continuously incorporate technologies developed for easier dismantling and higher recycling efficiency into cars under development Continuously promote study of practical applications of ELV recycling
Recycling volume	<ul style="list-style-type: none"> Increase the number of used bumpers collected from the market 	<ul style="list-style-type: none"> Collected about 41,700 used bumpers 	<ul style="list-style-type: none"> Increase the number of used bumpers collected from the market
Reduction of substances with environmental impact	<ul style="list-style-type: none"> Promote alternative technologies for the parts and substances with environmental impact newly subject to control by the EU directive from 2004 Promote measures for the voluntary action program under Goals for Reduction of Substances with Environmental Impact in New Model Cars by the Japan Automobile Manufacturers Association (JAMA) 	<ul style="list-style-type: none"> Dealt with the EU directive on restriction of substances with environmental impact (lead regulations came into effect in January 2005) In accordance with Goals for Reduction of Substances with Environmental Impact in New Model Cars by JAMA usage of lead in compact cars was reduced to 1/10 the 1996 level The goal concerning mercury was also achieved Progress was made in responding to the fundamental ban on use of hexavalent chromium 	<ul style="list-style-type: none"> Promote development of alternative technology for parts containing lead that will be subject to the EU directive from 2006, and continue to study further reduction of lead usage Promote measures for the voluntary action program under the Goals for Reduction of Substances with Environmental impact in New Model Cars by JAMA Further promote development and adoption of alternative technology for hexavalent chromium
Sales and services	<ul style="list-style-type: none"> Respond to the Law on Recycling End-of-Life Vehicles without delay Further promote environmental conservation activities by dealers 	<ul style="list-style-type: none"> Held practical business seminar meetings for dealers, and established an intra-company operation system Aomori Subaru Co., Ltd. and Fuji Subaru Co., Ltd. acquired ISO 14001 certification 	<ul style="list-style-type: none"> Continuously promote responses to the Law on Recycling End-of-Life Vehicles

■ Logistics

Fiscal 2004		Fiscal 2005 goals
Goals	Achievements	
<ul style="list-style-type: none"> Promote logistics efficiency, and control generation of waste Further streamline transportation of completed vehicles Control generation of packing material waste 	<ul style="list-style-type: none"> (Transportation of completed vehicles) Increased the number of vehicles transported jointly with other companies (Reduction of packing material waste) Improved the packing specifications for large packing boxes shipped overseas. Also improved packing materials for knock down parts for North America 	<ul style="list-style-type: none"> Further promote reduction of the environmental burden in terms of logistics

Reference

New Voluntary Plan for the Environment

◆ FHI Environmental Conservation Program (Fiscal 2002 through Fiscal 2006)

Items		Goals and actions
Clean plants	Promoting energy conservation, and curbing global warming	<ul style="list-style-type: none"> ◇ Aim to reduce energy consumption per production by 28% compared to the fiscal 1990 level by fiscal 2006 ◇ Aim to reduce CO₂ emissions by 6% from production plants compared to the fiscal 1990 level by fiscal 2006
	Control and reduction of substances with environmental impact at production plants	<ul style="list-style-type: none"> ◇ Establish stricter standards than the current voluntary standards for newly established and remodeled environmental facilities in order to reduce the environmental burden on the air and water ◇ Reduce emissions of chemical substances listed in the Pollutant Release and Transfer Register (PRTR) into the environment ◇ Reduce Volatile Organic Compound (VOC) emissions in car production lines to the level of 45g/m² or less on average by the end of fiscal 2006
	Reducing wastes generated at production plants	<ul style="list-style-type: none"> ◇ 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	<ul style="list-style-type: none"> ◇ Reduce the amount of water used in the production plants
	Green procurement activities	<ul style="list-style-type: none"> ◇ Request a research report from suppliers on the contents of substances with environmental impact, and establishment of an environmental management system. The following are the target dates for establishing the environmental management system: <ul style="list-style-type: none"> ● Automotive Business Unit: 95% or more of the suppliers, including overseas ones, should have established a system by March 2005 ● Industrial Products Company: by the end of March 2004 ◇ Promote green procurement activities in other departments, including the Aerospace Company ◇ Develop green procurement activities with overseas suppliers (Automotive Business Unit) <ul style="list-style-type: none"> ● Research started in fiscal 2002 on the status of introducing the EMS and the contents of substances with environmental impact
Clean products	Improving fuel economy	<p>[Automobiles]</p> <ul style="list-style-type: none"> ◇ 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 <p>[General-purpose engines]</p> <ul style="list-style-type: none"> ◇ Aim to improve the average fuel economy of general-purpose engines by 15% (compared with the 1995 level) by 2005
	Cleaner exhaust emissions	<p>[Automobiles]</p> <ul style="list-style-type: none"> ◇ Produce excellent low emission vehicles (E-LEV) or good low emission vehicles (G-LEV) for all models, except for a few, by autumn 2002 ◇ The goal is to have the exhaust emissions of 80% of the cars sold be either 50% or 75% reduced beyond 2005 standards (out of this 80% figure, half should be vehicles with emissions reduced 75% beyond 2005 standards) by 2006 <p>[General-purpose engines]</p> <ul style="list-style-type: none"> ◇ Aim to reduce the average emissions of HC and NO_x from general-purpose engines by 30% (compared with the 1995 levels) by 2005
	Developing products using clean energy	<p>[Automobiles]</p> <ul style="list-style-type: none"> ◇ Hybrid vehicles: Continue development for market launch, and aim at limited introduction to the market in fiscal 2007 ◇ Natural gas vehicles: Continue market expansion of NGVs based on the new Legacy ◇ Fuel cell vehicles: Continue development toward next-generation FCVs <p>[General-purpose engines]</p> <ul style="list-style-type: none"> ◇ Introduced general-purpose engines compatible with CNG and LPG fuel during fiscal 2002
	Improving recyclability	<ul style="list-style-type: none"> ◇ Improve recyclable design for new models, and contribute to a recycling rate of 95% in 2015 <ul style="list-style-type: none"> ● Improve ease of disassembly in the recycling market by considering re-use and other methods ● Use easy-to-recycle plastic materials more extensively

Items		Goals and actions
Clean products	Reducing substances with environmental impact	<p>[Automobiles]</p> <ul style="list-style-type: none"> ◇Promote development of technologies which replace substances with environmental impact, aiming at faster application to developing vehicles <ul style="list-style-type: none"> ●Further reduce the amount of lead to 1/10 or less compared with 1996 levels from January 2006 ●Stop using mercury from January 2005 except in the following parts: <ul style="list-style-type: none"> Liquid crystal displays, combination lamps, discharge head lamps, and room fluorescent lighting ●Stop using cadmium from January 2007 ●Stop using hexavalent chromium from January 2008 <p>[General-purpose engines]</p> <ul style="list-style-type: none"> ◇Promote reducing the amounts of substances with environmental impact, such as lead and hexavalent chromium, used for general-purpose engines
	Reducing exterior noise	◇Promote development of technology to reduce noise that is compatible with 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 the environmental burden caused by logistics	◇Improve logistics efficiency and work on reducing the amount of packing materials
Clean dealers	Promoting environmental conservation activities at dealers	<ul style="list-style-type: none"> ◇Support environmental conservation activities by dealers ◇Promote recycling and proper disposal during the distribution and disposal stages <ul style="list-style-type: none"> ●Collect and destroy specific chlorofluorocarbons (CFC-12), collect CFC-12's substitute (HFC 134a), collect and dispose of airbags, and collect warning flares ◇Continue to collect used bumpers (ongoing) ◇Work to comply with the Law on Recycling End-of Life Vehicles
Management extension	Implementing actions contributing to society	<ul style="list-style-type: none"> ◇Continue to participate in environmental events, communicate with local residents at plants, and deal with visitors to plants (ongoing) ◇Continue to participate in cleaning and tree-planting activities in the area around each plant (ongoing) ◇Offer support and cooperation to environmental activity groups
	Disclosing environment-related information	<ul style="list-style-type: none"> ◇Continue to publish environmental reports, and release environmental information through publicity channels from time to time ◇Improve and upgrade the contents of environmental reports (e.g., compliance with guidelines, and reports including group businesses)
	Implementing environmental education and educational campaigns	<ul style="list-style-type: none"> ◇Incorporate environmental education into the company education system and put it into practice. Implement educational campaigns through company newsletters and various media ◇Continue to implement lectures and presentations of worksite improvement case studies (ongoing)
	Establishing an environmental management system	<ul style="list-style-type: none"> ◇Establish an environmental management system at business sites that presently lack 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 systems
Others	Promoting environment-related projects	◇Promote environment-related businesses, such as turbine generator systems and environmental equipment and devices

Note: In the sections called "Cleaner exhaust emissions" and "Developing products using clean energy," the contents of the goals and actions section have been partially changed.

Environmental Incidents

Environment-related complaints

In fiscal 2004, FHI received seven complaints about noise. The main plant of the Gunma Manufacturing Division received a complaint regarding tire noise from vehicles carrying completed cars. This was settled by changing the running speed and implementing thorough control. The Utsunomiya Manufacturing Division received a complaint due to noise caused by ground engine tests for aircraft. We responded by completely controlling the operation according to the work procedure.

In addition, we received six complaints about offensive odors. They were caused by exhaust air from the coating booth of the main plant and the Yajima Plant of the Gunma Manufacturing Division. We responded to these cases by improving the deodorizing equipment and by reducing the paint used in the coating process. We are also promoting a project to take fundamental measures for further improvement of such facilities.

Product Recalls

In fiscal 2004, there were no environmental technology-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 presents its approaches to environmental conservation on its Web site (<http://www.fhi.co.jp>).

In December 2004, the Utsunomiya Manufacturing Division organized an exchange meeting with eighteen board members from nine neighborhood community associations near the plant, where a study tour of the environmental facilities, such as the turbine power generation system, was arranged and environmental measures were explained.

In September 2004, the Gunma Manufacturing Division organized a social gathering with fourteen heads of wards from neighborhood community associations near the plant and explained our operation.

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 approaches Subaru takes to tackle environmental issues. In fiscal 2004, about 62,000 elementary schoolchildren, as well as about 12,000 junior and senior high school students and general visitors, visited the Center.

The Utsunomiya Manufacturing Division prepared and issued an independent Environmental & Social Report 2004. FHI also participates in the Environmental Management Forum sponsored by Nikkei Business Publications.

Mediums to Transmit Environmental Information

English version



Japanese version



Environmental & Social Reports*1



Photos exhibited in the Recycling Lab of the Subaru Visitor Center (Gunma Manufacturing Division)



Environmental information for each car model*1



Company brochure



Pages concerning environment in the product catalogue



Environmental & Social Report by the Utsunomiya Manufacturing Division



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