

# Environmental Goals and Achievements

Here is the report on the goals and achievements of our environmental activities.

## Manufacturing Environmentally Friendly Products

FY2006 Environmental Goals	FY2006 Achievements	Self-evaluation	FY2007 Goals	Mid- and Long-term Goals	Related pages
Improvement in fuel efficiency to prevent global warming • Continuous development of products with improved fuel efficiency	Achieved the 2015 fuel efficiency standard (some models excepted) • Light-duty trucks ELF (Released in December 2006) • Medium-duty trucks FORWARD (Released in May 2007) • Heavy-duty trucks GIGA (Released in March 2007) • Heavy-duty sightseeing bus GALA (Released in July 2006) • Heavy-duty route bus ERGA (Released in February 2007)	○	• Continuous development of products with improved fuel efficiency	• Achievement of maximum fuel efficiency	p. 7-p. 10, p. 25-p. 27
Cleaner emissions • Advanced launch of low-emission vehicles	Isuzu obtained certification for low-emission vehicles that achieved a 10% reduction in both NOx and PM, or a 10% reduction in PM versus new long-term emissions regulations. • Light-duty trucks ELF (Released in December 2006) • Medium-duty trucks FORWARD (Released in May 2007) • Heavy-duty trucks GIGA (Released in March 2007) • Heavy-duty sightseeing bus GALA (Released in July 2006) • Heavy-duty route bus ERGA (Released in February 2007)	○	• Advanced market introduction of low-emission vehicles	• Development of next-generation after-treatment devices	p. 7-p. 10, p. 25-p. 27
Reduction in vehicle external noise • Development of technology for vehicle external noise reduction and its deployment in vehicles	• Reduction of idling noise of light-duty trucks ELF by 2 dB versus conventional models (Released in December 2006) • Reduction of idling noise of medium-duty trucks FORWARD by 0.5 dB (4HK1 type) and 1 dB (6HK1 type) versus conventional models (Released in May 2007)	○	• Development and commercial application of technology to curb noise	• Development of low-noise diesel-powered vehicles	p. 28
Development and promotion of clean-energy vehicles • Development of new technology for marketing such vehicles	• Since the first registration in 1993 as minister-certified vehicles, registration of the ELF CNG reached 10,000 units in April 2007. In FY2006, the ELF CNG captured an outstanding 79% share (based on our data) of the CNG light-duty truck market.	○	Planning to achieve a 2015 fuel efficiency standard • Light-duty trucks ELF HYBRID Planning to obtain certification for low-emission vehicles, based on new long-term emissions regulations • Light-duty trucks ELF CNG • Light-duty trucks ELF HYBRID • Medium-duty trucks FORWARD CNG • Heavy-duty route buses ERGA CNG • Medium-duty route buses ERGA MIO CNG	• Research and development of alternative-fuel and electric vehicles with superior environmental performance	p. 27
Promoting recycling • Achieved compliance with the standards required by the domestic automobile recycling law • Established the EU's free-of-charge end-of-life vehicle recovery system and started operating it smoothly • Expanded the use of recycled materials	• Complied with the 2006 automobile recycling law: Achieved a 72.6% ASR recycling rate (a standard rate of 30% or more) and a 94.2% air bag recycling rate (a standard rate of 85% or more) • Constructed the EU's end-of-life vehicle recovery system • Deployed recycled material in the center console box (approved for an Eco Mark)—an interior plastic component of the heavy-duty GIGA truck (November 2006)	○	• Complied with the automobile recycling law • Improved the EU's free-of-charge end-of-life vehicle recovery system • Increased the use of recycled materials	• Achievement of a 95% actual recycling rate or more of used vehicles by 2015	p. 28, p. 31-p. 32
Reduction in environmental impact substances • Reduction in the usage of lead, mercury, cadmium and hexavalent chromium	• Achieved a reduction in the use of lead to 1/10 or less of the 1996 level (ELF), (achieved a reduction of 1/4 or less for heavy-duty commercial vehicles) • Completely eliminated the use of mercury, except in some limited parts (minimal quantities are used on the liquid crystal display in the discharge headlamp and navigation system) • Completely eliminated the use of cadmium (for new models released in January 2007 and subsequent years) • Completed the switch from hexavalent chromium to an alternative material, except in some limited parts	○	• Efforts to reduce the use of lead, mercury, cadmium and hexavalent chromium • A reduction in the use of lead to 1/10 or less, of the 1996 level in 2006 and subsequent years (to 1/4 or less for heavy-duty commercial vehicles) • Termination of the use of mercury from January 2005 and cadmium from January 2007	• Reduction in the use of lead, mercury, cadmium and hexavalent chromium • Ban on the use of hexavalent chromium from January 2008 onward	p. 28
Reduction in air conditioner refrigerant • Compliance with Japan Automobile Manufacturers Association's voluntary restraints: Reduction in the usage of air conditioner refrigerant by 20% by 2010, from the 1995 level	• Complied with Japan Automobile Manufacturers Association's voluntary restraints: Achieved a 44% reduction in the amount of refrigerant per vehicle in FY2005.	○	• To keep the reduction of refrigerant for the refrigerant system at the current top level in this fiscal year, too	• Switchover to fluorocarbon-free air conditioners	p. 28
Efforts to decrease VOC in vehicle cabins • Development of low VOC vehicles	• Light-duty trucks ELF (released in December 2006) complied with the guidelines of the Ministry of Health, Labor and Welfare • Medium-duty trucks FORWARD (released in May 2007) complied with the guidelines of the Ministry of Health, Labor and Welfare • Heavy-duty route buses ERGA (released in February 2007) complied with the guidelines of the Ministry of Health, Labor and Welfare in combined use with ventilation fans	○	• Development of low VOC vehicles	• Increase in the number of low VOC vehicles	p. 28

\*VOC (Volatile organic compounds such as formaldehyde and toluene)

## Building Environmentally Friendly Plants

FY2006 Environmental Goals	FY2006 Achievements	Self-evaluation	FY2007 Goals	Mid- and Long-term Goals	Related pages
Prevention of global warming by reduction in CO2 emissions • CO2 emissions: 188,300 tons or less • Improvement in energy efficiency by reduction in energy consumption by 1% or more per unit per year	• CO2 emissions: Target achieved with actual emissions of 185,749 tons, down 2.4% on the previous year • Basic unit for energy: Target achieved with actual reduction of 9.8%, more than the planned 1% reduction	○	• CO2 emissions: 184,129 tons or less • Basic unit for energy: Reduced by 1% or more per year	• CO2 emissions reduction targets Isuzu Motors Ltd.: Reduction by 50% or more from the FY1990 level by FY2010 Isuzu domestic group companies: Reduction by 6% per unit from the FY2004 level by FY2010 • Formulation of a medium-/long-term plan for global CO2 reduction	p. 34, p. 39
Reduction in waste • Strengthening of zero emission measures • Landfill waste: One ton or less per plant per month and 24 tons or less per year	• Actual: 12.5 tons per year (including incinerator ash) • Achieved target of one ton (including incinerator ash) per plant per month and 24 tons or less per year	○	• Landfill waste (only Isuzu Motors): One ton or less per plant per month and 24 tons or less per year	• Landfill waste (only Isuzu Motors): To maintain one ton or less per plant per month and 24 tons or less per year by FY2010 • Landfill waste (domestic group companies): Decrease by 50% from the FY2004 level by FY2010	p. 35, p. 39
Control and reduction of environmental impact substances • Reduction in VOC emissions in the painting process to 19.2 g/m <sup>2</sup> or less (voluntary target)	• VOC emissions in the painting process: Target achieved with actual emission of 19.1 g/m <sup>2</sup> versus planned 19.2 g/m <sup>2</sup>	○	• VOC emissions in the painting process to 20.7 g/m <sup>2</sup> or less	• VOC emissions in the painting process: 19.2 g/m <sup>2</sup> or less by FY2010 • Reduction in PRTR substances emissions Domestic group companies: Decrease by 30% from the FY2003 level by FY2010	p. 36, p. 39
Logistics • Identification of transport energy complied with the revised Energy Conservation Law • Formulation of a 1% reduction plan for FY2007	• Identification of transport energy complied with the revised Energy Conservation Law: Report to the regulatory body • Simulation of the energy-saving impact through logistics rationalization in FY2006: 3.7% reduction	○	• Transport energy use: Decrease by 1% over the previous year	• Transport energy use: Decrease by 4% from the FY2004 level by FY2010	p. 41-p. 42

## Environmental Management

FY2006 Environmental Goals	FY2006 Achievements	Self-evaluation	FY2007 Goals	Mid- and Long-term Goals	Related pages
Environmental management • Promotion of environmental efforts consolidation with domestic and overseas manufacturers and dealers	• Manufacturing sites: All domestic and overseas environmentally consolidated manufacturing sites were certified with ISO 14001 and renewals continued • Dealers: 86% of the sites achieved Step 1 of the guidelines (as at the end of March 2007)	○	• Expansion in the consolidation of environmental efforts of all domestic and overseas environmentally consolidated manufacturing sites (three companies) • Promotion of the consolidation of environmental efforts by dealers and advancing to the next step	• To promote Isuzu group's consolidated environmental management • To achieve the group's long-term goals	p. 19-p. 22
Green procurement promotion • Promotion of green procurement of materials and parts • Promotion of ISO 14001 certification among suppliers (a certification rate of 81.6% or more)	• Continued sponsoring of explanatory meetings on procurement guideline (promotion of introducing an environmental management system, request for green procurement, request for establishing IMDS) • Percentage obtaining certification: 78.9% (an improvement of 0.6% over the previous year)	△	• To promote green procurement of materials and parts • To promote the introduction of the environmental management system at suppliers • 84.2% or more in FY2007	• To promote a reduction in the use of environmental impact substances • To implement the environmental management system in more suppliers	p. 50

## Social Report

FY2006 Environmental Goals	FY2006 Achievements	Self-evaluation	FY2007 Goals	Mid- and Long-term Goals	Related pages
Promotion of social contribution activities and environmental communication • Publication of environmental and social reports in Japanese in September 2006 and in English in December 2006. • Participation in events and exhibitions • Social contribution activities	• Published environmental and social reports in Japanese in September 2006 and in English in December 2006 • Participated in events such as Eco-Products 2006, Eco-car World, and the Fujisawa Environmental Fair • MCPC Award 2007 Grand Prix and the Prize of the Minister for Internal Affairs and Communications were awarded to <i>Mimamori-kun</i> • Dispatched engineer to National Antarctic research expedition for technological cooperation, cleaned the areas near the plants, and dispatched environmental education instructor • Implemented various events and public relations activities, including fuel-saving seminars and driving-safety classes by coordinating efforts with domestic and overseas dealers	○	• To issue environmental and social reports • To participate in events and exhibitions • To promote activities for social contribution	• To promote social contribution activities and environmental communication	p. 29-p. 30, p. 45-p. 49

The "○" mark represents the achievement of the goals in self-evaluation.  
The "△" mark represents the need for continued efforts.