ENVIRONMENTAL REPORT 2004

Hino Motors, Ltd.

Hino Motors—Maturing along with Society

Evolution and Spread of Automobiles and Their Environmental Impact

As a symbol of the 20th century, automobiles have made great strides in evolution and popularity, bringing great convenience and comfort to our lives. At the same time, it is a fact that they have caused serious undesirable effects on the earth's environment and on citizens' daily lives.

The issues we need to address are numerous and include reducing the level of CO_2 emissions that worsen global warming, increasing fuel efficiency to prevent the depletion of natural energy, minimizing vibration and noise that accompany driving, and developing clean energy with minimal environmental impact. Hino Motors has captured each of these issues within our product life cycles and is engaged in reducing their negative environmental impact.

Developing Diesel Engines and Social Rules

Until now diesel vehicles have had a negative image because they emit PM (particulate matter), such as black smoke. I, as a citizen, have also felt that "Black smoke is terrible because it pollutes the air." However, in Europe diesel engines have been regarded positively for their low CO_2 emission levels and thus diesels have been widespread and their PM and NOx reduction technology has been more advanced. Is the gap between Europe and Japan a technological problem?

As far as I can recall, I did not see any large trucks in Europe driving through cities during the day. And the practice of controlling idling by shutting off the engine when stopping was widespread and a part of driving manners.

In this regard, I sensed a difference in social rules and people's attitudes towards the global environment and global community between Europe and Japan.

A Spirit of Coexistence and Coprosperity

For a business to survive, the pursuit of stable profit is indispensable. However, can one aspire towards long-term survival if business operations lean towards profit-seeking alone?

The perspective of coexistence and coprosperity brings to mind the irrigation channel Meiji Yosui in Japan. In central Aichi Prefecture, water was diverted from the Yahagi River and this life-supporting water was used for agriculture and industry in eight neighboring cities. There were no problems resulting from drainage by manufacturing plants because even large companies took the humble attitude of "We are being allowed to manufacture products in the premises of rice fields." Thus, water conservation took root as part of the rules of society before it became regulated and thus the daily life and natural environment of the people in that region were preserved.

I believe that it is only when we have a spirit of coexistence and coprosperity that businesses can continue to exist.

From a Response Model to a Proposing Model of Automobile Development

The development of automobiles occurs continually in relationship to legal regulations. But is it enough just to improve and upgrade our products to meet the limits of legal regulations? Instead of taking the attitude that we're OK as long as we meet regulation standards, we should pursue the limits to see how far product quality can improve using our technology. Such a pursuit generates technology that anticipates the future.

The Hino Four-Star Project is precisely this—an embodiment of our corporate message, "Performance for the Environment." While engaging in the Hino Four-Star Project, we were able to bring to reality the development of a super-low PM exhaust diesel engine, which had been considered impossible until then. This achievement goes far beyond the designated regulatory standards of the Ministry of Land, Infrastructure and Transport.

Thus, rather than following a "response model" to regulations, automobiles should be developed following a model in which we "propose" new ideas for the global environment and community. Hino Motors will continue to engage in technological development with a clear vision in order to fulfill our responsibilities as a member of a society.

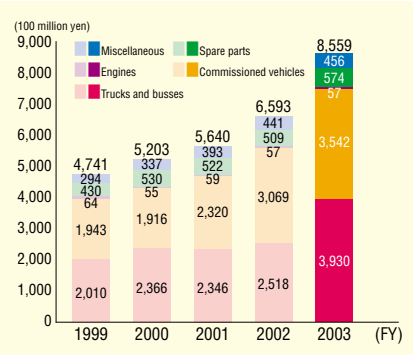
Tadaaki Jagawa
Chairman of the Board, Hino Motors, Ltd.

September 2004

Corporate Profile

Hino Motors, Ltd.

●**Capital:**
72.7 billion yen (as of March 31, 2004)
●**Number of employees:**
8,673 (as of March 31, 2004)
●**Products:**
Trucks, buses, special-purpose vehicles, small commercial vehicles, passenger cars, and engines
●**Trucks and buses shipped:**
87,911 units
●**Commissioned vehicles produced:**
222,676units (excluding parts produced overseas)
●**Net sales:**
855.9 billion yen (FY2003)



●**Offices and plants**
■Head Office and Hino Plant
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TEL +81-42-586-5011
■Hamura Plant
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TEL +81-42-579-0411
■Nitta Plant
10-1, Aza Hayakawa, Oaza Hayakawa, Nitta-machi, Nitta-gun, Gunma Prefecture 370-0344, Japan
TEL +81-276-56-5111
■Tamachi Office
11-3, Shiba 4-chome, Minato-ku, Tokyo 108-0014, Japan
TEL +81-3-3456-8811
■Ibaraki Gozenyama Proving Ground
Aza Okurayama 2023, Oaza Nagakura, Gozenyama-mura, Higashi-Ibaraki-gun, Ibaraki Prefecture 311-4613, Japan
TEL +81-295-55-3122
■Hokkaido Memuro Proving Ground
26-1, Omabetsu 14-sen, Memuro-cho, Kasai-gun, Hokkaido 082-0382, Japan
TEL +81-155-66-2511
■Hidaka Delivery Center
689-1, Kamikayama, Hidaka-shi, Saitama Prefecture 350-1234, Japan
TEL +81-429-85-4747
■Oume Parts Center
5-1, Suehiro-cho 1-chome, Oume-shi, Tokyo 198-0025, Japan
TEL +81-428-32-9911

■Editorial Aims of "Environmental Report 2004"
This report conforms to the Ministry of the Environment's "Environmental Report Guidelines (FY2000 version)" and "Environmental Report Guidelines (FY2003 version)." The target audience is investors, stockholders and customers who use our products. However, to make this report accessible to the local community and the general public, we have avoided the use of technical terms as much as possible and have made an effort to use more easy-to-understand expressions.

In order to further enrich the content which is based on the previous year's report, consideration was given to consistency with the "Environmental Report Guidelines (FY2003 version)."

■Scope of "Environmental Report 2004"
This report covers the environmental conservation activities of Hino Motors (including activities of some domestic and overseas affiliate companies) during the period from April 2003 to March 2004. Because the report is published in June, major developments after April 2004 are also included.

This report is also published in PDF format in the Hino Motors website (http://www.hino.co.jp/). In addition, the following environmental activities can be viewed in the website:
Environmental Report by Vehicle Model [Japanese]
List of Vehicles Meeting Green Purchasing Standards [Japanese]
Lineup of Low Pollution Vehicles [Japanese]
Hino Motors Press Releases on the Environment [Japanese and English]

CONTENTS

Highlights of FY2003 Activities

A List of Major Achievements and Topics from FY2003 Engagements

During FY2003, Hino Motors continued to advance steadily toward its target business image. A portion of these engagements is highlighted for each field. Details for each area are listed in the pages indicated.

Environmental Management System

Supplier-related companies made further progress in acquiring ISO 14001 Certification.

Out of our 275 primary suppliers, 184 have acquired ISO 14001 certification. Furthermore, of the 21 companies comprising the Domestic Affiliates Environment Subcommittee, one newly affiliated company anticipates certification during FY2004 in addition to 20 companies already certified.

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Environmental Management System

Gathering data on Environmental Conservation Costs and Effectiveness to grasp the cost vs. effectiveness of environmental activities.

In our environmental budget for FY2003, actual costs for environmental conservation totaled ¥20.6 billion or 2.4% of sales. The economic benefit of conserving energy amounted to ¥31 million .

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Production Achievements

Compared to FY2000, our plants achieved a 21% Reduction in CO_2 emission volume.

Automobile-manufacturing plants emits CO_2, which is believed to cause global warming. In FY2003, the total emission volume increased, accompanying a rise in production; however, emission volume relative to sales diminished 21% compared to FY2000.

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From Logistics and Marketing to Recycling

30 companies and their 80 affiliates were certified as Eco-Management Dealers.

At Hino Motors, "Environmental Guidelines for Dealers" are issued to all dealers. In FY2003, a total of 30 companies and their 80 affiliates satisfied all conditions and were certified as Eco-Management Dealers.

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Product Research and Development

Engaging in research and development toward the 2005 New Long-Term Exhaust Emission Regulations.

In response to the 85% reduction (PM level) of the 2003–2004 (new short-term) exhaust emission regulations, technology was developed to actualize exhaust emission reduction going above regulated levels through our Hino Four-Star Project instituted throughout the company.

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Product Research and Development

Conducting research and development on Hybrid Technology and selling new models.

In November 2003, the Hino Dutro Hybrid installed with a clean diesel engine and hybrid system was put on the market. The epoch-making event of cleaner exhaust gas and improved fuel efficiency were put into effect simultaneously.

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From Logistics and Marketing to Recycling

Intensifying efforts to prepare to implement the 2005 Automobile Recycling Law.

In January 2005, recycling and appropriate disposal of used vehicles will be legally mandated. In order to improve the recoverability of our products, we have reviewed the design stage and have worked towards joint cooperation with contract production-related companies.

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Workplace Creation and Connection with Society

Strengthening our customer service and customer response system to fulfill our Responsibilities to Customers.

We have strengthened our customer service program as a follow-up to sales as well as our system of responding to inquiries and complaints. In addition, we are collecting product information from dealers and summarizing it through the quality guarantee division.

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Documentary

The Challenge of a 21st Century Diesel Vehicle

The Story of the "Hino Four-Star Project"

Mr. Shinsuke Miki
Deputy General Manager
Product Planning Department, Marketing Planning Division

"If Hino Motors changes, we can change our environment and even the world." Based on this belief we have been engaged in improving the performance of diesel trucks and buses as a major operation involving the entire corporation.

We call this the "Hino Four-Star Project"—a project that concentrates Hino's technology and passion to predict the shape of 21st century diesel vehicles. We asked a central figure in the project, Mr. Shinsuke Miki, to take a look at where the project has come from.

Before the Birth of the Hino Four-Star Project

As symbolized by the governor of Tokyo when he held up a plastic drink bottle filled with soot, diesel engines have been treated as "evil internal combustion machines" in Japan. In contrast, in Europe low CO_2 emission levels that are a characteristic of diesels are widely recognized and utilized in many automobiles.

In 2000, the Japan Automobile Manufacturers Association, Inc. discussed the new short-term exhaust emission regulations for 2003 and 2004. At that time, because of the high level of interest in PM, Hino Motors established clear autonomous goals.

"Instead of merely responding to the regulations, let's show the world how far Hino technology can lead the industry."

Thus began Hino Motors' challenge to clear the new long-term PM level regulations. At this stage, however, we did not know just how rigorous the regulations would be.

The Unexpected Difficulty of the Four-Star Standard, 0.027

While we were moving forward with developments toward PM reduction, the new long-term exhaust emission regulations were announced. They were much stricter, poles apart from the values Hino had anticipated.

"It's impossible."

The world's strictest regulations were considered by all to be an impossibility at that time. However, the Ministry of Land, Infrastructure and Transport submitted a proposal to certify vehicles meeting the PM emission level of 0.05g/kWh (what each company considered barely possible) as "Three-Star" vehicles and those meeting the 0.027g/kWh level as "Four-Star" ultra-low PM emission diesel vehicles, and asked each diesel manufacturer to make an effort to comply.

"We Can Do It"—with the President's Conviction, Doubts Disappeared

"The technical difficulties of the 0.027g/kWh emission level were extremely high. To be truthful, upon hearing this number, everyone worried about whether we could actually clear it."

However, in the face of the conviction of the president and vice president who said, "We can do it," everyone's doubts disappeared.

"As our social mission as a manufacturer of diesel vehicles, let's take on the challenge of meeting the world's strictest regulations."

A manifesto was issued in the company and each project member repeatedly engaged in serious discussion of what the best technology to clear the "0.027" standard would be.

Finally, the Birth of the DPR System

Right around that time, the results of 10 years of research on catalytic filters were coming together.

Formerly, catalytic filters could trap soot but would quickly become clogged. Because of this it was necessary to replace the filter each time it became clogged. As a response, the technical prospects for a system that would automatically burn the accumulated soot were established.

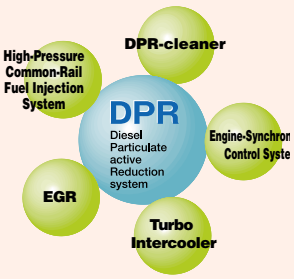
"The DPR system with a catalytic filter at the core is truly the best technology."

This conclusion was reached after conducting numerous types of research. Thus, research toward practical application of the DPR (Diesel Particulate active Reduction) system, which was the pivotal point in the Hino Four-Star Project, began.

Seal of Four-Star Certification for "Ultra-low PM emissions diesel vehicle"

The Voice of a Four-Star Engineer

The central character responsible for research and development of the DPR system is Mr. Jinichi Minamikawa. In the past, diesel engines, unlike gasoline engines, did not utilize catalytic conversion to dispose of exhaust emissions. Thus, about five years ago a post-disposal design group with which Mr. Minamikawa is affiliated was set up. Of course there was no Hino Four-Star Project as yet.



Mr. Jinichi Minamikawa
Manager, Post-Disposal Design Group, Functional Design Section, Power Train R&D Division

Let Us Develop Together the Best System in the World

The Power Train R&D Division contains many people who are mechanically skilled. However, the development of the DPR system required knowledge of ceramic filters, catalysis, electronic control technology, and so on, which were outside the group's specialty. For this reason they asked specialists from other divisions and affiliate companies for their cooperation.

A certain supplier company was ready to give up at first, saying, "It's clearly impossible." However, Mr. Minamikawa set out to persuade them.

"Let's develop the best system in the world together." His passion moved those involved with the project.

"Many times we stayed up all night and our suppliers no doubt did, too."

The hardship was rewarded when in August 2003 they were finally able to launch into the world the Hino Dutro, the first light-duty truck in Japan, to comply with the Four-Star standard.

"We Want to Thank Those Who Contributed to This Project"

At Hino Motors today we have a full lineup of Four-Star-certified vehicles in all classes: heavy-, medium-, and light-duty.

"When I think about it now, our success was the result of the entire company—including the suppliers—becoming one. Again, I would like to thank everyone who contributed to this project."

More than 50 patent application forms had to be submitted for the Hino Four-Star Project. Without a doubt we achieved a huge technological advantage. Many of our customers have voiced surprise at the absence of black smoke from these trucks.

"We're very happy. But we're not going to be satisfied at this point."

Mr. Minamikawa's next goal is to take the present system to an even higher level of performance and meet the challenge of taking the diesel engine to its ultimate potential.

Exhaust Emissions and Fuel Efficiency, the Eternal Agenda

Research on next-generation clean-energy trucks utilizing CNG and fuel cell as the power source has been progressing. However, it will take even more time to put the social infrastructure into place. Even if the transition to modal shift advances, truck transport still plays a major role in the total distribution system in Japan.

Along with actualizing Four-Star-certified ultra-low PM vehicles, we have also made great gains in fuel efficiency. With regard to the next new long-term NOx level regulations, the prospects of achieving it are promising. However, efforts toward greater fuel efficiency have no end. Exhaust emissions and fuel efficiency are an eternal agenda for diesel engines.

"We want to deliver products that will satisfy our customers as quickly as we can."

Regardless of regulatory timing, we want to offer quality to our customers as soon as possible. Hino Motors will never depart from this conviction.

Hino Sets the World Standards for Diesel Vehicles

Recently there has been a move among other companies to follow Hino's precedent-setting Four-Star technology.

"We heartily welcome it. We are confident that the direction we have taken in seriously engaging with the environment was the right one. For other companies to develop this type of technology is good for the global environment."

We are confident that we can lead other companies. By continually developing the next stage in environmental technology, we can demonstrate the right path to the future. This is Hino Motors' mission.

"Hino sets the world standards for diesel vehicles." Hino Motors' challenge continues.

Related pages

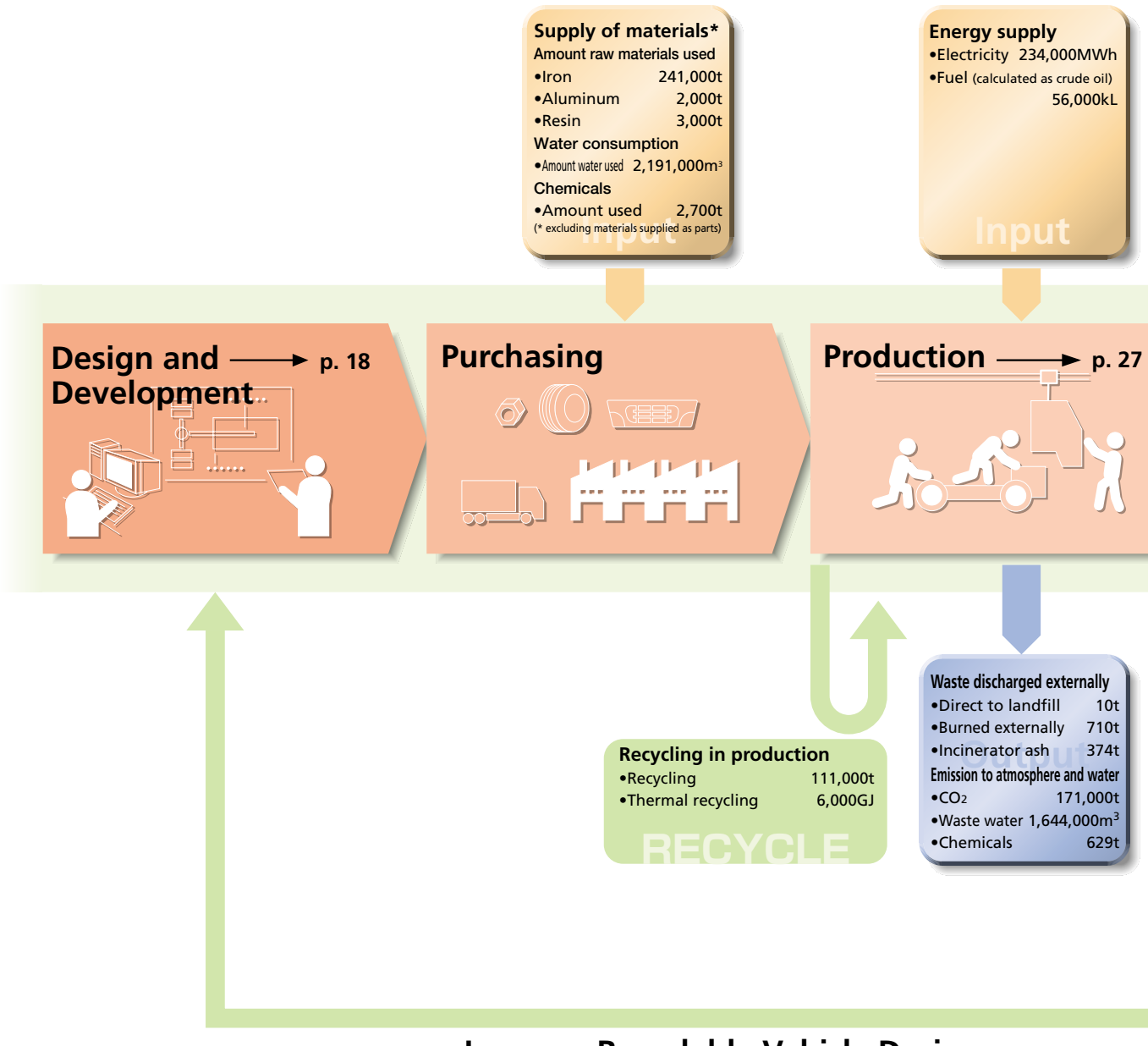
Policies in design and development of Hino vehicles —> p. 17
Trends in exhaust emission regulations —> p. 21
Common-rail fuel injection system —> p. 22
Hybrid vehicles —> p. 23

Hino Motors' Involvement with the Environment

Reducing the Environmental Impact of Diesel Vehicles throughout Their Life Cycle

Diesel vehicles, the primary product manufactured by Hino Motors, produce a high level of environmental impact at each point in the production process. To reduce environmental impact as a whole, we are engaged in environmental conservation beginning from the designing board.

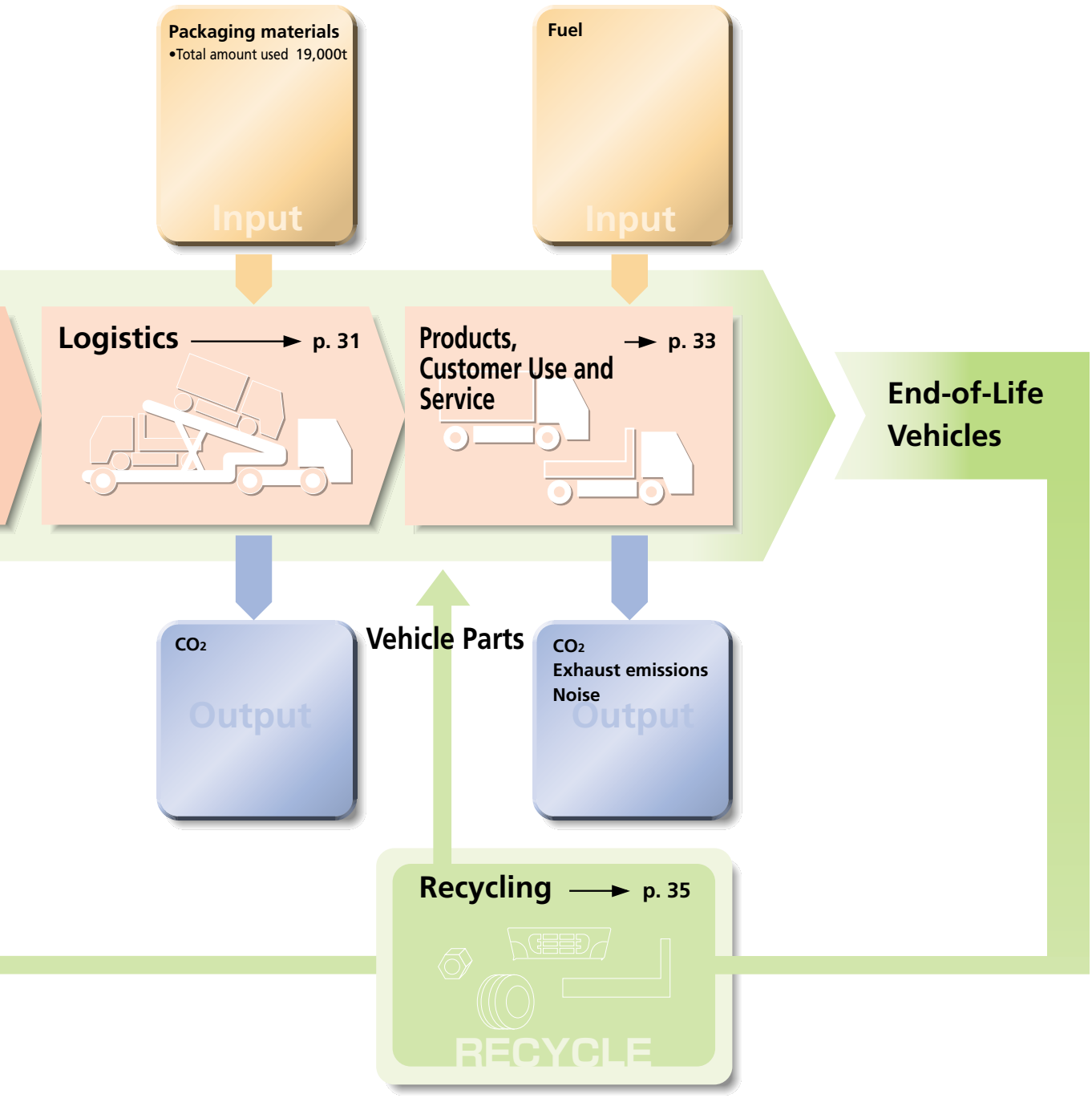
■Hino Motors' Business Operations and Their Environmental Impact



Hino-Topics

What LCA Can Tell Us

LCA (life cycle assessment for the environment) is a means of assessing the entire product life cycle, from development and design to use and disposal. Using this method, analysis can clarify which processes in a product's life cycle have an especially high impact on the environment, illuminating the issues that need to be dealt with.



Environmental Conservation Promotion Organization

Aiming at a Comprehensive Approach to the Environment and Promoting It through the Entire Corporation

Positioning environmental conservation as an important management issue, we are implementing comprehensive steps by establishing the Hino Global Environment Charter and the Hino Motors Environmental Voluntary Plan, as well as organizing the companywide Hino Environment Committee.

Environmental Conservation Promotion Structure

In March 1993, Hino Motors drew up a plan to implement comprehensive environmental conservation through the Hino Global Environment Charter and the Hino Motors Environmental Voluntary Plan to promote a concrete plan of action. At the same time Hino established the Hino Environment Committee chaired by the company president as a companywide organization to implement environmental conservation activities. Two subcommittees—the Products Environment Committee and the Production Environment Committee—were established to promote concrete actions based on the voluntary plan.

In March 2002, the Recycling Committee and the Sales Companies Environment Committee were established. The Recycling Committee has the goal of responding to every area of operation in line with the Automobile Recycling Law and designing an internal system, while the Sales Companies Environment Committee has the goal of enhancing the environmental management system within the companies.

Corporate Philosophy

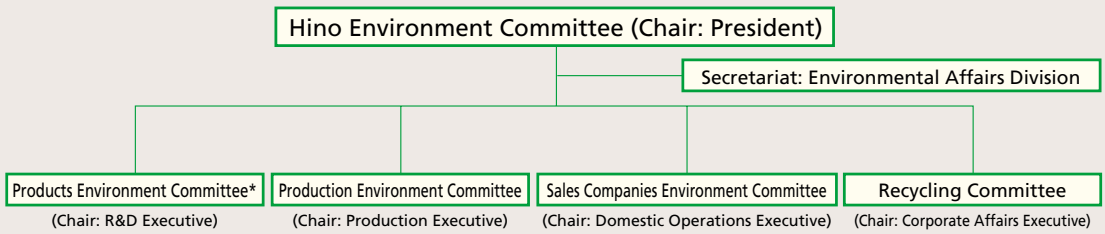
To contribute to the development of a more prosperous and comfortable society by providing the world with a new set of values

Hino Global Environment Charter

(Basic policies and action guidelines are listed on p. 10)

Hino Motors Environmental Voluntary Plan

Implementation Structure



* The subcommittees from both the Products and Production Environment Committees are implementing concrete steps (see p. 10).

Hino Global Environmental Charter

— Environmental Policy of Hino Motors, Ltd. —

Basic Policies

1. Promote comprehensive and ongoing environmental protection.

As a leading manufacturer of diesel vehicles, it is our endeavor to offer superior products to customers in all countries of the world and we will continue to contribute to the achievement of greater prosperity through our products. In this we are fully aware of the environmental impact of our production activities and products and pledge ourselves to an earnest commitment to sustainable human and global development through an ongoing effort to improvement and betterment while focusing attention on the prevention of pollution wherever we engage in our corporate activities.

2. Take concrete and definite steps to protect the global environment.

Through the establishment and operation of our Environmental Management System, we maintain a continuous effort to define, assess and review environmental goals and targets while strictly adhering to all legal and other requirements placed upon us.

Action Guidelines

1. We are minimizing the environmental impact of our corporate activities, in general, and of our vehicles throughout their life cycle.

We are determined to offer the public products with top-level environmental performance and to engage in continuous technical development designed to minimize the environmental impact of our products and the logistics process. We are also engaged in the establishment and operation of our Environmental Management System embracing all life-cycle stages of our vehicles.

2. We are developing a closer partnership with our affiliated companies.

We critically depend on the cooperation of a great many companies for the effective pursuit of our business activities. In this sense we are in close cooperation with vehicle manufacturers who are our partners both at home and abroad. This helps us extend the range of our environmental protection efforts on an ever-broadening front.

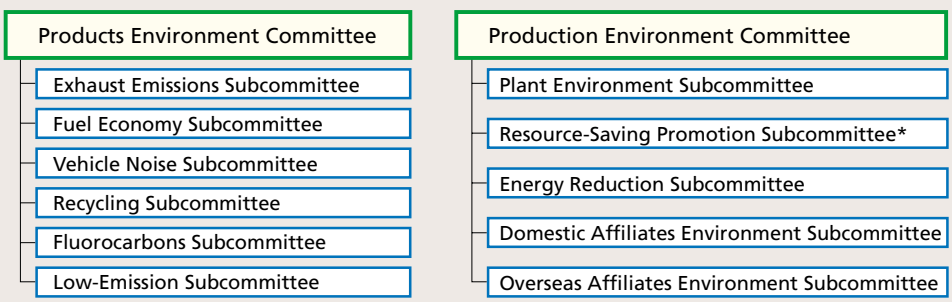
3. We will make greater efforts within the areas of information disclosure, education and awareness-promotion activities.

We are engaging in activities designed to disseminate as best we can a correct and proper understanding of what we are trying to achieve and spare no effort to hone our own environmental sensitivity.

4. As corporate citizens, we take an active part in a range of community activities to benefit society.

Our contribution as a corporate member of society is not limited to the offering of superior products alone. We see our role as corporate citizens and as corporate personnel living with a local community in a positive involvement in the activities and efforts of society.

■Subcommittees of the Products Environment Committee and Production Environment Committee



* The Waste Subcommittee was renamed the Resource-Saving Promotion Subcommittee.

Targets and Results for FY2003

Plans Are Implemented Based on Goals with Medium- and Long-Term Targets

To implement steps, we drew up a voluntary plan incorporating concrete goals for management, development, production, and logistics. Each year we assess the yearly targets reached the previous year, and use them to plan the following year and implement steps to carry it out.

Environmental Management pp. 9–16

Item	*Basic Objectives*	*Voluntary Plan Target Levels*
Implement comprehensive environmental management	• Expand and complete an applicable level of the environmental management system; Acquire ISO 14001 certification for all domestic offices and plants	• Acquire ISO 14001 certification for all domestic offices and plants [end of FY2005]
Complete plan with domestic and overseas affiliates (procurement source)	• Expand ISO 14001 certification	• Acquire ISO 14001 certification for primary domestic affiliates at each company (23) [end of FY2001] • Acquire ISO 14001 certification for primary overseas production sites (5) [end of FY2003]
	• Implement green procurement and purchasing	• Expand green purchasing of parts [from FY2001] • Expand green purchasing of office supplies and equipment [from FY2001]
Complete plan with dealers	• Implement environmental management system among dealers	• Issue environmental guidelines for dealers [beginning of FY2001]

Research and Development pp. 17–26

Item	*Basic Objectives*	*Voluntary Plan Target Levels*
Increase fuel efficiency	• Secure top-level efficiency in all vehicles classes in each country and region by developing element technology and vehicle control technology	• Secure top-level efficiency in all vehicle classes by developing element technology and vehicle control technology [end of FY2005]
Reduce exhaust emissions	• Achieve a breakthrough in clean emission performance for diesel engines	• Early introduction of clean diesel vehicle [end of FY2003] • Establish technology for future clean diesel vehicle [end of FY2005]
Develop clean-energy vehicles	• Actively develop clean-energy vehicles and expand their sales	• Upgrade the technical level of the hybrid system toward popularization and extend models with this system [end of FY2005] • Continue commitment to develop various clean-energy vehicles including CNG [end of FY2005]
Increase recoverability	• Promote development of recyclings designs that can contribute to a vehicle recoverability rate of 95% by 2015	• Incorporate recycling design to vehicles [end of FY2005]
Control and reduce substances with environmental impact	• Promote control of chemical substances and steps to reach the top of the field • Reduce substances with environmental impact	• Expand the range of controlled substances and strengthen follow-up procedures [end of FY2005] • Lay out design for reaching levels one-fourth or less than FY1996 levels [FY2005]
Reduce vehicle noise	• Upgrade product strength by further reducing vehicle noise	• Introduce models in compliance with 2001 noise reduction regulations to the market [from FY2001]
Reduce fluorocarbons	• Reduce refrigerant in vehicles	•Reduce refrigerant 10% below FY1995 [from FY2000]

Production pp. 27–30 Logistics pp. 31–32

Item	*Basic Objectives*	*Voluntary Plan Target Levels*
Implement strategy to prevent global warming	• Promote active CO_2 reduction measures	• Reduce CO_2 emissions 5% below FY2000 per unit sold (by the end of FY2010 reduce CO_2 emissions 10% below FY1990) [end of FY2005]
Control and reduce substances with environmental impact	• Reduce PRTR substances	• Reduce PRTR-related materials 30% below FY1998 levels [end of FY2005] • Reduce VOC emissions at the body production line to an average of 55g/m^2 [end of FY2002]
Reduce waste and conserve resources	• Reduce waste, aiming for achievement of zero emissions and promote steps to conserve resources	• Achieve zero direct landfill disposal of wastes for all plants companywide [end of FY2001] • Reduce combustible wastes to one-third less than FY1990 [end of FY2005]
Conserve water	• Reduce water consumption	• Reduce water consumption per vehicle 10% below FY2000 [end of FY2005]
Implement streamlined logistics	• Actively promote logistics rationalization to reduce the amount of packaging and wrapping materials used	• Reduce packaging and wrapping materials use by 20% below FY2000 [end of FY2005]

FY2003 Targets	FY2003 Results	Pages
• Acquired ISO 14001 certification for all companies in FY2002		p. 13
• Acquire certification for all companies during FY2003 • Support plans to acquire certification appropriate to the operations of each production point	• Instituted change in target companies in FY2003 (23 companies → 21 companies) • All existing participating companies have completed certification • All new participating companies are required to acquire certification during FY2004 • All new production sites are required to acquire certification within 1 to 2 years of beginning operations	p. 14
• Publish guidelines • Continue green purchasing of office supplies and equipment	• "Environmental Purchasing Guidelines" issued September 2002 to all domestic suppliers • Maintained 100% green purchasing	p. 13
• Publish guidelines	• "Environmental Guidelines for Dealers" issued to all domestic dealers in July 2002	p. 14

FY2003 Targets	FY2003 Results	Pages
• Put in place technology to increase fuel efficiency • Develop hybrid system toward popularization	• New heavy-duty truck, Hino Profia with increased fuel efficiency technology, put on the market • Light-duty truck Hino Dutro Hybrid put on the market	p. 19
• Develop vehicle in response to New Short-Term Exhaust Emission Regulations • Establish technology for New Long-Term Exhaust Emission Regulations	• Line up of Four-Star heavy-, medium-, and light-duty trucks • Achieved exhaust emission reduction targets through improved combustion system	p. 21
• Develop hybrid system toward popularization • Research and develop DME engine	• Light-duty truck Hino Dutro Hybrid put on the market. Medium-duty truck Hino Ranger Hybrid announced • Achieved technical targets through installation of DME engine in vehicle	p. 23
• Conduct assessment of suitability for recoverability • Improve ease of dismantling	• Improved the ease of dismantling through the use of resin for interior plastic parts, harness clips, etc. • Instituted assessment of air bag disposal potential, clarified procedures, and reflected in dismantling manual	p. 25
• Construct a management system for substances with environmental impact • Assess and implement reduction of 4 substances under EU directive • Lay out design for reaching levels one-fourth or less than FY1996 levels	• Completed response to lead, mercury, cadmium, and hexavalent chromium of light duty trucks; currently undertaking heavy-duty trucks • Achieved targets including instituting lead-free battery harness terminals in new heavy-duty trucks	p. 26
• Introduce model in compliance with 2001 noise regulations to the market	• Regulation-compliant Hino Profia put on the market	p. 24
• Reduce refrigerant over 10% below FY1995	• Achieved targets for all models of vehicles	p. 26

FY2003 Targets	FY2003 Results	Pages
• 3% reduction from FY2000	• 21% reduction from FY2000	p. 27
• 22% reduction from FY1998 (900 ton and below) • Body production line average of 55g/m^2	• 45% reduction from FY1998 • Body production line averaged 53g/m^2	p. 29
• Continue to implement zero direct disposal of wastes in landfills • 55% reduction from FY1990 (3,740 ton and below)	• Continued zero direct landfill disposal of wastes • 50% reduction from FY1990	p. 28
• 6% reduction from FY2000	• 28% reduction from FY2000	p. 27
• 12% reduction from FY2000	• 21% reduction from FY2000	p. 31

Hino Motors' Environmental Management System

Expand ISO 14001 Certification and Work to Broaden the System

During FY2002 we completed the ISO 14001 certification of virtually every business unit and now plan to broaden the environmental management system (EMS) by FY2005. In each of these systems, we hold regular strict environmental audits to ensure the validity of the system.

The Status of Hino Motors Certification Acquisition

By April 2003 Hino Motors acquired ISO 14001 certification for Head Office functions, product development, production engineering, parts and vehicle logistics, all domestic production plants, as well as the Tamachi Office which is the comprehensive base for domestic and overseas sales divisions.

From now to FY2005, we plan to broaden EMS as well as "spiral up" to an EMS with a greater sense of unity.

■Status of Certification

		Date certified
Head Office & Hino Plant	Production, product development, product engineering, head office functions	Mar. 24, 2001
Hamura Plant	Production	Mar. 10, 1999
Nitta Plant	Production	Mar. 27, 2000
Oume Parts Center Hidaka Delivery Center	Logistics	Jan. 11, 2002
Tamachi Office	Domestic sales operations	Apr. 25, 2003

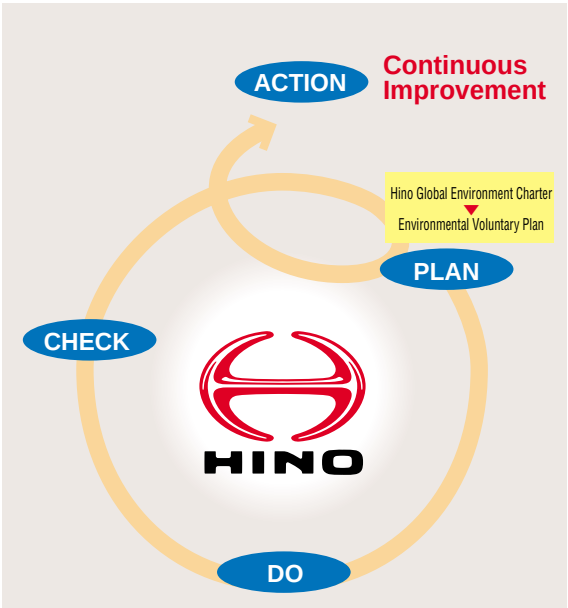
Internal and External Environmental Audits

While carrying out the environmental management system based on ISO 14001, we also conduct internal environmental audits as well as external audits which are carried out by independent inspection bodies. In the external audits of FY2003, non-compliances listed below were pointed out, but there were no major non-compliances.

■Audit Results

		Major non-compliances	Minor non-compliances	Incidences
Head Office & Hino Plant	Renewal audit	0	0	5
Hamura Plant	Surveillance	0	0	2
Nitta Plant	Surveillance	0	1	2
Oume Parts Center Hidaka Delivery Center	Surveillance	0	1	1
Tamachi Office	Surveillance	0	0	0

■PDCA Cycle Flow



Based on ISO 14001, we consider Plan, Do [Implementation], Check, and Action [Review] to be one revolution. By going through the cycles, we plan to continually improve the environmental management system.

Hino-Topics

Green Purchasing

To actively promote greater green purchasing of office supplies and equipment, in September 2001, Hino Motors created and implemented Green Purchasing Guidelines and a Green Purchasing Promotion Plan, based on the Law on Promoting Green Purchasing issued by the Ministry of the Environment. The green purchasing rate in FY2002 reached the target and we have implemented 100% green purchasing.

Hino Group's Environmental Conservation Activities

Working Together as a Group, Including Affiliates and Dealers

Hino Motors' actions are implemented not only within the corporation, but we take steps toward environmental conservation throughout the Hino Group, including domestic and overseas affiliates and dealers, using the acquisition of the internationally recognized ISO 14001 certification as the foundation.

Domestic Affiliates' Activities

In September 2002, Hino Motors established Environmental Purchasing Guidelines and requested that all parts suppliers acquire ISO 14001 certification and control and reduce substances which have a negative environmental impact. Of 275 major parts suppliers, 184 have acquired ISO 14001 certification. The remaining parts suppliers are being requested to become certified.

In addition, Domestic Affiliates Environment Subcommittee consisting of 21 major parts suppliers was established in order to move environmental management forward. In FY2003, all 20 existing affiliate companies acquired ISO 14001 certification and one new affiliate is expected to acquire certification during FY2004. Starting from FY2003, we began holding Environmental Meetings on a regular basis with the affiliate companies in order to further their environmental consciousness.

Environmental procurement guidelines

Environmental meeting of affiliate companies

Discussion meeting with HPM

Overseas Affiliates' Activities

As for overseas affiliates, Overseas Affiliates Production Environment Subcommittee was established and we are carrying out support for environmental conservation operations and ISO 14001 training for local staff.

In particular, during the current fiscal year, site visits were made to HMMT (Thailand) and HPM (Pakistan) to carry out discussion meetings on environmental conservation. During the next fiscal year, we plan to expand on such engagements.

Domestic Dealers' Activities

In order to bring the circle of environmental management closer to our customers, Hino Motors issued "Environmental Guidelines for Dealers" to every dealer nationwide in July 2002. This is a compilation of Hino Motors' requirements for environmental management. Compliance by each dealer with the guidelines is assessed and any dealer who successfully complies with all the items in the guidelines is approved as an Eco-Management Dealer (EMD).

Of 42 domestic dealers, 30 dealers have been recognized as Eco-Management Dealers. In addition, two dealers have acquired ISO 14001 certification.

■Hino Group EMS Structure Status (as of March 2004)

		Relevant companies	EMS structure	
			ISO 14001 external certification	EMDs certified
Domestic	Related companies	21	20	—
	Primary suppliers	275	184	—
	Dealers	42	2	30*
Overseas	Related companies	5	2	—

*Outside companies who have received ISO 14001 certification are also included in the number of EMDs. The title EMD is a certification by Hino Motors' standards (see p.33).

Environmental Education and Risk Management

Educate Awareness of the Environment and Respond Appropriately to Environmental Risk

With the goal of carrying out effective environmental conservation measures, we are practicing environmental education and improvement activities to raise employees' environmental awareness. For safer operations and to reduce environmental impact, we are developing emergency response procedures and carrying out training regularly.

Environmental Education and Awareness Promotion Activities

Enhancing individual employees' awareness of environmental conservation requires practice. Thus, we have implemented environmental education and awareness promotion.

From FY1994, the training program for new employees has included environmental education in which new employees develop greater consciousness and sense of responsibility as members of the automobile industry. In February, during Energy Saving Month, the fifth companywide presentation on saving energy for FY2003 was held.

■Educational Programs (FY2003)

Course	Attendance
Environmental Education for New Employees	200

■Employees with Environment-Related Qualifications (as of March 2004)

Environment-Related Qualification	Number
Environmental Management System Lead Auditor	1
Environmental Management System Auditors	11
Pollution Prevention Supervisors	75
Energy Supervisors	16

Emergency Response and Environmental Accidents

For the safe operation of plants and reduction of environmental impact, Hino has established proper operation and work standards to maintain and ensure stable operations. Further, we have instituted Emergency Response Procedures in order to take systematic and effective measures in an emergency. Periodic emergency response training is also conducted. There were no environmental accidents in FY2003.

Complaints, Lawsuits and Product Recalls

In FY2003 there were four environmentally related complaints. Specifically, one was a complaint about the noise, one was about noise and vibration, and two were about odor. We responded to each of these cases by investigating the actual conditions and carried out an appropriate response.

The number of recalls during FY2003 was 17 cases (see p. 39). None of these recalls were related to the environment.

As far as environmentally related lawsuits are concerned, there is one ongoing case, the Tokyo Atmospheric Pollution Suit (stages 1 to 5), concerning the effects of automobile exhaust emissions on health. Thus far in the first trial the district court ruled in favor of the plaintiff on October 29, 2002, but the decision is currently being appealed. Regarding stages 2 to 5, the first trial is in process.

Hino-Topics

Companywide Presentations on Saving Energy

Since 1999 Hino Motors has held companywide presentations on saving energy in February, the Energy Saving Month. Each production site, research and development division, office site and product engineering division, gives presentations and examples of their energy-saving measures. The presentations are judged strictly by executives in charge of environment who selects the best example in order to stimulate environmental consciousness and action at each site and division.

The best example for FY2003 came from the chassis production division at the Nitta Plant, entitled "Energy-Saving Activities—Challenges from the Starting Point." This example also received commendation from the Ministry of Economy, Trade and Industry as the "Best example of energy-saving implementation for 2003."

Environmental Accounting

Implementing Continuous Environmental Conservation through a Grasp of Cost vs. Effectiveness

Hino Motors is adding up the cost of environmental conservation based on the Ministry of the Environment's "Environmental Accounting Guideline." Our purpose is to implement effective environmental investments and to continue reducing negative environmental impact through a grasp of cost-effectiveness.

Environmental Conservation Costs

The table shown below was constructed using the "Guidelines for Introducing an Environmental Accounting System" of the Ministry of the Environment as a reference and by categorizing the environmental costs that Hino Motors has been adding up. The FY2003 environmental conservation costs add up to 20.6 billion yen (2.4 % relative to sales). However, regarding expenditures for which it is difficult to ascertain whether it is applicable to the environment or another purpose, we tallied only those where it was clear what portion was spent on the environment.

■Environmental Conservation Costs

[Unit: ¥1 million; dash (–) represents less than ¥1 million]

Item		Primary steps taken	FY2001		FY2002		FY2003	
			Investment	Expense	Investment	Expense	Investment	Expense
1. Business-related cost	Pollution prevention cost	Cost for pollution prevention, including atmospheric and water pollution	—	—	72	365	48	339
	Global environmental conservation cost	Cost for protection of the global environment, including energy-saving equipment	—	—	71	7	39	1
	Resource circulation cost	Resource-recycling cost, including recycling and waste treatment	—	—	5	410	3	412
	Subtotal		141	794	147	781	91	752
2. Upstream/downstream cost		Additional cost for efforts to reduce environmental impact Cost for establishing and operating EMS and acquisition of ISO certification	—	—	—	—	—	—
3. Management activities cost		Cost for monitoring and measuring environmental impact Personnel cost for environmental conservation organization	—	333	—	362	—	419
4. R&D cost		R&D cost for products for environmental conservation R&D cost for controlling environmental impact	—	19,170	—	19,366	—	19,370
5. Social activity cost		Cost for environmental improvement, including protection of nature and greening of the environment Cost for announcement of environmental information	—	7	—	7	—	—
6. Environmental damage cost		Cost for restoring destruction to natural environment Insurance premiums against environmental damage	—	—	—	—	—	—
Total			141	20,304	147	20,518	91	20,541
			20,445		20,665		20,632	

Environmental Conservation Effects

In terms of environmental conservation effects, only those that can be verified through clear evidence are calculated as effect within a single fiscal year. Specifically, total environmental conservation effects for FY2003 were calculated at 31 million yen, which includes the reduction of energy costs by saving energy and the reduction of disposal costs by reducing waste.

■Economic Effects

[Unit: ¥1 million]

Item		FY2001	FY2002	FY2003
Revenue	Operating revenue by the recycling of waste generated by key business operations or the recycling of used product	—	—	—
Cost reduction	Reduction of energy expense by energy conservation	119	40	27
	Reduction of waste disposal expense by resource conservation and recycling	7	1	3
Total		126	41	31

■Environmental Effects

Item	FY2001	FY2002	FY2003
Reduction of CO_2 emissions [ton-CO_2]	4,797	315	659
Reduction of waste [ton]	50	29	1,435

Designing and Developing Diesel Vehicles Compatible with the Environment

We Develop Products in Which Performance Is Based on "Coexistence with the Environment"

Hino Motors is aware that just as basic performance factors such as power, load capacity, operation, and comfort, which are sought from diesel vehicles, coexistence with the environment is equally crucial to performance. Based on this consciousness, we are developing new products that mobilize various kinds of knowledge and the latest technology.

Combined EGR System

Hino Motors' unique EGR system, Pulse EGR, has evolved further and was combined with the highly efficient Cool EGR, resulting into world's first "Combined EGR," realizing a significant reduction in NOx.

(Reducing Emissions) p. 21

Recyclable/Recycled Materials

For interior resin, we use thermoplastic resin materials with good recycling efficiency. We also use recycled felt on the backs of floor mats, and actively use recycled materials for seat cushions and battery covers.

(Recycling) p. 25

Turbo Intercooler

The intercooler, which lowers the engine intake air temperature, also lowers combustion temperature and reduces NOx, while improving fuel efficiency.

(Improving Fuel Efficiency, Reducing Emissions) p. 19

Idle Control

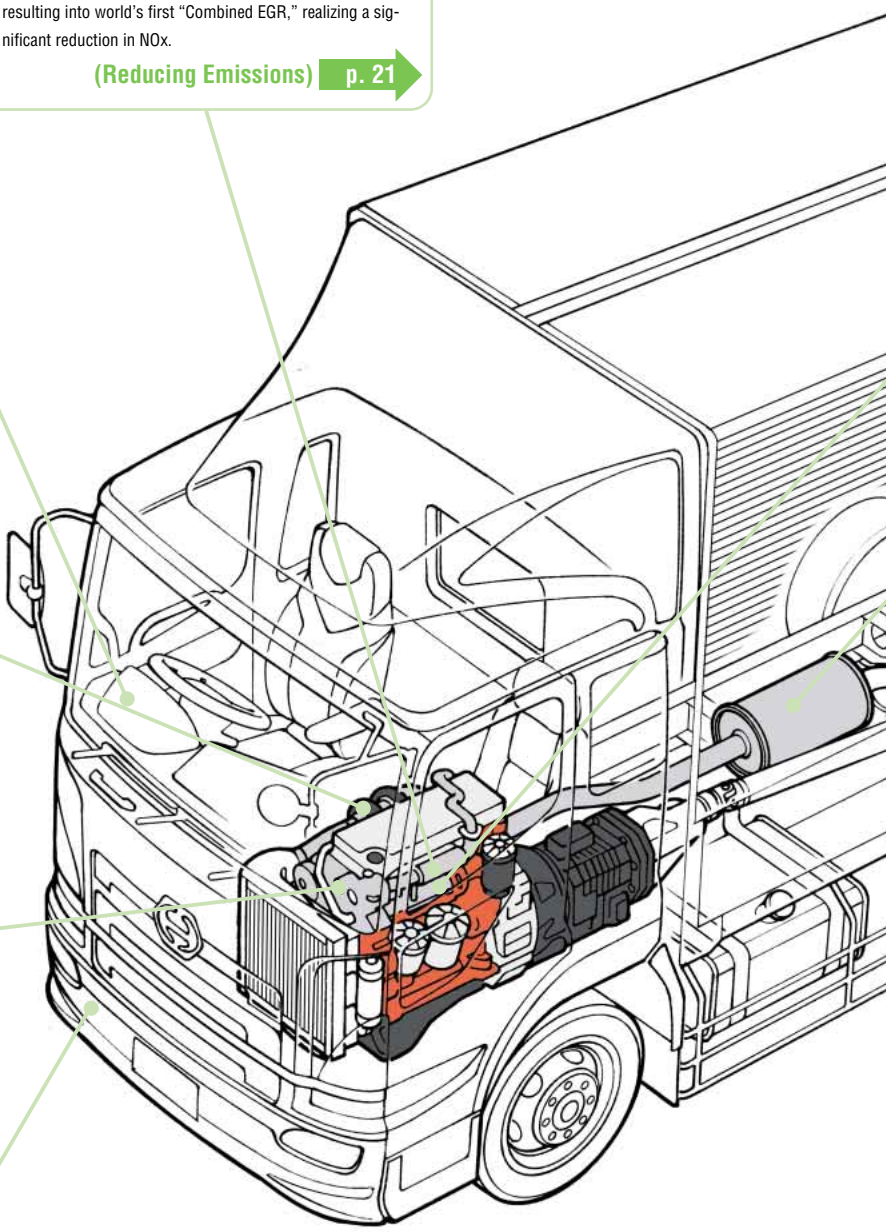
When stopping in traffic jams or at a traffic light, by shifting into neutral, the engine turns off automatically. Contributes to exhaust and noise reduction, as well as fuel efficiency.

(Improving Fuel Efficiency, Reducing Emissions) p. 20

Aerodynamic Characteristics

The aerodynamic cab style is designed to further increase fuel efficiency.

(Improving Fuel Efficiency) p. 20



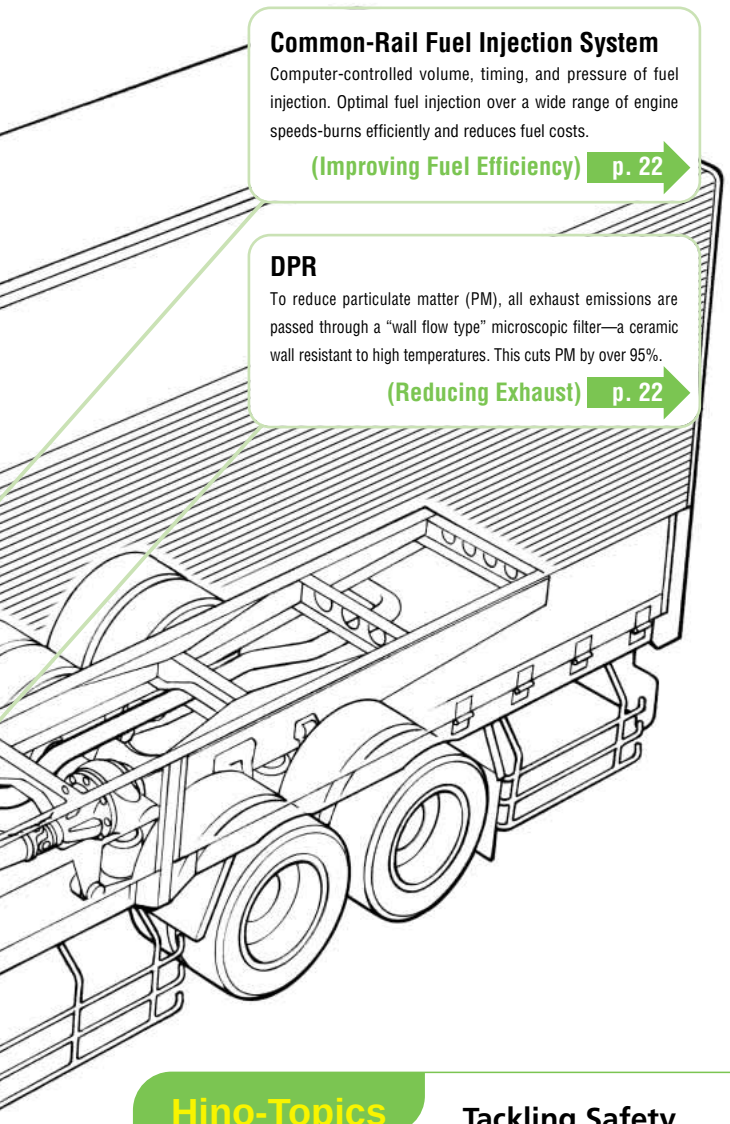
E-COMMENT

Takayuki Suzuki
Executive Vice President,
Member of the Board; Chair,
Products Environmental Committee

"We continually strive for compatibility between the environment and performance."

In response to global warning, Hino Motors has enacted further decrease in CO_2 emission levels and, in response to atmospheric pollution, a reduction in NOx, PM, and black smoke emission levels. Regarding each of these areas as critical, we have pursued numerous technical developments.

Keeping in balance improved engine performance, we have invested new technology based on many years of research and development, have increased recycling and reduced use of substances with environmental impact. In short, we have aimed to achieve compatibility between the environment and performance. We are moving forward with product development to further refine cutting-edge diesel technology that yields results in order to offer vehicles to the market that minimize environmental impact.



Common-Rail Fuel Injection System
Computer-controlled volume, timing, and pressure of fuel injection. Optimal fuel injection over a wide range of engine speeds-burns efficiently and reduces fuel costs.
(Improving Fuel Efficiency) p. 22

DPR
To reduce particulate matter (PM), all exhaust emissions are passed through a "wall flow type" microscopic filter—a ceramic wall resistant to high temperatures. This cuts PM by over 95%.
(Reducing Exhaust) p. 22

Guiding Principles for Hino Motors Design and Development

Believing that coexistence with the environment is part of the basic performance sought in diesel vehicles, Hino Motors has devoted many years to research and development. In particular, we have directed special efforts to reducing pollution caused by diesel engines. After clearing the hurdles of the short-term exhaust regulations and long-term exhaust regulations one after the other, we are preparing to meet even stricter short- and long-term regulations.

In the process of mobilizing to the challenge of an agenda filled with new information and advanced technology, countless cutting-edge technologies have been born. Whether measuring and recording diesel fuel combustion for the first time, explicating the process of how a direct fuel injection system diesel engine generates NOx and black smoke, or announcing the world's first diesel and electric hybrid HIMR (Hi-MR), Hino Motors' basic research takes into account every condition and environment to back up careful, analytical experiments.

Hino-Topics

Tackling Safety

The driver's safety is also a crucial principle in design and development. Hino Motors is tackling the total safety of diesel vehicles through the three perspectives of collision safety, preventative safety, and reduction of driver fatigue.

- Collision safety: EGIS cab, large rear bumper, front underrun protection device
- Preventative safety: Safety eye, ABS, engine retarder, scanning cruise, discharge headlamp, roll stability assist, left rear view supplemental camera, warning alarm against lane departure, tire pressure monitor
- Reducing fatigue: Air suspension cab, pro shift, ES starting system, improved comfort, high-function seat, improved stability for going straight

Improving Fuel Efficiency

Working to Improve Fuel Efficiency through Cutting-Edge Technology

As a means of saving energy through product development, we are putting our energy into improving fuel efficiency. We are committed to reducing CO_2 emission levels by developing the turbo intercooler and 12-gear Pro Shift which utilizes cutting-edge technology based on our longtime research.

Turbo Intercooler (TI)

The straight six-cylindar E13C model engine installed in the Hino Profia is a new-generation diesel engine developed through Hino's concerted efforts. It uses the world's first combination of the electronically controlled pulse EGR with the highly efficient cool EGR, the Combined EGR results in further reduction of NOx.

In addition, it exhibits overwhelming high torque from ultra-low revolutions, achieving extremely smooth operation and powerful acceleration. Combined with the newly developed Pro Shift 12-gear, it can drive while continuously maintaining optimal combustion revolutions yielding outstanding fuel efficiency.

■E13C containing variable nozzle turbo

E13C
Straight six-cylindar engine
Common-rail fuel injection system
Employs combined EGR
Variable nozzle turbo installed
Total diplacement: 12.913L
302kW (410PS)

12-Gear Pro Shift

We have developed a new 12-gear Pro Shift semiautomatic transmission which fully utilizes the fuel efficient performance of the E13C engine which is the first domestic fully synchronized model to be built.*

The wide gear range covers start up to high-speed cruising. Appropriate, smooth, automatic gear shifting continually occurs in the fuel efficient green zone and makes possible both easy driving and fuel-saving operation.

This results in less driver fatigue and, in addition, improved power performance.

*among heavy-duty class trucks

12-gear Pro shift

Gear position indicator

●Heavy-Duty Truck: Hino Profia

The Hino Profia series underwent a total model change for the first time in 12 years. Hino Motors invested all its technology into building a heavy-duty truck that will lead logistics in the present century. It has been completely redeveloped with significantly improved performance and product appeal.

- Meets 2004 exhaust emission regulations
- Meets the ultra-low PM emission diesel vehicle designation system at 85% reduction level [☆☆☆☆]
- "Ultra-low polluting vehicle" compliant with the low emission vehicle designation system of eight municipalities around metropolitan Tokyo
- "LEV-6" vehicle compliant with the low emission vehicle designation system of six municipalities in the Kansai region
- Complies with the Environmental Conservation Ordinance of Metropolitan Tokyo and Saitama, Chiba, and Kanagawa prefectures
- 2001 noise regulation-compliant vehicle
- Automobile NOx and PM Law-compliant vehicle

Expansion of the Idle Control System

This system was developed to comply with the expansion of the idle control ordinance of the Tokyo Metropolitan Government and other municipalities. When the vehicle stops due to congestion or at a light, the engine automatically turns off merely by putting the gearshift in neutral. The system is being adopted not only in route buses but also in sightseeing buses and trucks with city routes. This system allows improved fuel efficiency and reduces exhaust emissions and vehicle noise.

■How to Operate the Idle Control System

Step on the clutch
↓
Vehicle stops
↓
Set the gear shift to neutral
↓
Release the clutch
↓
Set the parking brake
↓
Engine stops automatically
↓
Step on the clutch
↓
Engine starts automatically
↓
Release the parking brake
↓
Vehicle starts to move

Aerodynamic Characteristics

Fuel efficient vehicles require technological developments in areas in addition to the engine. To minimize air resistance, we are continuing to design high fuel efficiency vehicles by improving body style, adopting aerobumpers and wind deflectors, reducing vehicle weight, and optimizing power line series.

The Hino Profia utilizes the Grand Aerotech Design cab which was born as a result of pursing the world's highest quality aerodynamic performance.

Cab style designed for fuel efficiency

Hino-Topics

Other Energy-Saving Activities

The development of vehicles with higher fuel efficiency requires not only maximum engine performance, but also reduced air resistance through better designed body style and other improvements, in addition to reduced vehicle weight and optimum power line series.

In addition to hardware, we have a transport simulation service that uses computer simulation to determine each customer's vehicle operation requirements, and vehicle performance, which provides useful information for better transport methods. Further, we teach driving techniques for maximum vehicle performance in various parts of the country and hold a lecture series on energy-saving driving with actual driving experience.

Reducing Exhaust Emissions

Using the Power of Superior Technology to Respond to Even Stricter Emission Regulations

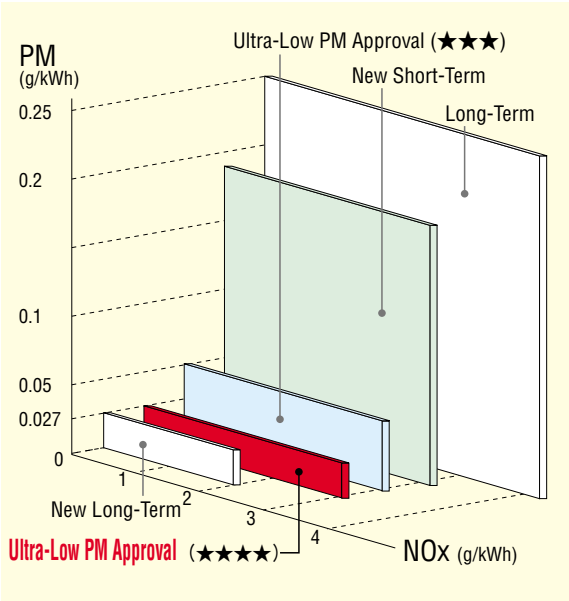
Automobile exhaust emission regulations were strengthened in October 2003. In addition, a low-emission vehicle approval system was been instituted. Hino Motors will respond to stricter regulations through superior research and development know-how which we have stored up to this point.

Diesel Vehicle Emission Regulatory Trends

Since October 2003, the new short-term exhaust emission regulations mandating a 30% reduction in PM was enforced. In 2005, new long-term exhaust emission regulations mandating an additional 85% emissions reduction over the short-term emission regulations are planned. Hino Motors is preparing a response to these stringent regulations by putting our energies into research and development.

In addition, the Ministry of Land, Infrastructure and Transport has begun a low-emission and ultra-low PM emission vehicle approval system to promote the development and dissemination of low-emission diesel vehicles. We will respond to these approval systems as well by endeavoring to obtain approval at the top rank.

■Diesel Vehicle Exhaust Emission Regulatory Trends

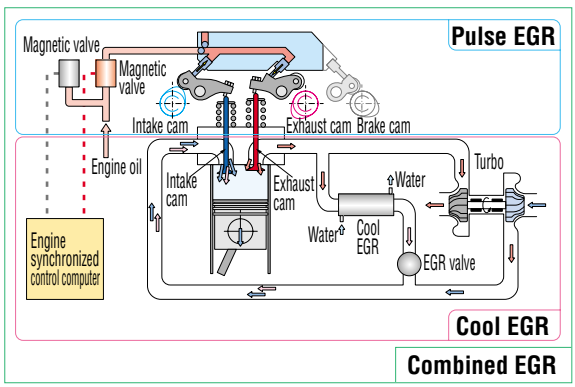


Combined EGR System

The EGR (emission gas recirculation) system is designed to recirculate exhaust emission into the combustion chamber and lower the combustion temperature through slow combustion, thus, cutting the oxygen concentration in the combustion chamber and reducing NOx.

The Combined EGR system adopted in the Hino Profia utilizes an electronic controlled Pulse EGR evolved from Hino's unique Pulse EGR at high-load times; at light load times, a highly efficient Cool EGR is utilized to chill exhaust emission and recirculates it into the cylinder. While controlling the amount of increase in heat toward the cold water, and without deterioration of fuel efficiency, by achieving recirculation of exhaust emission in high-load area, we have made possible a major reduction of NOx.

■Combined EGR System



●Medium-Duty Truck: Hino Ranger

Hino Ranger received high acclaim from customers even before it was put on the market for its environmental performance, fuel efficiency, loading capacity, transport quality, and comfort among other things. By utilizing DPR, a clean diesel system, it has evolved further in environmental performance and will lead logistics in the present century.

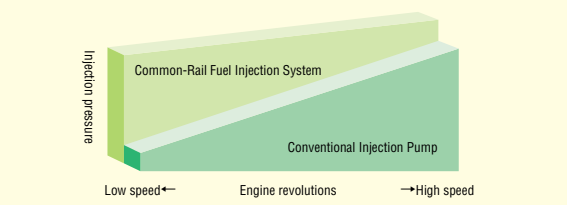
- **Meets 2003 exhaust emission regulations**
- **Meets the ultra-low PM emission diesel vehicle certification system of 85% reduction level [☆☆☆☆]**
- **"Good low-polluting vehicle" compliant with low-emission vehicle designation system of eight municipalities around metropolitan Tokyo**
- **"LEV-6" vehicle compliant with the low-emission vehicle designation system of six municipalities in the Kansai region**
- **Complies with Tokyo Metropolitan Environmental Conservation Ordinance**
- **2001 noise regulations-compliant vehicle**
- **Automobile NOx and PM Law-compliant vehicle**

Common-Rail Fuel Injection System

This system stores high-pressure fuel in the common-rail and injects it into each combustion chamber via an electronically controlled injector. This allows the timing, volume and pressure of fuel injection to be controlled independent to engine speed. Thus, high-pressure fuel injection according to engine load is possible, from low to high speeds, resulting in clean, superior fuel combustion.

The Hino Profia, introduced November 2003, meticulously controls fuel injection through this high-pressure common-rail fuel injection system, to realize the best fuel control for each driving condition.

■Comparison of Injection Pressure



DPR Cleaner

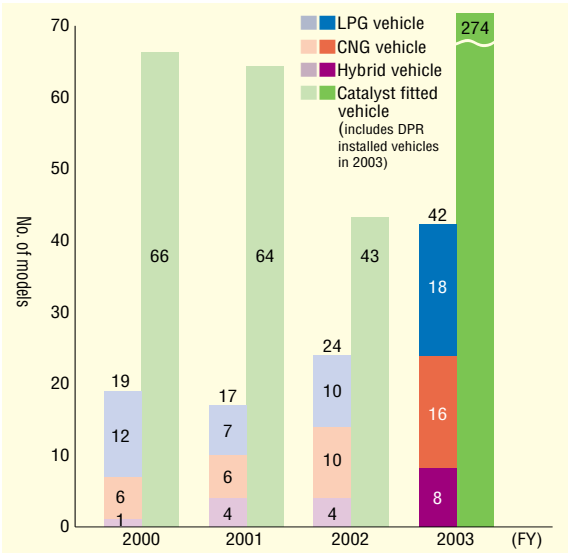
By utilizing a "wall flow type" microscopic filter that passes and filters all engine exhaust through a highly temperature-resistant ceramic wall, 95% of PM can be captured. The captured PM is then incinerated and disposed of while the vehicle is in operation through meticulous electronic control of the common-rail fuel injection system. Stable PM reduction capability can be achieved even in situations formally considered to be difficult, such as low exhaust temperature conditions in city driving during traffic jams.

Response to Low-Emission Vehicle Regulations of Municipalities

Hino Motors has responded positively to the low-emission vehicle designation system enforced by eight municipalities in the metropolitan Tokyo region and the low-emission vehicle designation system enforced by six municipalities in the Kansai region. Forty-two models of LPG, CNG, and hybrid (HIMR)-type vehicles, primarily vehicles operating in cities, have been designated as trucks and route buses. In addition, 274 models of vehicles containing highly reliable diesel engines equipped with oxidation catalysts or DPR system were designated under the system.

From October 2003, diesel vehicles that were not in compliance with the PM emission standards of the regulations were banned from operating in the Tokyo metropolis and three neighboring prefectures. Hino Motors has received approval for the "PM Trap" as a PM reduction device applicable to vehicles sold after the 1994 regulations (KC type) of eight municipalities.

■Changes in Models Designated as Low-Pollution Vehicles



Developing Clean-Energy Vehicles

Developing Clean-Energy Vehicles with Low Environmental Impact

We are engaged in developing LPG, CNG, and Hybrid vehicles—new-energy vehicles with low impact on the environment. Some of these vehicles are already in compliance with the Law on Green Purchasing. We will actively continue their development, including necessary infrastructures.

Hybrid Vehicles

In 1991, Hino Motors began mass production of the world's first hybrid trucks and buses with the diesel-electric parallel system, which are being actively utilized in Japan.

In November 2003, the Hino Dutro Hybrid equipped with advanced hybrid bus/truck technology was put on the market. The low-pollution/high-fuel efficiency technology in this vehicle combines a DPR equipped clean diesel system which cuts PM by 95% with Hino's unique hybrid system. It has cleared the new short-term exhaust emission regulations' lowest PM reduction level of 85% (Four-Star level) and has met the new long-term exhaust emission regulations which means more than 50% reduction in NOx compared to the new short-term exhaust emission regulation level.

In addition, the vehicle's fuel efficiency has been raised to about 1.3 times that of current diesel trucks, and CO_2 emissions have been reduced by about 25%.

Furthermore, monitored tests of a four-ton class medium-duty hybrid truck began in January 2004. This vehicle meets the new long-term exhaust emission regulations and clears the new short-term exhaust emission regulations enforcing a 85% reduction in PM, with a 20% improvement in fuel efficiency compared to existing diesel trucks. It was put on the market in spring 2004.

LPG (Liquid Petroleum Gas) and CNG (Compressed Natural Gas) Vehicles

LPG and CNG vehicles have excellent properties, including low levels of NOx, PM, and black smoke emissions, as well as low noise. Hino Motors has established LPG and CNG models of the light-duty truck Hino Dutro and CNG models of the medium-duty truck Hino Ranger and HU-model route bus.

Both types of vehicles require a large-capacity reservoir for the gas fuel, which limits cruising distance, among other issues. In the future, however, we are looking at ways to expand to other models, focusing on vehicles operating within cities in accordance with the progress in fuel supply infrastructure.

Hino-Topics

CNG Eco-Station

Hino Motors established a CNG-fueling station, the Hino Motors Eco-Station, next to the Head Office in Hino City, Tokyo. This station supplies CNG fuel to vehicles, including those belonging to the general public and is committed to spreading CNG vehicles in western Tokyo, where the number of CNG fueling stations is limited compared to central Tokyo.

●Light-Duty Truck: Hino Dutro Hybrid

By combining the newly developed clean diesel engine and Hino's repeatedly tested hybrid system, epoch-making clean exhaust emissions and improved fuel efficiency can be achieved simultaneously.

- **Meets 2003 exhaust emission regulations**
- **Meets the ultra-low PM emission diesel vehicle certification system of 85% reduction level. [☆☆☆☆]**
- **Designated as ultra-low emission vehicle by the Ministry of Land, Transport and Infrastructure.**
- **"Ultra-to-low polluting vehicle" compliant with low-emissions vehicle designation system of eight municipalities around metropolitan Tokyo.**
- **Complies with Tokyo Metropolitan Environmental Conservation Ordinance**
- **Meets 2001 noise regulations**
- **Complies with NOx/PM regulations for vehicles**

Models Conforming to the Law on Promoting Green Purchasing

The following four categories of vehicles conform to the Law on Promoting Green Purchasing enacted in April 2001 (as of March 2004):

- Light-duty truck: Five models including Hino Dutro CNG vehicle
- Medium-duty truck: Eight models including Hino Ranger CNG vehicle
- Large route bus: Two models including Blue Ribbon City CNG vehicle
- Light-duty truck: Four models including Hino Dutro Hybrid vehicle

* For detailed vehicle specifications visit www.hino.co.jp/e/index.htm

Research on Other Next-Generation Fuels

Hino Motors is actively researching other types of next-generation fuel as well. At present, under commission by the Ministry of Economy, Trade and Industry, we are studying the development of an engine fueled by DME (dimethyl ether), a next-generation fuel, based on the HIMR* system.

In addition, in a joint effort with Toyota Motor Corporation, we have been developing a large bus equipped with a fuel cell hybrid system using high-pressure hydrogen as fuel. In August 2003, the bus began operating on bus routes maintained by the Tokyo Metropolitan Government as part of the "Tokyo Fuel Cell Bus Pilot Project."

* HIMR (Hi-MR) system: Hybrid Inverter controlled Motor & Retarder system

Hino-Topics

Reducing External Vehicle Noise

Hino Motors has developed several measures to reduce vehicle noise, namely, noise from such sources as the engine and power train. Structural improvements based on noise reduction strategies from an improved combustion system and advanced analytic technology is being carried out, along with use of noise absorbing, insulating material.

The new heavy-duty truck, Hino Profia, employs low-noise technology accumulated to date, including a common-rail fuel injection system, reinforced noise insulating cover and improved muffler, and it has cleared 2001 noise regulations. We have now completed measures to bring all vehicle models in line with the acceleration noise regulations.

■Trends in Acceleration Noise Regulations

Model		Regulated values dB(A) Current→ New regulations	1998	1999	2000	2001	2002	2003
Heavy-duty vehicles GVW>3.5t Over 150kW	All-wheel drive vehicles	83→82				10		9
	Trucks	83→81						
	Buses	83→81	10	9				
Medium-duty vehicles GVW>3.5t 150kW or less	All-wheel drive vehicles	83→81				10	9	
	Trucks	83→80						
	Buses	83→80			10	9		

●Regulations for new models
●Continued production models

Fuel cell bus

Promoting Recycling and Reducing Environmental Impact

Minimizing the Environmental Impact of Raw Materials with a View toward Recycling

The point of highest environmental impact is not during vehicle operation, but at disposal. Hino Motors takes recycling into account from the design stage and is taking steps to increase actual recycling rates. In addition, we are lowering the use of substances impacting the environment, such as lead and refrigerants, by setting self-imposed standards.

Designing with Recycling in Mind

Based on the April 2001 revised Automobile Recycling Law, Hino Motors has established preliminary guidelines incorporating prior evaluation of recycling, along with controlling waste generation and reusing products and parts, and is in the process of developing specific standards.

●Easily Recycled Materials

To increase recycling, all thermosetting resin and rubber material, including parts made up of multiple materials were replaced with thermoplastic materials that have better recycle-ability. Interior plastic parts, such as the console, and polyurethane coated material have been replaced with newly developed lustrous AES (unpainted).

■Easily Recycled Materials

●Expanding the Use of Recycled Material

To vitalize recycling activities, we are expanding the use of recycled material. For example, we use recycled felt on the back of floor mats. In addition, we use recycled urethane resin as part of seat cushions and recycled plastic bumpers as battery covers. We are also examining recycling techniques for FRP resin, nylon alloy resin from the outer panel, and wood that is widely used for truck beds.

●Improving Ease of Dismantling

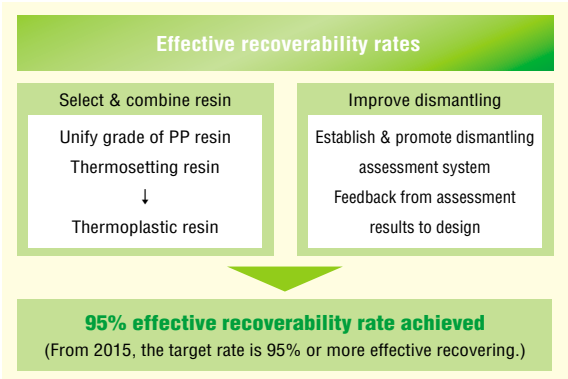
The material used for door trim and interior panels is TSOP (Toyota Super Olefin Polymer), which has good recoverability. By minimizing the adhesive area of the outer layer and the number of screw points, and through the use of resin for stabilizing clips, the structure is easier to dismantle.

Recoverability Rates

As far as the recoverability rates of new vehicle models, 90% or higher voluntary target rates were achieved with chassis with cabs. At the same time, we are working to improve the effective recoverability rate taking into account the recoverability conditions of existing end-of-life commercial vehicles.

A survey of vehicle dismantling was conducted to gain an understanding of current effective recoverability rates and issues for improvement. In the future we will unify resins, carry out evaluations of dismantling, and work to reach 95% recoverability levels by 2015.

■Raising Recoverability Rates



●Bus: Low-Floor Bus, Hino Rainbow

This bus is equipped with a low-emission diesel engine and is officially approved as a low-emission vehicle. By deploying an idle control system, we have achieved high fuel efficiency, low exhaust emissions, and low external noise.

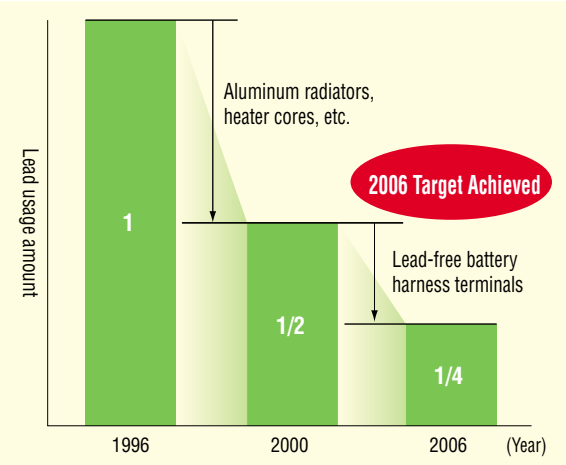
- **Meets 1998 and 1999 exhaust emission regulations**
- **Meets 1998 noise regulations**
- **Complies with Tokyo Metropolitan Environmental Conservation Ordinance**
- **Complies with Low Emission Vehicle Designation System of eight municipalities**
- **Complies with LEV-6**

Reducing Lead Usage

To reduce lead amounts, we have set voluntary, incremental targets reducing lead usage in new models (excluding batteries) and enacted them as follows: reduce to at least half of 1996 levels by 2001 and to one-quarter or less by 2006.

In the heavy-duty truck, Hino Profia, we switched to aluminum instead of copper radiators and copper heater cores and, in addition, have instituted lead-free battery harness terminals. By doing so, we achieved our 2006 goal of reducing lead usage to less than one-fourth of previous levels.

■Comparison of Target Lead Usage Amount



Reducing Other Substances with Environmental Impact

Hino Motors has created voluntary standards for substances with environmental impact and is taking steps to reach our reduction targets.

Since the enacting of the Automobile Recycling Law, we have banned the use of mercury other than for safety purposes, such as liquid crystal navigation displays and interior fluorescent lights.

In addition, the use of cadmium will be discontinued from January 2007, and hexavalent chromium from January 2008.

Reducing Refrigerant in Air Conditioners

We advocate reducing the use of the refrigerant HFC134a in car air conditioners, which has been linked to global warming.

In the heavy-duty truck, Hino Profia, the volume of refrigerant has been reduced to 600 grams per vehicle and in the medium-duty truck, Hino Ranger, to 400 grams per vehicle.

Reducing Environmental Impact of Production Activities

Grounded in Long-Term Goals, Reducing the Environmental Impact of Production Activities

Hino Motors has established concrete reduction goals through our Voluntary Plan and is engaged in reducing environmental damage in the production process through an accumulation of small steps. In FY2003, we reached our targets for CO_2 emissions and amount of water used.

Preventing Global Warming

Hino Motors is engaged in saving energy, targeting a 5% cut in CO_2 emissions per net sales from FY2000 levels by the end of FY2005.

In FY2003, we implemented a number of restructuring measures in existing production lines, such as reevaluating air blow and utilizing energy saving air guns. In new lines we introduced new technology and employed energy, saving equipment in an effort to reduce energy use.

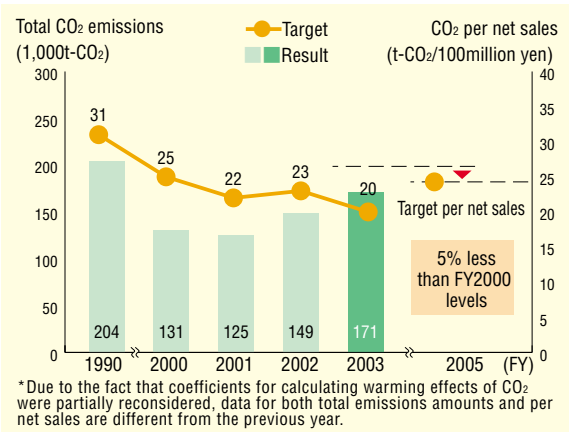
In FY2003, CO_2 emissions levels totaled 171,000 tons, due to a significant increase in production volume. This is an increase of 22,000 tons over the previous year. However, through steady energy-saving activities, CO_2 units per net sales dropped 12% over the previous year—a major reduction. Compared to FY2000, we achieved a 21% reduction in CO_2 emissions.

Conserving Water Resources

We are engaged in activities to conserve water in order to reach our goal of reducing water consumption per vehicle by 10% from FY2000 levels by FY2005.

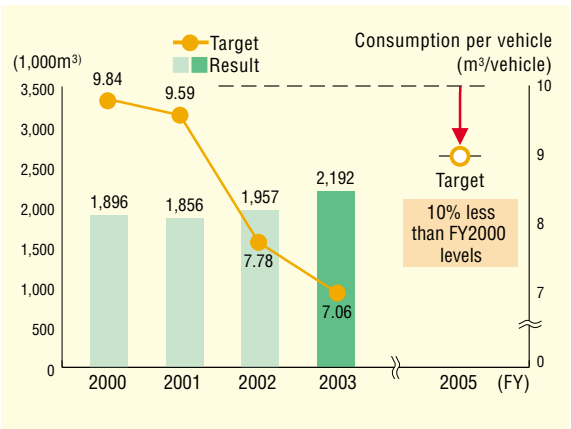
In FY2003, we instituted patrolling of water leaks, eradicating overflow and installing spray prevention covers on cooling towers. As a result we achieved a 28% reduction in water consumption per vehicle over FY2000.

■Changes in Total CO_2 Emissions and Emissions per Net Sales



*Due to the fact that coefficients for calculating warming effects of CO_2 were partially reconsidered, data for both total emissions amounts and per net sales are different from the previous year.

■Changes in Water Consumption



E-COMMENT

Bunji Hagiwara
Senior Managing Director
Member of the Board
Chair, Production Environment Committee

"Toward Reducing the Environmental Impact of Automobile Production."

Even in the midst of greater activity by each industry endeavoring to reduce negative environmental impact, the problems of global warming, the depletion of underground resources, and the lack of waste disposal sites have not yet moved toward radical solutions.

The manufacture of automobiles utilizes a great deal of energy, raw materials, water, and chemical substances. Thus, it also results in significant negative environmental impact such as CO_2 and waste water emissions, a great quantity of waste materials and global warming.

To continue to reduce the environmental impact of these byproducts, Hino Motors has set up concrete anuual goals through our Voluntary Plan and is promoting a reduction in environmental impact centered around saving energy, conserving water, minimizing waste, and controlling and reducing the amount of chemical substances used.

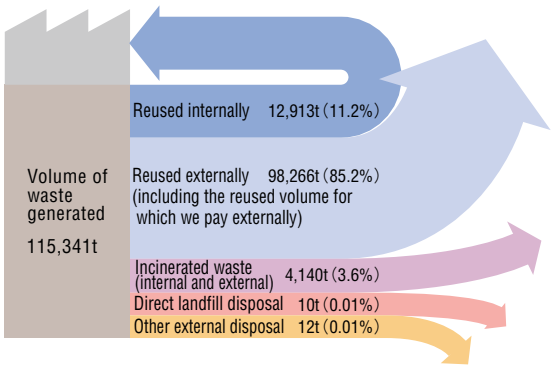
Reducing Waste

Hino Motors has set target levels for reducing waste through the Voluntary Plan and is engaged in achieving them through resource-recycling activities and resource-saving activities.

State of Waste Disposal in FY2003

The state of Hino Motors' waste disposal in FY2003 is illustrated below.

■State of Waste Disposal in FY2003



Direct Landfill Waste

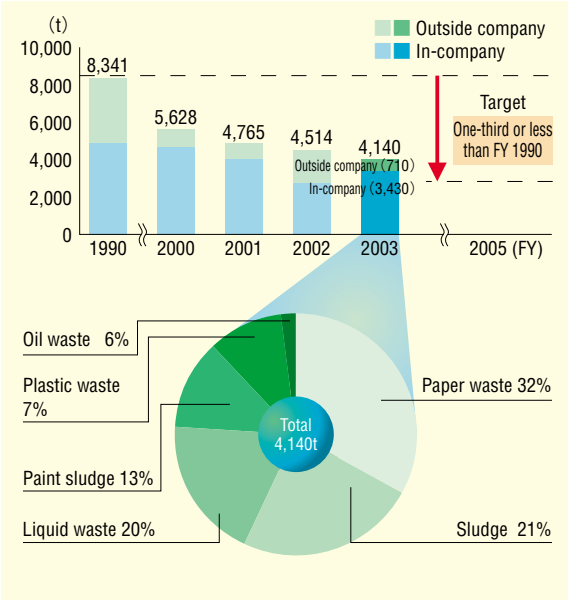
Zero direct landfill waste* was achieved by all plants in FY2000. At present we are engaged in further reduction of direct landfill waste.

*Zero direct landfill waste: Reduced to 5% of FY1995 levels.

Combustible Waste

Our target is to reduce the amount of waste generated by plants to one-third (33%) or less than FY 1990 levels by the end of FY2005 and we are promoting activities toward this. In FY2003, in addition to reduction activities carried out to date, we reduced the volume of waste to 50% of FY1990 levels by using composite discharge sludge as cement material, using light-weight frames, and using plastic waste as solid fuel (RPF).

■Relative Composition of Combustible Waste in FY2003



Controlling and Reducing Chemical Substances

Working to Lessen Environmental Impact via Thorough and Strict Control of Chemical Substances

Along with instituting strict control of chemical substances utilized in the production process, we have instituted on-going strategies to reduce the volume of such substances released into the environment. In addition, regarding environmental pollution, we are working at preliminary assessment, prevention, and disclosure of information to the public.

Controlling Chemical Substances

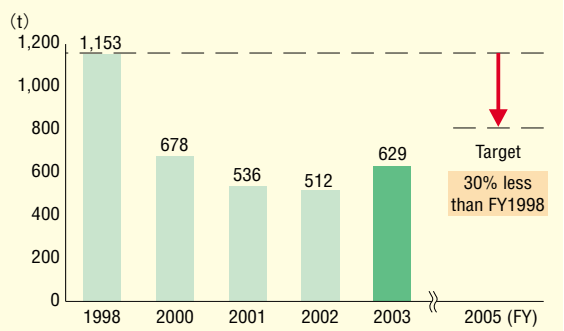
Numerous chemical substances are used in manufacturing automobiles. Hino Motors strictly adheres to the PRTR Law (Law Concerning Reporting, etc. of Releases to the Environment of Specific Chemical Substances and Promoting Improvements in Their Management). In addition, when purchasing new auxiliary materials, we have established a chemical substance preliminary assessment system to confirm in advance the chemical substances contained and to prevent the use of highly polluting substances with regard to the environment and safety.

PRTR (Pollutant Release and Transfer Register)

In FY2003, Hino Motors used 21 types of chemical substances that were subject to the PRTR Law, a total of approximately 2,700 tons. Of these, 23% were released into the atmosphere or water system. To reduce the amount of discharge into the atmosphere and water system, we have replaced washing thinner and diluting thinner with other types of liquids.

Due to a rise in the number of vehicles produced the amount of discharge for FY2003 increased over the previous year, but compared to the levels for 1998 when the count of chemical substances began under the PRTR Law, there has been a 45% reduction in discharge.

■Changes in Volume of Substances Released Subject to PRTR



Reducing Substances of Environmental Concern

To counteract the variety of chemical substances used in the production process, we have instituted measures to control their release to the environment. We carry out regular surveys of soil and groundwater pollution for a thorough, speedy, and appropriate response, as well as working to disclose information to the government and the surrounding community.

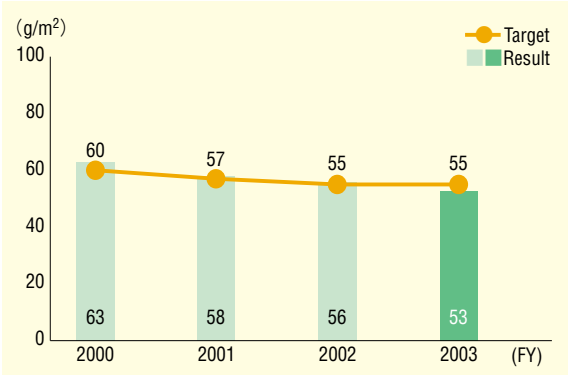
VOC (Volatile Organic Compounds)

The Hamura Plant has established voluntary targets for reducing volatile organic compounds (VOC) that are discharged during the vehicle body-painting process and is actively working to reach the targets.

During FY2003, the target reduction was set at 55g/m^2, and, by instituting the use of low VOC material in newly added paint, was reduced to 53g/m^2.

In FY2004, we will work toward further improvements in reducing the volume of discharge. In addition, in response to VOC regulations, we began regular measurements of VOC concentrations in paint booths and drying ovens in FY2004.

■Changes in VOC Emissions (Hamura Plant)



Hino-Topics

Cooperating with the Development of Technology to Reduce Dioxin

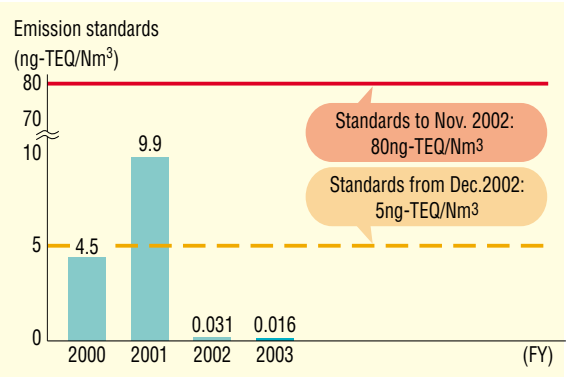
Hino Motors has cooperated with JFE Engineering, Inc.'s development of a dioxin reduction device in numerous ways, such as offering our own incinerators for experimental use.

In November 2003, "Gas Clean DX" which eliminates dioxin from exhaust emissions became available for practical use. In an empirical experiment using the device at the Hamura Clean Center, we achieved under 1 pg (0.001ng) - TEQ/Nm^3 elimination level.

Dioxin

Hino Motors Hamura Clean Center operates incinerators in order to dispose of waste generated at each operating center. We strictly comply with every aspect of the revised regulations which were tightened in December 2002. With regard to the new regulations limiting Dioxin concentration in exhaust gas to 5ng-TEQ/Nm^3, we carried out strategies such as controlling operations to incinerate waste completely, thoroughly equipping facility functions, and strengthening management systems, as well as stricter separation of trash and reviewing appropriate incineration volumes. As a result, we achieved and have maintained dioxin concentrations of less than 0.02ng-TEQ/Nm^3—a value that is less than 1/200ths of emissions standards.

■Changes in Dioxin Concentration



PCB (Polychlorinated Biphenyl)

We properly manage and store PCBs which are used in transformers in electrical equipment and in insulation oil in condensers. The number of units of equipment storing used PCBs numbered 223* at the end of FY2003.

* Hino Plant: 140 units (Note: 25 units containing PCBs currently in use)
Hamura Plant: 83 units (Note: zero units containing PCBs currently in use)

Steps for Soil and Groundwater

Since 1994, Hino Motors has been investigating the extent of contamination in soil and groundwater at the Head Office and at Hino, Hamura, and Nitta Plants.

As a result of these investigations, we confirmed one area within the Head Office and Hino Plant property where trichloroethylene levels exceeded environmental standards. Since 1997, we have been taking active countermeasures to decontaminate the soil. In taking these steps, we gave priority to preventing an outflow of groundwater outside the plant and, in 1998, dug barrier wells along the property line. We are continuing to pump up groundwater and decontaminate it through aeration and also testing groundwater quality regularly.

We reported the test results and the decontamination procedures to the government and also gave appropriate explanations to the community. To ensure early detection of soil contamination, we are conducting soil tests whenever a plant or facility is vacated.

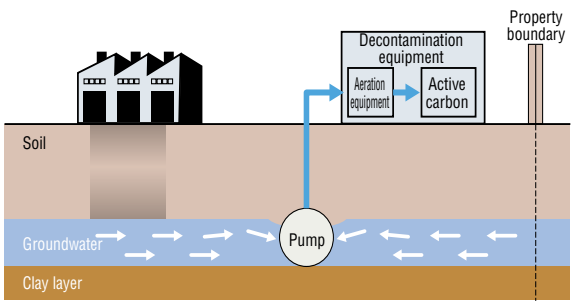
■Measured Values of Trichloroethylene in FY2003

Environmental standard: 0.03 [Unit:mg/L]

Plant/Office	At groundwater level
Head Office and Hino Plant	0.002–0.36
Hamura Plant	0.002–0.058*
Nitta Plant	Not detected

• Range of values is due to multiple measurement points.
• Date measured (Head Office & Hino Plant: February 2004; Hamura Plant: September 2003)
* Due to inflow from outside plant

■Decontamination Measures for Groundwater (Image)



Logistics-Related Activities

Making Comprehensive Cutbacks to Lessen the Environmental Impact of the Logistics Process

Led by the Logistics Improvement Subcommittee, we aim to promote a streamlined logistics system by improving the completed vehicles transport system, consolidating the shipment of parts for overseas production, and aiming to cut CO_2 emissions, as well as reducing the amount of packaging and wrapping materials used.

Cutting CO_2 Emissions

We are controlling the amount of CO_2 emitted during transport by improving the efficiency of inter-plant and purchasing logistics. By combining routes, determining the appropriate weight for each route and mixing cargo, we have achieved increased efficiency in loading capacity and effective dispatching. We are also promoting multiple deliveries through the use of relay stations.

For transport of completed vehicles, we have instituted shipping by means of carrier cars and full trailers. A full trailer system couples a carrier loaded with completed vehicles to a general-use cargo truck for shipping.

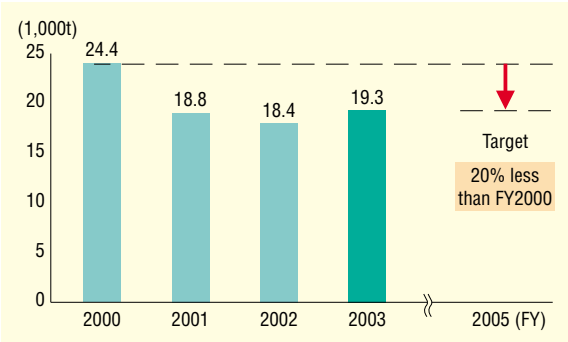
Mixed cargo truck

Reducing Packaging and Wrapping Materials

With respect to inter-plant and purchasing logistics and production parts and spare parts logistics, we have instituted the use of returnable shipping cases and boxes, increased the amount of filling space in shipping cases, and are rethinking packaging and wrapping material. From these efforts, total packaging and wrapping materials used in FY2003 was reduced 21% from FY2000 totals.

In addition, shredder dust generated from office paper which formerly cost to dispose of is now being reused as cushioning material. As a result, we have reduced the purchasing amount of packing materials and furthermore, since the cushioning is made of paper, recycling it is now simpler.

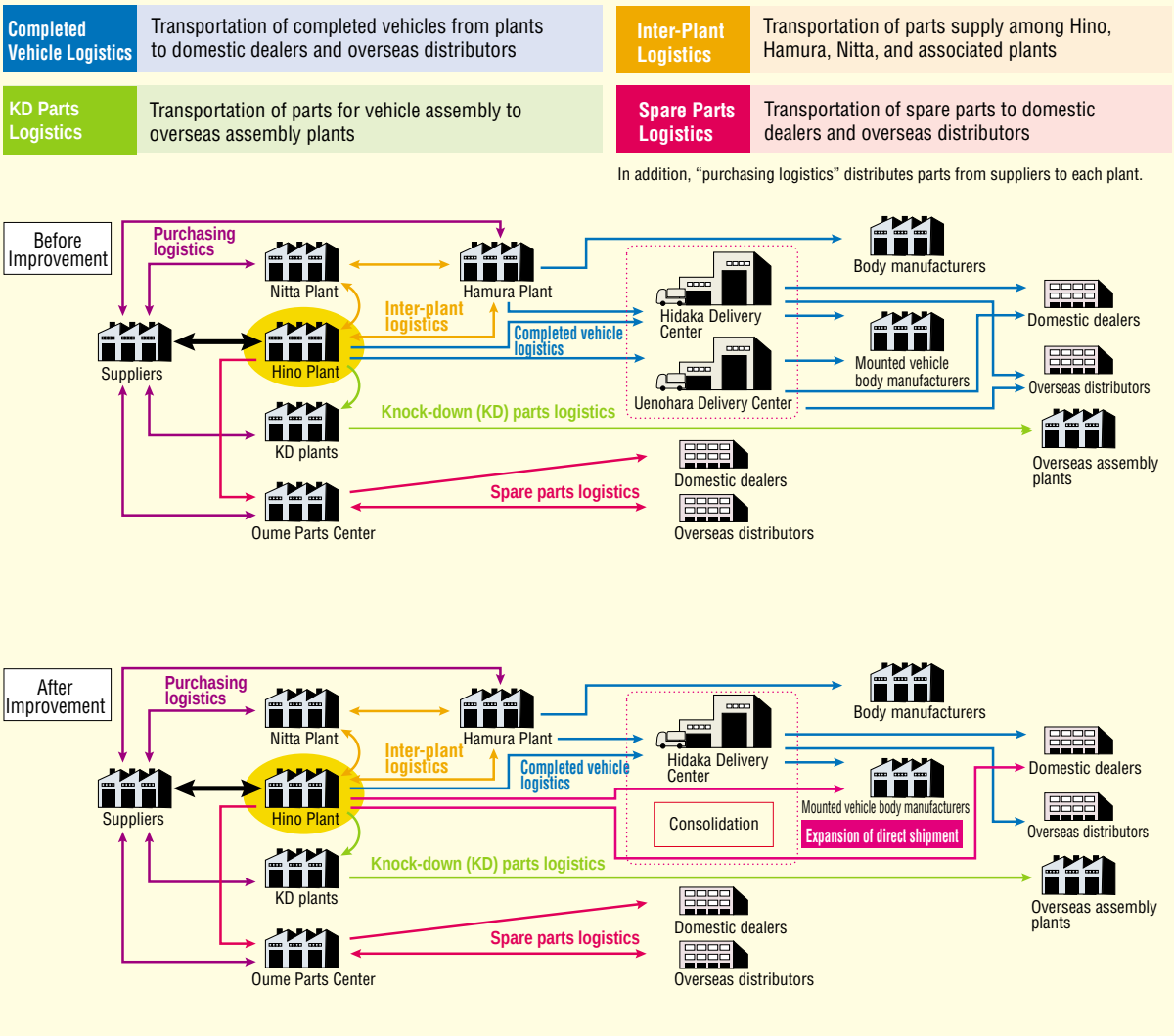
■Changes in Use of Packaging and Wrapping Materials



Efficiency of the Logistics System

By expanding direct shipments to mounted vehicle body manufacturers and dealers, we have raised the efficiency of the logistics system.

■Consolidation of Vehicle Delivery Centers for a Better Logistics System



Marketing Activities

We Are Taking Steps toward Environmental Management in the Marketing Arena

Customer service occupies a large part of the business operations of an automobile manufacturer. Hino Motors has put in place numerous concrete steps toward environmental management by organizing the Dealers' Environmental Management System.

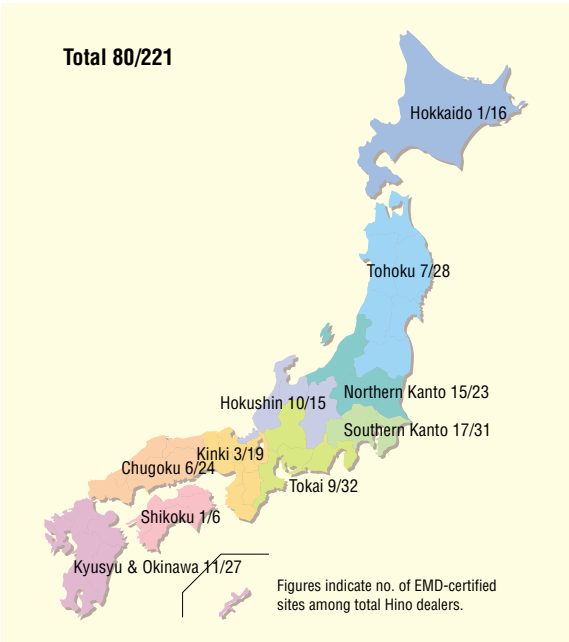
Eco-Management Dealer (EMD) Certification

In the life cycle of a vehicle, direct interaction with customers occurs most during operations and service. In FY2002, Hino Motors formed a network of 42 dealers nationwide and instituted the Dealers' Environmental Management System.

The Environmental Guidelines for Dealers, a system which incorporates environmental laws and regulations as well as Hino Motors' own requirements, was issued to every dealer. After assessing whether particular dealers are meeting the guidelines 100%, they are certified as an EMD.

In FY2003, the following 80 sites in 30 companies were certified as EMDs.

■EMD Certification Sites



Fluorocarbon Recovery Activities

The requirements of the Law Concerning the Recovery and Destruction of Fluorocarbons, promulgated in October 2002, have already been met in September 2002 on the part of all 42 dealers.

Hino Motors have had each dealer register as Businesses Handling Class II Designated Chemical Substances and had some of the companies register as Businesses Recovering Class II Designated Chemical Substances. Those companies that do not actually carry out recovery contracted with those who do in order to take care of fluorocarbon recovery.

In reality, dealers do not handle very many end-of-life vehicles and thus the amount of fluorocarbon recovered is small. From January 2005, we will comply with the Law Concerning Recycling Measures for ELV (Automobile Recycling Law). We will continue to further support the recovery of fluorocarbons by active publicizing.

Fluorocarbon recovery

Hino-Topics

Environmental Conservation Activities by Dealerships

"Aiming to Expand Both Environmental Management and Market Share."

In FY 2003, Tochigi Hino Motors, Ltd., following the lead of the Head Office's Eco-Management Dealer (EMD) certification in FY2002, acquired EMD certification for all branches within the prefecture. Only three companies among domestic dealers have registered and acquired certification for all branches. We asked President Kodaira of the Tochigi Hino Motors, who spoke in a humble tone, about his company's path to this point and future plans.

Kazumasa Kodaira
President
Tochigi Hino Motors, Ltd.

Applying the Head Office's Experience to Branch Activities

"Let's make the workplace beautiful."

First of all, we took the basic attitude that we start with the act of cleaning and organizing. The very strict trash separation rules in Utsunomiya city where the head office is located were actually a help to us, and the employees did not seem to oppose working toward EMD certification. Of the 108 items in the EMD guidelines, only a few were not met.

"Among the items that were not met, the most difficult was figuring out how to prevent waste products from being exposed to rain. Even when they were covered with sheets, the strong winds in this region blew them off and we had a hard time."

"A huge point of difference in our awareness was following waste products to the final place of disposal. In our contracts with trash conveyers, we were not consciousness of the need to institute a process of tracking intermediate disposal agents all the way to the final disposal agent. We only became aware of this by having it pointed out."

The head office humbly accepted non-compliances and brought new awareness. The experiences of the head office as such were later applied to the efforts at the four branch companies.

Communication and Competitive Spirit among All Branches

In the case of Tochigi Hino, conditions were favorable for all branches to acquire certification. The fact that trash separation rules in the prefecture are very strict meant that their employees were already highly conscious. And all of their branches are in new constructions built within the past 15 years. And the four branches (in Ashikaga, Nishi Nasuno, Oyama, and Moka) are all within a 50-kilometer radius with the head office at the center. They have a leaders' meeting twice a month where they can closely communicate each other and exchange useful information.

"Actually, at first the Nishi Nasuno branch office was out of consideration on EMD certification during FY2003."

However, while making preparations along with the other three locations, a strong wish was born to achieve it, and they decided to go for certification for all four locations.

"We know each other's situation. A competitive spirit of 'I don't want to lose' was probably the reason why we were able to achieve it."

Mr. Kodaira

Quality Leads to Customer Satisfaction

A Hino hybrid bus operates in Nikko National Park in Tochigi Prefecture.

"At that time (1993), there were only a few hybrid buses operating as city buses, so it was extremely unusual. We even had inquiries from abroad."

Their employees environmental awareness was kept high owing to our record of achievements.

"The next theme is achieving sales target (market share)."

"If we look at it with a long-term perspective, I think that the original performance and quality of the automobile, including environmental aspects, is what leads to customer satisfaction."

The vision of Tochigi Hino Motors, Ltd. is a dual achievement of environmental management and expansion of market share. The words of President Kodaira were full of conviction.

Hybrid bus "White Birch," operating in Nikko National Park.

Taking Steps toward Recycling

Actively Promoting Automobile Recycling and Appropriate Disposal

Hino Motors is involved in the Automobile Recycling Law enacted in July 2002. By forming a recycling committee, strengthening measures already in place, and articulating closely with associated companies, we are moving steadily toward our goal of setting up an automobile recycling system.

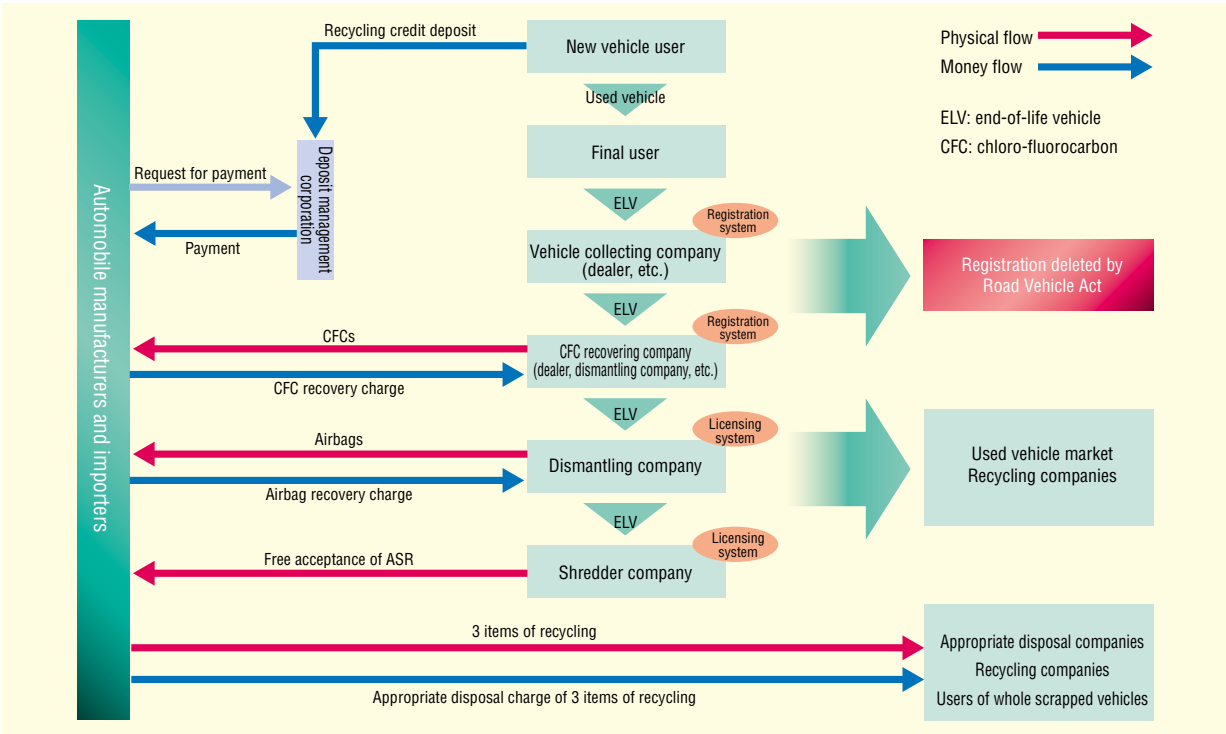
The Automobile Recycling Law

In the past, end-of-life vehicles (ELV) were recycled and disposed of by disposal businesses, but given the present situation, we cannot say that the automobile-recycling system is functioning adequately today.

For this reason, a law promoting automobile recycling and appropriate disposal, the Law Concerning Recycling Measures for ELV (Automobile Recycling Law) was enacted in July 2002 and will be promulgated in January 2005. The purpose of this law is to enforce the responsibilities of the parties concerned, beginning with automobile manufacturers, to ensure the appropriate recycling and disposal of used vehicles. This law covers, in particular, commercial vehicles (trucks more than GVW3.5 tons and buses with ten passengers or more) and is the first of such in the world. When a vehicle manufactured by a given company comes to the end-of-life, the said company must accept the fluorocarbons, air bags, and shredder dust from the vehicle and recycle them, and, in the case of fluorocarbons, destroy them appropriately.

To take steps toward compliance with this law, Hino Motors formed the new Recycling Committee in March 2002 to promote recoverability and to step up the pace and strengthen measures already in place.

■Outline of Automobile Recycling Law



Recycling Mounted Vehicle Bodies and Promoting Appropriate Disposal

Trucks are disassembled into three main sections—the cab, the chassis, and the mounted vehicle body. Of these, the most difficult part to dispose of, and the part that generates the most waste, is the mounted vehicle body.

The mounted vehicle body has the following characteristics: 1) It contains parts that must be disposed of at different timing and different locations than the chassis with cab; 2) It has a high recycle and reuse rate; and 3) Multiple manufacturers are involved in its production, making it difficult to pin down which manufacturer bears primary responsibility.

In order to consider the above characteristics and establish an effective course of action that can be promoted by the vehicle manufacturing industry as a whole, the Japan Automobile Manufacturers Association (JAMA) and Japan Auto-Body Industries Association (JABIA) have set up "Voluntary Plan for Recycling Commercial Vehicle Bodies."

■Voluntary Plan for Recycling Commercial Vehicle Bodies

Design stage	Implement recycling plan	Asses ease of dismantling and compile a dismantling manual
		List and clarify manufacturers of used materials
		Survey alternative materials
	Reduce the use of the 4 most environmentally impacting substances*	Pinpoint the parts containing hazardous substances and exact amounts used
		Promote alternatives and reduce usage
End-of-life stage	Accelerate the recycling/disposal of materialsdifficult to recycle/dispose of	Investigate appropriate disposal methods of wood, refrigeration/freezer insulation and FPR, and disseminate information
	Network cooperative disposal/recovery businesses	Solicit cooperative businesses to carry out disposal/recovery and design networks
Partnership with associates	Disseminate information and promote illuminating activities	Disseminate information and request voluntary participation from manufacturers who are not members of the Auto Industrial Association
		Illuminate users

* lead, mercury, hexavalent chromium, cadmium

Dismantling of a truck

The main content of the plan is outlined below.

We have already begun implementing the recycling plan and creating a network of disposal and recovery businesses.

Partnership with Associates

Hino Motors trucks are not entirely manufactured within our corporation—with respect to many of the truck beds, their manufacture is commissioned to partner companies. According to the Automobile Recycling Law, there are two types of truck beds—those that fall under the law and those that don't. However, even for those outside the law, it is necessary to make provisions for their appropriate recycling, and we are seeking voluntary participation by the truck body manufacturers.

Hino Motors wishes to work with the associated vehicle bed manufacturers to jointly own the problems related to recycling and disseminate technology that would solve these problems. With this purpose in mind, we are seeking deeper partnership with the associated companies to implement recycling of vehicles in their entirety.

Hino-Topics

Reusing Resources via Hino U-Truck

In April 2003, to foster the reuse and recycling of used vehicles, Hino Chuhan, Ltd.—seller of used trucks—and CRC, Ltd.—truck dismantlers, rebuilders and sellers of secondhand parts—merged to form Hino U Truck.

Through this merger, which yielded a rise in efficiency from streamlining our used car and parts-related industry, we formed a new used automobile division within Hino Motors which is dedicated to promoting the reuse and recycling of used vehicles in the Hino Group as a whole.

Hino Motors' Workplace Creation

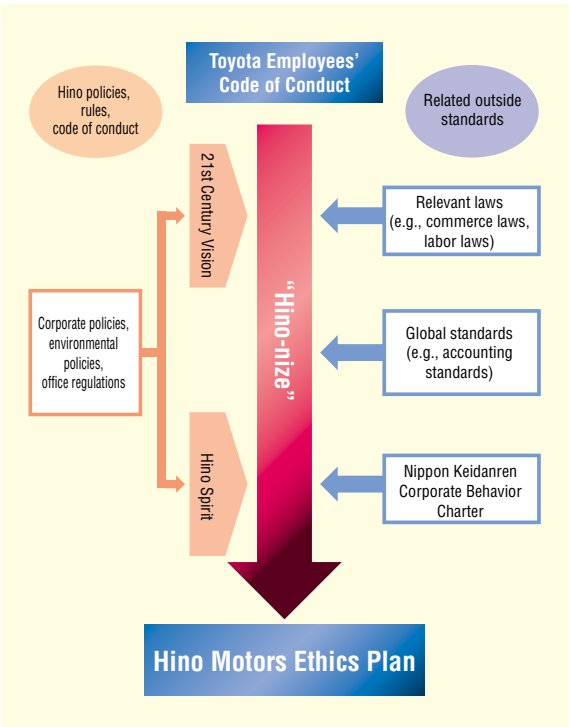
Establish Corporate Ethics, Bearing in Mind the Health and Safety of Employees

In FY2002, the Hino Motors Ethics Plan was enacted as the basis of corporate activities. Keeping employees' safety uppermost in mind, we pay utmost attention to physical and mental health and fulfill our corporate responsibilities to society.

The Hino Motors Ethics Plan

On the occasion of the 60th anniversary of Hino Motors' founding in 2002, we established the Hino Spirit to guide our actions. In addition, in January 2003, using Toyota Employees' Code of Conduct as reference, we established the Hino Motors Ethics Plan to further develop the Hino Spirit. We intend to use this as a behavior standard for the ethical conduct of employees and as the basis for our corporate ethics.

■The place of the Hino Motors Ethics Plan



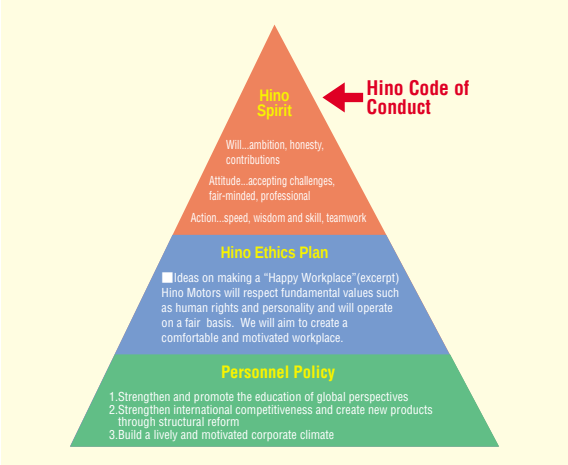
Employment and Social Welfare

Following our personnel policies which are based on the ideals reflected in the Hino Ethics Plan, we are engaged in creating a comfortable and motivated workplace where each person's character is respected and where there is no discrimination.

We observe all the various-labor related laws and also make an effort to maintain and develop healthy mutual labor relationships of trust based on our labor contract with the Hino Motors Labor Union, as well as observing the "60 Hino Labor Renewal Statement" released at the 60th anniversary.

As of March 2004, our regular employees number 8,039 males and 634 females, a total of 8,673 employees. The percentage of female employees is 7.3%. For female employees, we have established parental leave system up to age one of the child (from FY2004, leave is extended to the month of March after the child reaches age two). We offer a system of shorter work hours until the child becomes three in order to support both work and childcare. In FY2003, 190 (about 30%) of the 634 female employees at Hino Motors are working while raising children.

■Illustration of Hino Motors' Personnel Principles



Safety and Health

At Hino Motors, we consider safety and health to be the first priority in corporate activities. In June 2002, spurred by the 60th anniversary of the founding, we established Hino Motors Basic Safety and Health Principles to undergird all of our safety and health activities. "Safety is the first priority in all operations" and a safe, healthy workplace that is conducive to work is the key to a compatible balance between respecting humans and expanding the company—now part of the management agenda. We aim to express clearly inside the company and beyond that we are concerned with safety and health and hold this consciousness in common with all employees.

In the future, we plan to introduce an Occupational Safety and Health Management System (OSHMS) based on this principle to develop positive safety and health actions towards early prevention of occupational disasters.


日野自動車安全衛生基本理念

基本理念

○ 安全は全ての業務に優先する
- 安全なくして、企業の発展なし
- ルールを守らずして、安全なし
- プロとしての自覚なくして、安全なし

安全で健康な、働きやすい職場づくりこそ、人間尊重と企業の発展を両立させる最善の策である。

2002年6月

取締役社長

Hino Motors Basic Safety and Health Principles

Mental Health Care

Under the direction of the Ministry of Health, Labour and Welfare, Hino Motors made plans for a mental health care system in 1998. We held regular training meetings for managers and supervisors to raise their awareness regarding mental health and, in 2002, conducted a questionnaire among all employees. Based on the results, we are working to improve communication based on an understanding of the present state of affairs.

In 2003, with the assistance of outside professional counselors, we compiled a mental health manual directed at the managerial level and deployed it to all managers in the company.

Through education and training, we are supporting the reform of the workplace environment by managers and supervisors and are improving our responsiveness to employees through individual guidance and counseling. Furthermore, we have instituted regular individual consultation service by an outside professional counselor at each business site and have introduced an outside telephone counseling service to complete the system of care.

Hino-Topics

Traffic Safety and Disaster Prevention

Hino Motors has established November 12 each year as "Hino Disaster Prevention Day" and carries out a variety of fire drills, classes, and lectures to raise awareness on disaster prevention.

In addition, in conjunction with the spring and fall national traffic safety weeks, we hold drivers training classes in which many employees participate each year.

Hino Motors' Connection with Society

We Will Fulfill Our Responsibility to Customers and Carry Out a Variety of Social Contributions

Hino Motors' social responsibilities are, first of all, to the customers who use our products. In addition, we are conscious of the role we play as a corporate citizen and are making an effort to respond to social needs and create a society where we can live safely and have peace of mind.

Thoughts about Our Customers

Hino Motors' view that "Customers come first" is a corporate principle that is consistent with the Hino Spirit. We fulfill our obligations regarding diesel vehicles, which have a strong social impact by providing thorough customer service and response to customers.

●Customer Service Program

We have created a follow-up customer service program which includes inspection and repairs after sales and have recommended it to customers. The service content provides preventative service through a maintenance lease and annual service contract.

●Responding to Customers

We have established a customer contact desk to respond to various inquiries and complaints from customers and are building a system which will be reflected in future activities.

Of 2,350 inquiries received at our customer contact desk in FY2003, concrete complaints and suggestions received from 180 inquiries were used as feedback within the company as well as to dealerships, and were added to the agenda for preventing repeat occurrences and used in product development.

Hino-Topics

Offering Energy-Saving Driving Workshops

We have been offering workshops on energy saving driving at the Ibaraki test course. After a lecture on energy-saving driving using a text, participants actually drove on the test course and experienced the benefits of energy-saving driving.

In FY2003, a total of 26 companies (about 900 people) participated in these workshops.

●Present State of Recalls and Collections

We are instituting a system to gather information on market conditions from dealerships around the world. The information is summarized and analyzed by our quality control department. When necessary, we conduct site surveys, collect and analyze problematic products, and promote response strategies through the relevant departments. In addition, when the quality control department determines that a defect exists in a product and an appropriate countermeasure is required, we implement the necessary steps including reporting, notification, collection of the product, free of charge repairs, and so on.

In addition, in actual implementation, we clarify the steps to be followed and monitor the activities of each department to check whether they are appropriate and if there are problems, we maintain a means of improvement.

In FY2003, we carried out 17 recall notifications.

Auto Scholarships

The "Auto Scholarship High School Student Cultural Award" is an essay contest targeting high school students that is sponsored by the Sankei Newspaper and supported by Hino Motors. The contest, which began in 1968, has a 37-year history and the total number of applicants over that period has grown to approximately 40,000. The winners are awarded a training trip to the United States or China and we also invite exchange trainees from the United States.

As one of Hino Motors' cultural activities that support the youth of the next generation, we have made a significant contribution to the development of international exchange.

Community Involvement and Volunteer Activities

Our community involvement ranges from the areas of education and academic research, international contributions and cooperation, social welfare, and the natural environment to the local community. In addition to inviting local residents to enjoy a number of events so we can cultivate mutual friendship, we also take part in city-sponsored industrial fairs and environmental festivals, offer plant tours, and participate in clean-up activities around the plant through which we work to gain the understanding of local residents.

In FY2003, the number of visitors who came to the three plants of Hino Motors for plant tours totaled 20,773.

●Hino Art Classes

We cooperated for Hino City Art Education sponsored by the Hino City Board of Education. Each Saturday from January 17 to February 7, 2004, we held art classes at the Head Office of Hino Motors on the theme of "Let's design a car."

●Participation in Eco-Car World 2003

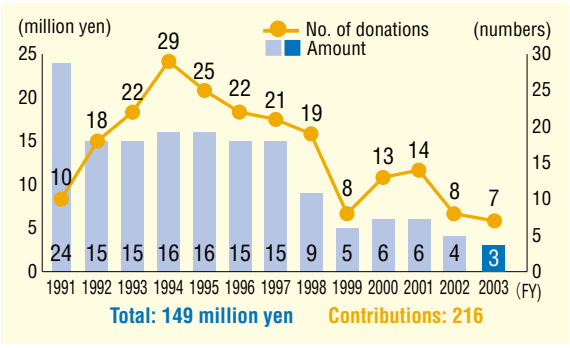
We participated in Eco-Car World 2003, sponsored by the Ministry of the Environment, the Tokyo Metropolitan Government, and others. The purpose of this event is to spread low-emission automobiles and it is held in Yoyogi Park each June.

Hino Motors Green Fund

The Hino Motors Green Fund was established on July 30, 1991, as part of celebrations marking the 50th anniversary of our corporation in May 1992.

Based on our corporate objective, "Harmonizing with the social environment," we are active in environmental conservation, support environmental surveys and research, and plant trees, in line with our motto, "Think globally, act in your local community."

■Record of Donations



Making charcoal at Mount Takao Recreational Woods

Head Office/Hino Plant

JAB EMS Accreditation RE008 | ISO 14000 JARI-RB JAER0233

ISO 14001 Certified: March 24, 2001

Shinji Fujimoto
Environmental Management Coordinator
Head Office and Hino Plant

"Aiming to Be a Manufacturing Plant in Harmony with the Local Community and Global Environment."

Surrounded by the clean water and green foliage of the Tama region, the Head Office and Hino Plant, in addition to manufacturing automobiles, functions in the areas of product development, office managements and production preparation. In March 2001, the Head Office and Hino Plant acquired ISO 14001 certification. Our qualifications were reconfirmed during a environmental audit in March 2004.

During this time, we made concrete advances in the reduction of CO_2 emissions, negative environmental impact, trash incineration, and water conservation through the yearly arranged Environment Conservation Promotion Plan. In order that these fruits grow even larger, we will actively engage every employee in fully understanding the connection between business and its environmental effects. We will hold up the ideal of manufacturing clean cars, and aim to be a manufacturing facility of low environmental impact in harmony with the community and global environment.

●Plant Overview

Address: 1-1, Hinodai 3-chome, Hino-shi, Tokyo
Main products: Heavy-duty truck: Hino Profia,
Medium-duty truck: Hino Ranger
No. of employees: 4,646 (as of March 2004)
Site area: 446,461m²
Total floor area: 359,929m²
Recipient of the 1997 Agency for Natural Resources and Energy Director General's Award (Electricity Division)

Head Office & Hino Plant Environmental Policies

1. Harmony with the region, living together with the environment
2. Prevent environmental pollution through proactive measures and continuous improvement
3. Respect all applicable laws and regulations
4. Generate no waste and waste nothing
5. Each member more conscious of duty

●Community Involvement by the Plant

•Hino Plant Cherry Blossom Festival	April 2003
•Community Social Gathering	August 2003
•Cosponsor of Hino City Industry Fair	November 2003
•Community Social Gathering	December 2003

Water Release (Water Pollution Prevention Law, Tokyo Ordinance)
Quality analysis of discharged water (Discharged into river: Tamagawa River via Yajigawa River)

Item	Regulation value	Maximum	Minimum	Average
Water discharged [m³/day]	—	4,483	673	1,957
pH	5.8–8.6	7.2	6.7	7
BOD [mg/L]	20	2.2	0.9	1.4
COD [[mg/L]	—	19	4.6	7.6
SS [[mg/L]	40	9	1	2.4
N-hexane[mg/L]	5	ND	ND	ND
Total phosphorous [mg/L]	2	1.2	0.2	0.7
Total nitrogen [mg/L]	20	13.8	7.1	10.9
Zinc [mg/L]	5	0.09	0.06	0.08
Fluorine [mg/L]	15	0.1	0.1	0.1

ND: Below lower quantitative limit (not detected)

Air Release (Air Pollution Prevention Law, Tokyo Ordinance)

Facilities	Measurement item	Regulation value	Maximum	Minimum	Average
Boiler (crude oil)	NOx [ppm]	100	92	61	84
	Soot [g/Nm³]	0.3	0.047	0.022	0.031
Cogenerator	NOx [ppm]	35	26	20	23.5
	Soot [g/Nm³]	0.05	0.016	0.002	0.006
Carburizing Furnace No.1 (city gas)	NOx [ppm]	180	148	148	148
	Soot [g/Nm³]	0.2	0.004	0.002	0.003

Chemical Substances (PRTR Law) [Unit: tons/year]

Substance No.	Name of Type I designated substance	Quantity handled	Amount released: Atmosphere	Amount released: Water	Amount transferred: Waste	Amount transferred: Public sewerage	Amount transferred: Recycling	Quantity removed	Consumption
1	Zinc compounds (water-soluble)	2.0	0.0	0.0	0.6	0.0	0.0	0.0	1.4
40	Ethyl benzene	18.3	14.3	0.0	0.1	0.0	0.1	0.4	3.4
43	Ethylene glycol	449.1	0.2	0.0	0.0	0.0	0.0	0.1	448.9
63	Xylene	53.4	31.9	0.0	0.1	0.0	0.2	4.1	17.1
177	Styrene	38.1	1.2	0.0	0.0	0.0	0.0	0.0	37.0
224	1,3,5-Trimethylbenzine	6.5	6.3	0.0	0.0	0.0	0.1	0.0	0.0
227	Toluene	36.1	10.5	0.0	0.1	0.0	0.0	0.4	25.1
299	Benzene	1.1	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Total		604.8	64.4	0.0	0.8	0.0	0.4	5.0	534.1

- Quantity handled: over 5 tons is subject to compilation. (For special chemical substances designated as Type I, quantity handled over 500kg is subject to compilation.)
- Quantity removed: Amount removed by combustion treatment, decomposition, etc.
- Consumption: Amount converted to other substances through chemical reactions or amount transferred outside the premises due to inclusion in products or accompaniment therewith.

Hamura Plant

ISO 14001 Certified: March 10, 1999

JAER0085

Takahiko Yamamoto
Environmental Management Coordinator
Hamura Plant

"We Are Working for Spiraling Up through Planned Improvements."

The conservation of the global environment is an agenda held in common by all humanity. Businesses, too, must recognize the environmental impact of their business operations and begin taking concrete measures.

At the Hamura Plant, we hold up the Hamura Plant Environmental Objectives so that in every aspect of production we are engaged in preserving and improving the environment. Concrete targets were established in the Hamura Plant Environmental Conservation Implementation Plan and we are working at planned improvements (spiraling up).

●Plant Overview

Address: 1-1, Midorigaoka 3-chome, Hamura-shi, Tokyo
Main products: Light-duty truck: Hino Dutro, Dyna, Hilux, and Hilux-Surf
No. of employees: 2,525 (as of March 2004)
Site area: 750,770m^2
Total floor area: 362,363m^2
Recipient of the 1996 Agency for Natural Resources and Energy Director General's Award (Electricity Division)
Recipient of the 2002 Kanto Bureau of Economy, Trade and Industry Director's Award (Heat Division)

Hamura Plant Environmental Policies

1. Promote business operations in harmony with the natural environment
2. Effectively utilize finite resources
3. Build a partnership with the local community

●Community Involvement by the Plant

•Cherry Blossoms Festival (Rained out)	April 2003
•Cleaning convex mirrors by the labor union	May and Sept. 2003
•Took part in Hamura City Summer Festival	July 2003
•Took part in Hamura City Industry Fair	November 2003

Water Release (Sewage Law)
Quality analysis of discharged water (Discharged into sewer)

Item	Regulation value	Maximum	Minimum	Average
Water discharged [m^3/day]	—	3,299	368	2,026
pH	5.7–8.7	7.4	6.5	6.9
BOD [mg/L]	300	9	0.9	2.5
SS [mg/L]	300	36	2	4.7
N-hexane[mg/L]	5	ND	ND	ND
Total phosphorous [mg/L]	20	2	0.1	0.2
Total nitrogen [mg/L]	150	6.4	1.6	3.6
Zinc [mg/L]	5	ND	ND	ND
Fluorine [mg/L]	15	0.92	0.47	0.7

ND: Below lower quantitative limit (not detected)

Air Release (Air Pollution Prevention Law, Tokyo Ordinance)

Facilities	Measurement item	Regulation value	Maximum	Minimum	Average
Boiler	NOx [ppm]	97	87	45	64
	Soot [g/Nm^3]	0.25	0.012	0.004	0.007
Cogenerator (diesel)	NOx [ppm]	950	760	660	710
	Soot [g/Nm^3]	0.1	0.03	0.02	0.025
Cogenerator (city gas)	NOx [ppm]	35	31	20	24
	Soot [g/Nm^3]	0.05	ND	ND	ND
Drying booth	NOx [ppm]	180	50	3	15
	Soot [g/Nm^3]	0.1	0.015	ND	0.003
Incinerator	NOx [ppm]	250	93	ND	89
	Soot [g/Nm^3]	0.5	ND	ND	ND
	Hydrogen chloride [mg/Nm^3]	750	80	39	63
	Dioxin [ng/Nm^3]	5	0.016	0.0009	0.008

ND: Below lower quantitative limit (not detected)

Chemical Substances (PRTR Law) [Unit: tons/year (Dioxins are mg/year)]

Substance No.	Name of Type I designated substance	Quantity handled	Amount released: Atmosphere	Amount released: Water	Amount transferred: Waste	Amount transferred: Public sewerage	Amount transferred: Recycling	Quantity removed	Consumption
1	Water-soluble zinc compounds	11.2	0.0	0.0	3.3	0.1	0.0	0.0	7.8
16	2-amino ethanol	2.4	0.0	0.0	0.0	0.0	0.0	2.2	0.1
30	Bisphenol A type epoxy resin (liquid)	6	0.0	0.0	0.2	0.0	0.0	1	4.9
40	Ethyl benzene	77	43.1	0.0	0.0	0.0	7.8	7.4	18.7
43	Ethylene glycol	972	0.0	0.0	0.0	0.0	0.0	0.0	972
44	Ethyleneglycol monoethylether	28.3	28.2	0.0	0.0	0.0	0.0	0.0	0.0
61	ε-caprolactam	1.2	0.0	0.0	0.0	0.0	0.0	0.1	1.1
63	Xylene	339.2	193.1	0.0	0.0	0.0	19	33.1	94
101	2-Ethoxyethlbenzene	40.9	39.8	0.0	0.0	0.0	0.0	1.1	0.0
179	Dioxins	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
224	1,3,5-trimethylbenzene	38.1	17.9	0.0	0.0	0.0	18.4	1.8	0.0
227	Toluene	316.4	160.7	0.0	0.0	0.0	0.0	18.5	137.1
232	Nickel compounds	2.2	0.0	0.0	1.1	0.0	0.0	0.0	1.1
272	bis (2-ethylhexyl) phthalate	4.5	0.0	0.0	0.2	0.0	0.0	0.0	4.3
299	Benzene	6.3	0.0	0.0	0.0	0.0	0.0	0.0	6.2
311	Manganese and its compounds	18.3	0.0	0.0	1.8	0.1	0.0	0.0	16.3
Total		1,863.7	482.9	0.0	6.6	0.2	45.3	65.1	1,263.6

- Quantity handled: over 5 tons is subject to compilation. (For special chemical substances designated as Type I, quantity handled over 500kg is subject to compilation.)
- Quantity removed: Amount removed by combustion treatment, decomposition, etc.
- Consumption: Amount converted to other substances through chemical reactions or amount transferred outside the premises due to inclusion in products or accompaniment therewith.

Nitta Plant

JAB EMS Accreditation RE008
ISO 14000 JARI-RB JAER0170

ISO 14001 Certified: March 27, 2000

Hideo Baba
Environmental Management Coodinator
Nitta Plant

"Setting Even Higher Goals, We Will Tackle Them as a Whole Group."

The Nitta Plant, operating in lush, green Gunma Prefecture, acquired ISO 14001 certification in March 2000. In March 2003, we underwent another environmental audit and our qualifications were reconfirmed in an audit in March 2004.

Aiming at further progress, we will emphasize the importance of environmental conservation starting with strict adherence to the laws and regulations and being in harmony with the local community in order to fulfill our social responsibility. In addition, during this fiscal year, we are all engaged in targeting even higher goals in reducing waste, negative environmental impact, and conserving energy.

●Plant Overview

Address: 10-1, Aza Hayakawa, Oaza Hayakawa, Nitta-machi, Nitta-gun, Gunma
Main products: Engines for medium- and light-duty trucks; Transmissions for heavy- and medium-duty trucks; Axles for medium-duty trucks
No. of employees: 948 (as of March 2003)
Site area: 393,932m^2
Total floor area: 148,649m^2
Recipient of the 2001 Ministry of Economy, Trade and Industry Director General's Award (Heat Division)
Recipient of the 2002 Agency for Natural Resources and Energy Director General's Award (Electricity Division)
Awarded the 2003 Energy Conservation Activities Outstanding Group Prize by the Ministry of Economy, Trade and Industry

Nitta Plant Environmental Policies

1. Harmony with the region, living together with the environment
2. Proactive measures are basic
3. Respect all applicable laws and regulations
4. Generate no waste and waste nothing
5. Each member more conscious of duty

●Community Involvement by the Plant

Clean up Hayakawa River with Sawafuji Electric Co.	May and September 2003
Exhibit at Nitta Town Industry Fair	Oct. 2003
Sponsored Fall Festival (3,200 participants)	Oct. 2003

Water Release (Water Pollution Prevention Law, Prefectural ordinance, Pollution Prevention Agreement undertaking with Nitta-machi)
Quality analysis of discharged water (Discharged into river: Hayakawa River)

Item	Regulation value	Maximum	Minimum	Average
Water discharged [m^3/day]	—	910	63	520
pH	6.0–8.0	7.5	7	7.3
BOD [mg/L]	10	10	ND	3.8
COD [mg/L]	15	11	2	4
SS [mg/L]	15	11	ND	3.4
N-hexane [mg/L]	3	ND	ND	ND
Total phosphorous [mg/L]	8	0.2	ND	0.1
Total nitrogen [mg/L]	60	30.0	3.1	8.8
Zinc [mg/L]	1	0.17	ND	0.17
Fluorine [mg/L]	1.5	0.1	ND	0.03

ND: Below lower quantitative limit (not detected)

Air Release (Air Pollution Prevention Law, Prefectural ordinance, Pollution Prevention Agreement undertaking with Nitta-machi)

Facilities	Measurement item	Regulation value	Maximum	Minimum	Average
Boiler 10t	NOx [ppm]	180	110	96	102
	Soot [g/Nm^3]	0.1	0.04	0.004	0.016
Heat treatment line No.1	NOx [ppm]	180	150	87	112
	Soot [g/Nm^3]	0.1	0.008	0.005	0.007

Chemical Substances (PRTR Law) [Unit: tons/year]

Substance No.	Name of Type I designated substance	Quantity handled	Amount released: Atmosphere	Amount released: Water	Amount transferred: Waste	Amount transferred: Public sewerage	Recycling	Quantity removed	Consumption
25	Antimony and its compounds	4.9	0.0	0.0	0.1	0.0	0.0	0.0	4.8
40	Ethyl benzene	18.5	17.2	0.0	0.1	0.0	0.0	0.0	1.3
43	Ethylene glycol	34.2	0.0	0.0	34.2	0.0	0.0	0.0	0.0
63	Xylene	34.4	22.7	0.0	0.1	0.0	0.0	0.0	11.6
68	Chromium and chromium (III) compounds	36.9	0.0	0.0	0.7	0.0	0.0	0.0	36.2
224	1,3,5-Trimethylbenzine	4.9	4.9	0.0	0.0	0.0	0.0	0.0	0.0
227	Toluene	45.9	36.5	0.0	0.1	0.0	0.0	0.0	9.3
232	Nickel compounds	1.5	0.0	0.0	0.1	0.0	0.0	0.0	1.4
266	Phenol	7.3	0.0	0.0	0.0	0.0	0.0	7.3	0.0
311	Manganese and its compounds	12.3	0.0	0.0	0.4	0.0	0.0	0.0	11.8
346	Molybdenum and its compounds	15.3	0.0	0.0	0.0	0.0	0.0	0.0	15.3
Total		216.0	81.2	0.0	35.9	0.0	0.0	7.3	91.6

- Quantity handled: over 5 tons is subject to compilation. (For special chemical substances designated as Type I, quantity handled over 500kg is subject to compilation.)
- Quantity removed: Amount removed by combustion treatment, decomposition, etc.
- Consumption: Amount converted to other substances through chemical reactions or amount transferred outside the premises due to inclusion in products or accompaniment therewith.

Oume Parts Center

ISO 14001 Certified: January 11, 2002

●Center Overview

Address: 5-1, Suehiro-cho 1-chome, Oume-shi, Tokyo
Business Operations: Manage and ship supplemental parts
No. of employees: 58 (as of March 2004)
Site area: 26,288m²
Total floor area: 31,533m²

Oume Parts Center Environmental Policies

1. Living together with the environment
2. Preventative measures and continuous improvement
3. Respect all applicable laws and regulations
4. Light flow of resources
5. Each member more conscious of duty

Oume Parts Center
Maintains replacement parts for trucks and buses, shipped all over the country.

Hidaka Delivery Center

ISO 14001 Certified: January 11, 2002

●Center Overview

Address: 689-1, Kamikayama, Hidaka-shi, Saitama
Business Operations: Manage and ship products (trucks)
No. of employees: 22 (as of March 2004)
Site area: 265,989m²
Total floor area: 10,003m²

Hidaka Delivery Center Environmental Policies

1. Living together with the environment
2. Preventative measures and continuous improvement
3. Respect all applicable laws and regulations
4. Light flow of resources
5. Each member more conscious of duty

Hikada Delivery Center
Manages completed manufactured products (trucks) and sends them to truck body manufacturers.

Tamachi Office

ISO 14001 Certified: April 25, 2003

●Center Overview

Address: 11-3, Shiba 4-chome, Minato-ku, Tokyo
Business operations: Sales and supervision of automobiles
No. of employees: 474 (as of March 2004)
Site area: 1,136m²
Total floor area: 8,743m²

Tamachi Office Environmental Policies

1. Greater trust from customers in environmental conservation
2. Prevent environmental pollution through continuous improvement
3. Respect all applicable laws and regulations
4. Generate no waste and waste nothing
5. Each member more conscious of duty
6. Together with the national dealerships

Tamachi Office
The central office for business operations, in charge of publicity activities to sell automobiles.

A History of Environmental Engagement

Year	Management, Production	Products	Events in Society
1990	*Dec.:* ■Cogeneration installed at Hino Plant		
1991	*July:* □Hino Motors Green Fund established	*Apr.:* Hybrid diesel engine—electric motor vehicle introduced (HIMR)	
1992	*Apr.:* ■Hamura Clean Center completed *May:* ■Full phase-out of casting mold-releasing agent CF113		◆Rio de Janeiro Earth Summit held ◇Mid-Phase Brakes Regulations enforced
1993	*Mar.:* □Hino Global Environmental Charter established □Hino Global Environmental Action Plan established □Hino Environment Committee formed ■Production Environment Committee formed	*Mar.:* Environment Technology Committee formed *May:* Preliminary evaluation guidelines issued based on Automobile Recycling Law Replacement of CFC12 for automotive air-conditioners with HFC134a completed	◇Basic Environmental Law established ◇Automobile NOx Reduction Law enacted
1994	*June:* ■Full phase-out of 1,1,1-trichloroethane for parts cleaning *Dec.:* ■Cogeneration No. 2 installed at Hamura Plant		◇1994 Exhaust Emission Regulations enforced
1995		*Feb.:* Vehicle equipped with common-rail fuel injection system launched	
1996	*Mar.:* □Hino Global Environmental Action Plan revised for the first time		
1997	*Mar.:* ■Casting Sand Recycling System installed at Nitta Plant		◆COP3 held in Kyoto
1998	*Nov.:* ■Small incinerators abolished as measure against dioxin	*Feb.:* Voluntary Action Plan, initiative to recycle end-of-life vehicles, announced	
1999	*Mar.:* ○Hamura Plant acquires ISO 14001 certification		◇1999 Exhaust Emission Regulations enforced
2000	*Mar.:* ○Nitta Plant acquires ISO 14001 certification *Sept.:* □First Environmental Report issued	*Feb.:* Vehicle equipped with Pulse EGR System launched	
2001	*Feb.:* □Hino Global Environmental Charter revised □Hino Motors Environmental Voluntary Plan established *Mar.:* ■Achieve zero direct landfill disposal of wastes for all plants companywide ○Head Office and Hino Plant acquire ISO 14001 certification	*Dec.:* First 5-cylinder turbo intercooler engine truck launched	◇2001 Noise Regulations enforced
2002	*Jan.:* ○Oume Parts Center, Hidaka Delivery Center acquire ISO 14001 certification □Recycling Committee formed □Sales Companies Environment Committee formed *July:* □"Environmental Guidelines for Dealers" issued *Sept.* □"Environmental Purchasing Guidelines" issued	*Feb.:* New hybrid vehicle (bus)—New HIMR Route Bus—receives Ministry of Economy, Trade and Industry Director General's Award	◇Automobile NOx, PM Law enacted ◆Johannesburg Earth Summit held
2003	*Apr.:* ○Tamachi Office acquires ISO 14001 certification *Note:* ○ ISO □ Management ■ Production	*Aug.:* "Four-Star"-certified ultra-low PM light-duty truck launched *Oct.:* "Four-Star"-certified ultra-low PM medium- and heavy-duty trucks launched	◇2003 Exhaust Emission Regulations enforced *Note:* ◇ Domestic ◆ International

Postscript

During this year in which diesel vehicle exhaust emission regulations were tightened and the corporate position on product safety was severely questioned, social responsibility of corporations was examined closely. For Hino Motors, manufacturer of trucks, the year was one where we were reminded of our heavy social responsibility.

The editorial aims for the fifth edition of "Environmental Report 2004," as was true last year, were to consider the type of information that is important to everyone who is connected to Hino Motors, and to be easy to read and understand. In addition, within the present social context, we aimed at enriching the information on the company's endeavors to reduce exhaust emissions, increase product safety and our engagement in social activities.

In particular, we laid out the Hino Four-Star Project as a documentary from the inception to successful conclusion, based on interviews of those in charge and entrusted with the mission. We hope that our readers can learn not only about our environmental technology, but will be able to see how Hino Motors' engagement with social responsibility propelled the project to fruition.

In the future we will continue to provide more of the type of information our readers seek so that Hino Motor's endeavors can be understood clearly. The next issue is scheduled to be published in September 2005.

Editor's Notes

In compiling this report we were the recipients of President Jagawa's commitment along with his thoughts regarding a corporation's social responsibility.

As Mr. Jagawa stated emphatically, "Without coexistence and coprosperity, neither businesses nor society could exist. It is only natural that a business should engage in the environment and society."

Through this process we felt keenly his unwavering resolve toward environmental responsibility, his confidence in the Hino Four-Star Project, his position toward the recall system, and how a corporation should be managed.

"Doing what is expected and making steady progress in doing it" is the most basic tenet of every endeavor. This was a good opportunity for us, even at this stage, to reconfirm these basic principles.

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