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Environmental Management Material Balance Hino Environmental Challenge 2050

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ESG Initiatives

Environment

Environmental Management

HINO GLOBAL Environment Charter

In April 1993, Hino Motors formulated the Hino Global Environment Charter, laying out its fundamental approach to environmental conservation. Every five years, the company creates a concrete action plan called an Environment Initiative Plan based on the charter, and advances activities in accordance with this plan.

Revised February 1, 2001

I. Basic Policies

1. We will promote comprehensive and ongoing environmental protection.

As a leading manufacturer of diesel vehicles, we will endeavor to offer superior products to customers in all countries, and continue to contribute to the achievement of greater prosperity through our products. In this, we are fully aware of the environmental impact of our products, and pledge ourselves to an earnest commitment to sustainable human and global development through ongoing efforts, whilst also paying careful attention to preventing pollution wherever we engage in our corporate activities.

2. We will take concrete and definite steps to protect the global environment.

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

I. Action Guidelines

1. We will minimize the environmental impact of our vehicles throughout their life cycles, and of all our

corporate activities in general.

We are determined to offer the public products having top-level environmental performance, and to engage in continuous technical development designed to minimize the environmental impact of our products and their distribution.

We will also engage in the establishment and operation of an Environmental Management System embracing all stages in the life cycle of our vehicles.

2. We will develop closer partnerships with our affiliated companies.

The cooperation of a great many companies is critical for the effective pursuit of our business activities. We will work closely with vehicle manufacturing partners both in Japan and abroad, and will strive to extend the mutual range of our environmental protection efforts.

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

We will engage in activities designed to disseminate to as many people as possible a correct and proper understanding of what we are trying to achieve. At the same time, we will spare no effort to hone our own environmental sensitivity.

4. Our contribution is not limited to the offering of superior products.

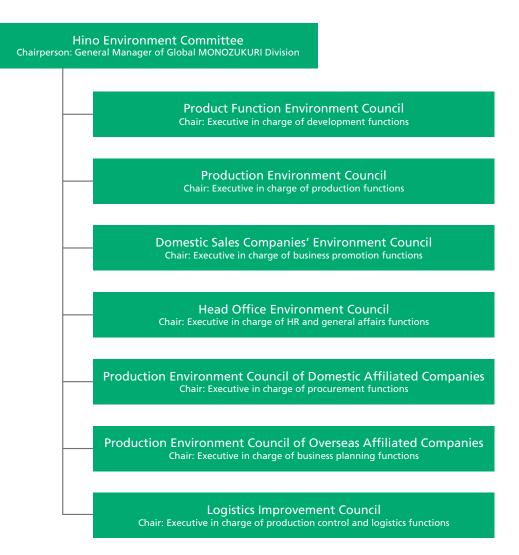
As corporate citizens, and as a corporate entity existing within a local community, we will take an active part in a broad range of community and social activities.

Environmental Conservation Promotion Structure

In March 1993, Hino Motors established the Hino Environment Committee, an overarching Company-wide organization chaired by the Hino Motors' president. At the same time, Hino Motors formulated the Hino Global Environment Charter, which underpins various facets of Hino Motors environmental conservation activities. Currently, the General Manager of the Global MONOZUKURI Division is serving as chairperson in order to further strengthen oversight and execution.

Developing and expanding environmental management systems on a separate functional basis are the features that most clearly define Hino Motors' environmental conservation activities. In this context, Hino Motors has established seven organizations subordinate to the Hino Environment Committee encompassing each of the Domestic Sales Companies, Headquarters, Production, Product Function, Logistic, and domestic dealer functions, Domestic Production companies, Overseas affiliated companies. Chaired by an appointed executive, these organizations promote specific environmental conservation initiatives and are working to further reinforce systems for carrying out long-term initiatives.

Environmental Conservation Promotion Structure



Environmental Management Systems

Hino Motors has developed environmental management systems (EMS) for all operational functions in Japan, and is effectively managing them in a manner that links each division's business operations to environmental conservation. At EMS-certified companies, these systems are periodically subjected to stringent environmental audits to ensure their effectiveness.

Hino Motors has acquired ISO 14001 certification for the Hino Group as whole. Hino Motors will continue to promote environmental initiatives with an even stronger policy of reinforcing links between its core business operations and environmental management systems.

Acquisition of ISO 14001 Certification

Organization/Entity	Date of acquisition
Headquarters & Hino Plant	March 24, 2001
Hamura Plant	March 10, 1999
Nitta Plant	March 27, 2000
Oume Parts Center	January 11, 2002
Hidaka Delivery Center	January 11, 2002
Azuma Plant of Fukushima Steel Work Co., Ltd.	November 28, 2003
Sagami Plant of Fukushima Steel Work Co., Ltd.	September 15, 2005
Riken Forge Co., Ltd.	March 22, 2002
Sohshin Co., Ltd.	March 14, 2003
Takebe Tekkosho Co., Ltd.	April 17, 2001
Trantechs, Ltd.	March 8, 2002
Meiyu Kiko Co., Ltd.	July 5, 2002
Hino Motors Manufacturing (Thailand) Ltd.	March 1, 2001
Hinopak Motors, Ltd.	June 17, 2001
PT. Hino Motors Manufacturing Indonesia	April 4, 2005
Shanghai Hino Engine Co., Ltd.	Decmeber 28, 2008
Hino Motors Vietnam, Ltd.	February 28, 2011
Hino Motors Manufacturing Mexico, S.A. DE C.V.	May 3, 2011
Hino Motors Canada, Ltd.	December 1, 2011
Arkansas Plant of Hino Motors Manufacturing U.S.A. Inc.	April 13, 2011
West Virginia Plant of Hino Motors Manufacturing U.S.A. Inc.	March 15, 2012
Hino Motors Philippines Corporation	August 8, 2017

Environmental Audits

Hino Motors conducts internal environmental audits as well as external audits by registered inspection organizations. Audits are undertaken within the overall context of environmental management system implementation and based on ISO 14001 standards. Hino Motors is responding appropriately to the results of each external audit conducted in fiscal 2017, as shown below.

Fiscal 2017 Audit Results

Office/Entity	Type of Audit	Imperative Non-Conformity	Non-Conformity	Observations
Headquarters & Hino Plant	Surveillance	0	0	11
Hamura Plant	Surveillance	0	0	10
Nitta Plant	Re-Certification	0	0	11
Oume Parts Center/ Hidaka Delivery Center	Surveillance	0	0	7

Environmental Risk Management

In various facets of its operational activities, the Hino Motors Group is addressing environmental risk management through awareness of the environment-related regulatory compliance across each of the countries and regions in which the Hino Motors Group operates, and incorporation of environmental risk countermeasures into environmental management system targets. In this manner, Hino Motors is continuously enhancing its environmental risk management capabilities while diversifying and promoting the quality of its initiatives. All of Hino Motors' activities involve certain environmental risks, from commercial vehicle design and development to procurement, production, distribution, and sales.

With the leadership of the Hino Environment Committee, Hino Motors has analyzed and assessed risks and opportunities related to environmental issues at seven different meetings, consulted with the executives in charge who chair each Environment Council, decided long- and short-term countermeasures, and implemented them in the relevant divisions. Hino Motors gives the highest priority to risks and opportunities related to laws and regulations. In the case of product marketability and productivity improvements, the Company decides based on cost-effectiveness as well as from an environmental perspective. The results of these efforts are reported to the relevant Environment Council and then reported to the Hino Environment Committee, the top deliberative body, as necessary.

In fiscal 2017, there was one oil leakage incident in the Hino Group. This was caused by a malfunction of the oil skimmer in a wastewater treatment facility. After conducting a check, Hino Motors immediately took steps to prevent any recurrence and reported it to the Hino Environment Committee.

Moving Forward with Initiatives to Lower Environmental Risks

The Hino Motors Group identifies risks and implements countermeasures using an environmental risk assessment manual used throughout the Group.

To further reinforce efforts to prevent leakage accidents, in fiscal 2015, Hino Motors began identifying environmental risks in work that involve the handling of liquid substances.

Efforts taken by Hino Motors Group companies include installing a blocking dam to prevent irregular wastewater discharge and arranging storage space for drum cans to reduce environmental risk.

As part of all these efforts, the Company is taking measures to further reduce environmental risk identified under various scenarios .



Blockade dam for preventing abnormal drainage



Drum storage area created as a risk countermeasure

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Green Purchasing Guidelines

To further promote environmental initiatives associated with its business activities, Hino Motors published guidelines concerning environmental initiatives for business partners and expanded its partners around the world after holding separate information sessions with them. It created these guidelines for its business partners around the world after holding separate information sessions with them. Since providing the guidelines, Hino Motors has been regularly monitoring the environmental performance of its business partners and their compliance with environment-related laws and regulations.

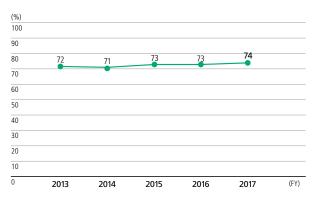
Looking ahead, Hino Motors intends to actively promote activities in collaboration with its business partners while stepping up initiatives that take full account of the supply chain.

HINO's Green Purchasing Guidelines (all pages)

Green Purchasing

In September 2001, Hino Motors formulated a set of Green Purchasing Guidelines as well as a Green Purchasing Promotion Plan, taking into consideration the Green Purchasing Items specified by the Ministry of the Environment under the Green Purchasing Law of Japan. In this manner, and as a part of its ongoing initiatives, Hino Motors is promoting the purchase of environmentally friendly office supplies and equipment.

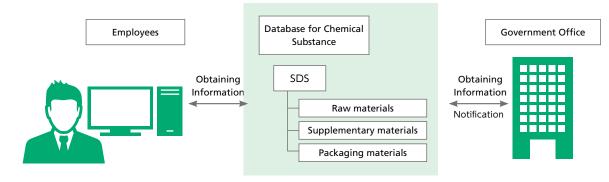
• Green Purchasing Rate of Office Supplies



Chemical Substance Management

Hino Motors employs Safety Data Sheets (SDS) to collect data and maintains a database for all paint and related materials used in-house. Information is accessible by employees via PCs, enabling them to identify chemical substances contained in the materials and undertake environmental and safety measures when required.

With the growing adoption of regulations for environmentally hazardous substances around the world, Hino Motors is enhancing the chemical substance management of raw materials used in its products, supplementary materials in manufacturing equipment, and packaging materials. Through these efforts, the Company is reducing the amount of environmentally hazardous substances used in its operations.





Green Purchasing Guidelines

Unit: millions of yen

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Environmental Accounting

Hino Motors tabulates the costs and results of environmental conservation activities based on the Environmental Accounting Guidelines of Japan's Ministry of the Environment. This enables the Company to contribute to environmental conservation through effective environmental investment and ongoing reductions in its environmental impact.

In fiscal 2017, the total of environmental conservation costs decreased by 99% year on year to 33.9 billion, equivalent to 1.8% of sales.

The economic effect of environmental conservation on the Group's financial performance was 1.7 billion, up 16% compared to the previous fiscal year due to active capital investment.

Environmental Conservation Costs

Environmental Conservation Costs	FY2016		FY2017		
Item	Invest ments	Costs	Invest ments	Costs	Description of major initiatives
(1) Costs in operational areas	233	662	123	763	
① Pollution prevention costs	71	375	109	279	Expenses for environmental risk countermeasures, drainage water treatment, and other activities
② Global environmental conservation costs	118	13	5	122	Installation of energy-saving equipment
③ Resource recycling costs	44	274	9	362	3R promotional activities, waste disposal, and other activities
(2) Upstream and downstream costs	0	74	0	67	Additional costs for reducing environmental load
(3) Management activity costs	0	401	0	401	Ongoing implementation of environmental management systems, and information disclosure
(4) Research & development costs	0	32,925	0	32,528	R&D expenses for reducing environmental load
(5) Social activity costs	0	3	0	5	Costs for environmental improvements, including off-site environmental conservation, tree planting, and beautification projects.
(6) Environmental remediation costs	0	0	0	0	
Total	233	34,064	123	33,762	

*For items such as capital expenditures that are difficult to distinguish whether they deal with the environment or have another purpose, only those items that can be clearly understood as dealing with the environment are recorded.

Impact of Environmental Conservation (1) Economic results

Impact of En		Unit: millions of yen	
	Details of results	FY2016	FY2017
Profits	Operational income from recycling	1,398	1,635
	Others	0	0
Reduced costs	Reduction in energy costs due to energy conservation	41	49
	Reduction in waste treatment costs due to resource conservation and recycling	13	3
	Others	0	0
Total		1,452	1,687

Note: The results of environmental conservation are calculated only for those items that can be definitely identified as having an effect over a single year.

Impact of Environmental Conservation (2) Quantitative results

	FY2016	FY2017
CO ₂ reduction (tons-CO ₂)	1,041	739
Waste reduction (tons)	448	204

Note: The results of environmental conservation are calculated only for those items that can be definitely identified as having an effect over a single year.

Total Support Services and Products

Trucks and buses are subject to various regulations concerning fuel consumption and exhaust emissions, including emissions of nitrogen oxide (NOx) and particulate matter (PM), and these regulations have been growing stricter with each passing year. Meeting these standards is an important obligation as a manufacturer of trucks and buses. In recent years, consumers have come to place importance on the environmental performance of commercial trucks and buses in addition to their basic performance such as horsepower, load capacity, and drivability. Companies are developing new products by applying their expertise and latest technologies to meet these expectations.

While promoting product development aiming for the industry's best environmental performance, Hino Motors is also focusing specifically on offering various benefits to customers throughout the entire product lifecycle, including servicing. Accordingly, Hino Motors is striving to maintain the environmental performance of its vehicles by enhancing its "total support" so that customers can use the environmentally friendly trucks and buses it has developed in ways that are friendly to the environment, right through to the time of final disposal. Going forward, Hino Motors will strive to enable its support system to respond to the needs and requests of every single customer, while always working to supply top-quality trucks and buses.

