

Environmental Management

2010 Environment Initiative Plan

Initiative items			Specific implementation items, targets, etc.																			
Energy & global warming	Management	1	Further reduction in CO ₂ emission in global business activities * Formulation of a medium- to long-term scenario and effective promotion of global CO ₂ reduction																			
	Development & design	2	Aiming for low emissions and fuel efficiency as unquestioned global leader among diesel vehicle manufacturers * Achievement of low emission gases through the development of low emission gas elemental technology and system optimal control technology * Achievement of world-class fuel consumption level through ultra-low fuel consumption diesel engines, minimization of aerodynamic resistance and optimal vehicle control * Further improvement and expanded sales of hybrid systems * Promotion of early market supply of vehicles compatible with heavy-duty truck fuel consumption and fuel consumption regulations																			
		3	Development of technology for energy and fuel diversification * R&D for assessment and compatibility technology for synthetic fuels, etc.																			
	Production & distribution	4	CO ₂ reductions in production and distribution activities in all countries and regions <Production> * Promotion of CO ₂ reductions through the promotion and development of eco-factory activities (incorporation of energy conservation items from the planning stage) * Promotion of the introduction of wind and solar power generation and other new natural energy, etc. <Distribution> * Implementation of CO ₂ reduction measures through improvements in transport efficiency * Expansion of small-truck-loaded overland transport and expansion of marine transport of completed vehicles <table border="1"> <thead> <tr> <th></th> <th>Region</th> <th>Item</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Production</td> <td>Global</td> <td>Discharges against sales volume</td> <td>10% reduction compared to FY2003</td> </tr> <tr> <td rowspan="2">Hino</td> <td>Discharges against sales volume</td> <td>35% reduction compared to FY1990</td> </tr> <tr> <td>Discharges</td> <td>10% reduction compared to FY1990</td> </tr> <tr> <td rowspan="2">Distribution</td> <td>Domestic</td> <td>Discharges</td> <td>10% reduction compared to FY1990</td> </tr> <tr> <td></td> <td colspan="2">Comprehension of CO₂ emission volume and expanded activities for</td> </tr> </tbody> </table>		Region	Item	Target	Production	Global	Discharges against sales volume	10% reduction compared to FY2003	Hino	Discharges against sales volume	35% reduction compared to FY1990	Discharges	10% reduction compared to FY1990	Distribution	Domestic	Discharges	10% reduction compared to FY1990		Comprehension of CO ₂ emission volume and expanded activities for
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				Overseas	reduction Comprehension of actual situation until FY2007 and shift to target management																											
Resource recycling	Development & design	5	Steady promotion and early achievement of initiatives for the achievement of 95% recycling rate by 2015	<p>(1) Further promotion of recycling design and effective incorporation in products</p> <p>* Promotion of design for improved recycling efficiency (integration of resin materials, replacement with easily recyclable materials, reduction in types of parts, improvements in durability, etc.)</p> <p>* Development of design standards for improved dismantling efficiency and effective incorporation in developed vehicles</p> <p>(2) Enhancement of recycling (dismantling) efficiency assessment systems</p> <p>(3) Reinforcement of collaboration with dismantlers and other related businesses</p> <p>* Development of recycling and dismantling information</p> <p>* Development of processes from the collection to treatment of recycled material</p> <p>* Promotion of the reuse of used parts</p>																												
	Production & distribution	6	Further promotion of the effective use of resources for the realization of a recycling society	<p><Production></p> <p>* Reuse of scrap cuttings and reductions in waste discharges through process yield improvements and other source countermeasures (reduction in metal scrap and other valuable resources and waste and continued realization of zero landfill waste)</p> <p><Distribution></p> <p>* Expansion in countries for the use of returnable racks and achievement of 100% country use ratio (Eradication of one-way use)</p> <table border="1"> <thead> <tr> <th></th> <th>Region</th> <th>Subject material</th> <th>Item</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Production</td> <td>Domestic</td> <td>Discharges</td> <td>Emissions against sales volume</td> <td>5% reduction compared to FY2003</td> </tr> <tr> <td>Hino</td> <td>Discharges</td> <td>Emissions against sales volume</td> <td>50% reduction compared to FY1990</td> </tr> <tr> <td>Overseas</td> <td>Waste</td> <td colspan="2">Promotion of top-level reduction activities in each country</td> </tr> <tr> <td rowspan="2">Distribution</td> <td>Domestic</td> <td>Packaging materials</td> <td>Usage volume</td> <td>45% reduction compared to FY1995</td> </tr> <tr> <td>Overseas</td> <td colspan="3">Comprehension of packaging material usage volume and expanded activities for their reduction</td> </tr> </tbody> </table>			Region	Subject material	Item	Target	Production	Domestic	Discharges	Emissions against sales volume	5% reduction compared to FY2003	Hino	Discharges	Emissions against sales volume	50% reduction compared to FY1990	Overseas	Waste	Promotion of top-level reduction activities in each country		Distribution	Domestic	Packaging materials	Usage volume	45% reduction compared to FY1995	Overseas	Comprehension of packaging material usage volume and expanded activities for their reduction		
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		7	Reduction in water use	* Establishment of individual targets in each country and continued reduction in the volume of water used																												
			Management of environmental burden																													

Environmental burden	Development & design	8	<p>substances and further promotion of reductions</p> <p>* Promotion of reductions of 4 environmental burden substances (lead, mercury, cadmium & hexavalent chromium) and expansion in relevant substances</p> <p>* Reduction of vehicle interior VOC and expansion in relevant substances</p>	<p>* Total discontinued usage of the 4 substances in domestically produced vehicles beginning in 2006 including continuously produced vehicles (completion by 2007, there are some non-applicable parts)</p> <p>* Promotion of the reduction of the 4 substances in vehicles produced overseas in conformity with domestic production</p> <p>* Expansion in environmental burden substances to be reduced and systematic promotion of their reduction</p> <p>* Achievement of standard values for vehicle interior VOCs in new model vehicles produced in 2007 and later (Ministry of Health, Labor and Welfare guideline values = Japan Automobile Manufacturers Association target values)</p> <p>* Development of air conditioning devices using catalysts with low global warming potential</p>																	
	Production & distribution	9	Reduction in discharge of PRTR Law designated substances	<p>* Reduction in discharge of PRTR Law designated substances centered in coating processes</p> <table border="1"> <thead> <tr> <th></th> <th>Region</th> <th>Item</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Production</td> <td>Domestic</td> <td>Discharges</td> <td>40% reduction compared to FY1998</td> </tr> <tr> <td>Overseas</td> <td colspan="2">Establishment of strict discharge targets based on regulations in each country and development of reduction activities</td> </tr> </tbody> </table>		Region	Item	Target	Production	Domestic	Discharges	40% reduction compared to FY1998	Overseas	Establishment of strict discharge targets based on regulations in each country and development of reduction activities							
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Atmospheric environment	Development & design	10	Reduction in emission gases conducive to improvements in the urban atmospheric environment in each country and region	<p>Domestic * Development and establishment of designated low pollution vehicles, etc.</p> <p>* Development and commercialization of vehicles in compliance with post-New Long-term Emission Regulations</p> <p>Overseas * Development and commercialization of technology compatible with US07, US10</p> <p>* Development and commercialization of technology compatible with Euro 4, Euro 5</p>																	
	Production & distribution	11	Measures for the reduction of VOC emissions in coating processes	<p>* Reduction in the use of cleaning thinner in coating processes, utilization of water-based coatings, etc.</p> <table border="1"> <thead> <tr> <th></th> <th>Subject material</th> <th>Region</th> <th>Item</th> <th>Target</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Production</td> <td rowspan="2">Body coatings</td> <td>Domestic</td> <td>Emissions per coated surface</td> <td>35g/m² or less (entire line average)</td> </tr> <tr> <td>Overseas</td> <td colspan="2">Development of activities for the top-level reduction of VOC emissions in each country</td> </tr> <tr> <td></td> <td>Other coatings</td> <td>Domestic & overseas</td> <td colspan="2">Development of activities for the reduction of VOC emissions</td> </tr> </tbody> </table>		Subject material	Region	Item	Target	Production	Body coatings	Domestic	Emissions per coated surface	35g/m ² or less (entire line average)	Overseas	Development of activities for the top-level reduction of VOC emissions in each country			Other coatings	Domestic & overseas	Development of activities for the reduction of VOC emissions
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		12	Reinforcement of consolidated	<p><Production entities></p> <p>* Global development of eco-factory activities effectively incorporating environmental measures from the planning stage</p> <p>(Zero violations and complaints, minimization of environmental risk, top environmental performance in each country and region)</p>																	

Environmental management	Management		environmental management	<p><Non-production entities> * Global management and improvements in environment performance involving CO₂, etc., in each business entity <Global environmental conferences> * Initiatives in environmental conservation through the unified efforts of the group through the periodic convocation of global environmental conferences</p>
		13	Further promotion of environmental management by business partners	<p><Suppliers> * Further enhancement of activities in collaboration with suppliers >>Enhanced management of environmental burden substances contained in delivered parts, raw materials, production equipment, etc. <Domestic sales companies> * Promotion of environmental improvement activities at sales offices based on the Hino Motors Sales Co. diesel producer top-level environmental guidelines >>Thoroughgoing appropriate facility and work management in compliance with environment-related laws and regulations >>Initiatives for reduction activities through the comprehension of the volume of energy usage and volume of waste discharges <Overseas sales companies> * Comprehension of CO₂, etc., generated in the operations of sales agencies overseas and the implementation of target management</p>
		14	Enhancement of environmental education	<p>* Continued implementation of environmental education for the purpose of improving the environmental awareness of the employees</p>
		15	Introduction of comprehensive vehicle environmental assessment systems taking the LCA approach into account	<p>* Development of facilitation systems and the development and management of the work environment (database, system development, etc.)</p>
		16	Contributions in planning environmental conservation activities	<p>* Contributions to society through the management of the Hino Motors Green Fund * Contributions to the community through environmental education, etc., from a long-term perspective</p>
	Collaboration with society	17	Disclosure of environmental information and the enhancement of interactive communication	<p>* Provision of eco-driving information to customers * Issuance and further enhancement of environmental reports in all countries and regions * Enhancement of communication with global regional society</p>
		18	Active contributions and advice for environmental policies taking sustainable growth into account	<p>* Promotion of global commercial vehicle meetings * Promotion of environmental initiatives of the Keidanren and Japan Automobile Manufacturers Association</p>

*Japanese Fiscal Year runs from April 1 to March 31.