

Environmental Management

Fiscal 2009 Targets and Achievements

Based on the Environmental Initiatives Plan 2010, which outlines Hino Motors' medium-term targets and goals, Hino Motors promotes environmental conservation activities while reflecting an assessment of target achievement levels for each year in the following year's plan.

■ FY2009 Targets and Achievements

Initiatives		Medium- to Long-Term Targets	FY2009 Targets	FY2009 Results	
1	Energy and Global Warming	Management	Further reduction of CO ₂ in global business activities: Formulation of medium- to long-term CO ₂ reduction scenarios and their effective promotion	Promotion of activities in accordance with CO ₂ reduction scenarios at domestic and overseas production subsidiaries	Achieved improved results for basic unit targets at domestic and overseas plants compared to the previous fiscal year
		Development & Design	Aiming for reduced emissions and enhanced fuel efficiency as the unrivaled world leader in diesel vehicle production <ul style="list-style-type: none"> • Achievement of low emissions • Achievement of industry-leading fuel economy standards • Further enhancement in the performance of hybrid systems as well as increase in vehicle models using hybrid systems and areas where hybrid systems are being introduced • Heavy-duty vehicle fuel consumption: Promotion of early market release of vehicles that comply with fuel consumption regulations 	Promotion of industry-leading emission reductions and fuel efficiency	Increased the number of vehicles in the light-, medium- and heavy-duty truck categories compatible with the Post Revised Long-Term Emission Regulations in Japan as well as with heavy-duty vehicle fuel consumption regulations of Japan applicable through FY2015 Link to "Products that Reduce Environmental Impact"
			Development of technology for energy and fuel diversification <ul style="list-style-type: none"> • Assessment of synthetic fuels, etc., and research and development of corresponding technologies 	Implementation of research and development and performance assessment	Performance test of Inductive Power Transfer (IPT) equipped hybrid bus overseen by the Tokyo Metropolitan government.
			Reduction of CO ₂ in production and distribution activities in each country and region		
		<i>Production</i> Emissions per sales volume: Reduction of 35% of the 1990 level;	<i>Production</i> Emissions per sales volume: Reduction of 35% of	<i>Production</i> Emissions per sales volume: Reduction of 39% of	

		Production & Distribution	Total emissions: Reduction of 10% of the 1990 level	the 1990 level; Total emissions: Reduction of 10% of the 1990 level	the 1990 level; Total emissions: Reduction of 30% of the 1990 level
			<i>Distribution</i> Total domestic emissions: Reduction of 10% of the 1990 level	<i>Distribution</i> Total domestic emissions: Reduction of 10% of the 1990 level	<i>Distribution</i> Total domestic emissions: Reduction of 44% of the 1990 level
2	Resource Recycling	Development & Design	Effective promotion of initiatives for the achievement of a 95% recycling rate by 2015 and its early achievement (1)Further promotion of recyclable design and definite incorporation into products (2)Enhancement of recyclability (easy disassembly) assessment systems (3)Strengthened coordination with disassembly businesses and other related businesses	In Hino Motors: Achievement of a 70% or higher ASR (Automobile Shredder Residue) recycling rate (Automobile Recycling Law of Japan requires 30% or higher)	Achieved 81% ASR recycling rate
			Further encouragement of the effective use of resources for the realization of a recycling-oriented society		
		Production & Distribution	<i>Production</i> Emissions per sales volume: Reduction of 50% of the 1990 level	<i>Production</i> Emissions per sales volume: Reduction of 50% of the 1990 level	<i>Production</i> Emissions per sales volume: Reduction of 71% of the 1990 level
			<i>Distribution</i> Domestic packaging material usage: Reduction of 45% of the 1995 level. Reduction in water usage (set independently by each country)	<i>Distribution</i> Domestic packaging material usage: Reduction of 25% of the 1995 level. Targets set by each overseas subsidiary	<i>Distribution</i> Domestic packaging material usage: Reduction of 74% of the 1995 level. Basic unit targets set at five major overseas subsidiary; promotion of reduction activities
3	Environmentally Hazardous Substances	Development & Design	Management of environmentally hazardous substances and promotion of further reductions <ul style="list-style-type: none"> Introduction of vehicles that have achieved voluntary Japan Automobile Manufacturers Association (JAMA) targets with respect to the reduction of cadmium, lead, hexavalent chromium, and mercury as four Substances of Concern (4SOC) in domestically produced vehicles, beginning in 2006 Promotion of the reduction of 4SOC in vehicles produced overseas following domestically produced vehicles Achievement of vehicle interior volatile organic compound(VOC) reduction standard, beginning with 	Reduction of 4SOC Compliance with new laws and regulations in Japan relating to bromine and other substances. ?Reduction in vehicle interior VOCs	Effective achievement of JAMA targets with respect to the reduction of 4SOC

			domestically produced new-model vehicles in 2007		
		Production & Distribution	Reduction in emissions of substances subject to the PRTR Law		
			Domestic: Reduction of 40% of the 1998 level in emissions	Reduction of 40% (692tons) of the 1998 level in emission	Domestic emissions: Reduction of 77% (269 tons) of the FY1998 level
			Overseas: Setting of more rigorous emission targets based on regulations in each country	Clarification of emission levels achieved by overseas facilities	Currently collecting data on emission levels achieved by overseas facilities
4	Atmospheric Environment	Development & Design	Reduction in emissions conducive to improvement in the urban atmospheric environment in each country and region Domestic: <ul style="list-style-type: none"> Development and enlargement of the model series of designated low-pollution vehicles, etc. Development of vehicles compatible with the Post-New Long-Term Emission Regulations in Japan Overseas: <ul style="list-style-type: none"> Development and commercialization of technology compatible with US07 and US10 Emission Standards Development and commercialization of technology compatible with Euro4 and Euro5 Emission Standards 	Receipt of approval for certified low-emission vehicles in Japan Compliance with designated low-pollution vehicles standard in Japan Commercialization of vehicles that conform to the Post-New Long-Term Emission Regulations of Japan	Promotion of technology development for vehicles compatible with the Post Revised Long-Term Exhaust Emission Regulations of Japan
			Production & Distribution	Reduction in VOC emissions Domestic: Emissions (vehicle-body paint): 35 g/m ² or less	Domestic: Emissions (vehicle-body paint): 35 g/m ² or less (Hamura Plant)
				Overseas: Setting of targets in each country	Overseas: Clarification of emission levels achieved by overseas facilities
					Reinforcement of consolidated environmental management <i>Production entities</i> <ul style="list-style-type: none"> Expansion of eco-factory activities into overseas production subsidiaries effectively incorporating environmental measures from the planning stage

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<p><i>Non-production entities</i></p> <ul style="list-style-type: none"> Global management of and enhancement in environmental performance, including CO₂, by all entities 	Consolidation of environmental data of subsidiaries every month	Consolidation of environmental data of subsidiaries every month
<p><i>Global Environment Council</i></p> <ul style="list-style-type: none"> Group-wide initiatives for environmental conservation through periodic councils 	Production Environment Council meetings held at related overseas companies	Production Environment Council meetings and North American Area Environment Council meetings held at related overseas companies
Further promotion of environmental management by business partners		
<p><i>Suppliers</i></p> <ul style="list-style-type: none"> Further enhancement of activities in collaboration with suppliers, and enhancement of management of environmentally hazardous substances 	Employ pre-evaluation system	Confirmation of Substances of Concern (SOC) regulations through a pre-evaluation system
<p><i>Domestic Dealers</i></p> <ul style="list-style-type: none"> Promote high-level environmental enhancement activities at sales offices based on Dealer Environmental Guidelines 	Conduct environmental enhancement activities at all sales offices in Japan	Implemented environment improvement activities at 222 business locations of dealers in Japan, and provided support for improvements and corrective measures
Management of appropriate equipment and tasks in compliance with environment-related laws and regulations	Target: EMD confirmation rate of 95%	Hino Motors' in-house Eco-Management Dealer (EMD) certification standards were verified at 93% of domestic dealers, and 207 locations in Japan were accredited, up 5 locations year on year
Initiatives for reduction activities based on an understanding of the volume of energy usage and waste material emissions	Target: reduce CO ₂ , waste and water usage by 4% compared to FY2006	Reduced CO ₂ emissions by 12%, waste by 21%, and water usage by 13%; achieved decrease of waste through sale and recycling
<p><i>Overseas Dealers</i></p> <ul style="list-style-type: none"> Clarification of the amount of CO₂, generated in the operations of sales agencies overseas 	Periodic access and receipt of monthly energy utilization data	Consolidated data with 6 overseas non-production facilities
<p>Enhancement of environmental education:</p> <p>Continued implementation of environmental education to boost employees' awareness of the environment</p>	Holding of environmental lectures	Environmental lecture featuring 2 speakers from outside Hino Motors was held on July 6

5	Environmental Management		<p>Introduction of comprehensive environmental assessment systems for vehicles, taking the LCA (life cycle assessment) approach into account</p> <ul style="list-style-type: none"> Development of a promotion structure, and the preparation and operation of the work environment (database, computer networks, etc.) 	Expansion of CO ₂ reduction activities based on the LCA approach	Clarification of life cycle-related CO ₂ emission volumes and the launch of reduction initiatives
			Contribution to environmental conservation activities		
		<ul style="list-style-type: none"> Contribution to society through the management of the Hino Green Fund 	Promotion of Hino Green Fund activities	In Japan, the Hino Green Fund distributed aid totaling ¥6.61 million to 14 organizations; conducted onsite visits to 5 organizations; and actively promoted collaborative efforts in a variety of regional activities, including PR support for events and provision of corporate buses	
		<ul style="list-style-type: none"> Contribution to communities through environmental education from a long-term perspective 	Promotion of community-based activities	<p>In Japan, participated in cleanup activities at the Tamagawa and Asakawa rivers on April 19; held planning committee meetings from May through September; conducted a bus tour of Gunma Insect World on July 25; held a charcoal-making event on October 17; held an environmental lecture on February 9, 2010</p> <p>In Japan, participated in a community potato harvest festival aiming at making use of resources organized at Seseragi Garden, and rural area conservation activities organized at the Minamino Nature School</p>	
		Disclosure of environmental information and enhancement of interactive communication			
	<ul style="list-style-type: none"> Provision of eco-driving information to customers 	Implementation of eco-driving education, through the Customer	Visitors in FY2009 numbered 5,196, for a cumulative total of 23,533 since		

			Technical Center	commencement
		<ul style="list-style-type: none"> Further enhancement of environmental reports in each country and region 	Issuance of the Hino Motors CSR Report	Issuance of the <i>2009 Hino Motors CSR Report</i> and the <i>Hinopak Motors Environmental & Social Report</i>
		<ul style="list-style-type: none"> Further global enhancement of communication with local communities 	Promotion of local communication	<p>Hinopak Motors Ltd. in Pakistan undertook cleanup activities with local elementary schools, and held an environmental exhibition</p> <p>Hino Motors Manufacturing Columbia, S.A. invited local university students to participate in environmental activities</p> <p>Each plant in Japan held social gatherings with local residents</p>
		Active contribution to and recommendations for environmental policies taking sustainable development into account		
		<ul style="list-style-type: none"> Promotion of environmental initiatives established by Nippon Keidanren, JAMA, and other industry organizations 	Active participation in the activities of JAMA and other organizations	Participation in JAMA committees and working groups (Safe Environment Technology Committee, Environment Committee, etc.)