

Nissan Green Program 2005 Progress and Results

To realize Nissan's philosophy of "Symbiosis of People, Vehicles, and Nature," we are promoting the Nissan Green Program throughout the entire company. We continue to move forward with actions to meet our 2005 goals as outlined in our mid-term environmental action plan, the Nissan Green Program 2005.



Models achieved 95% recoverability rate



Nissan Green Program 2005: FY2004 Environmental Action Plan Progress and Results

Area	Item	Objectives and Activities up to 2005
Product Development	Improvement of fuel economy (curbing global warming)	Early attainment of Japanese 2010 fuel economy standards for gasoline vehicles and 2005 standards for diesel vehicles [Objective] Attainment of the new standards by 2005 target date
	Reduction of exhaust emissions	Gasoline vehicles: Steady expansion of Nissan's ultra-low emission vehicle (U-LEV) lineup, starting with the 2000 launch of the Bluebird Sylphy [Objective] Achieve U-LEV certification for more than 80% of all Nissan passenger cars sold in Japan by end of March 2003 Diesel vehicles: early release of vehicles complying with the latest exhaust emission regulations
	Development of clean-energy vehicles (CEVs)	Fuel cell vehicles (FCVs) · Projecting the year 2005 as our technical development goal for practical use · Participation in domestic testing program for FCVs under the auspices of the Japanese government in 2002 Other CEVs · Research, development, and market introduction of electric vehicles (EVs), compressed natural gas vehicles
	Promotion of design for recycling and management/ Reduction of environmentally impacting substances	Advancing the recycling of new models Attainment of a recoverability rate of 95% or higher* by weight for new models by 2005 (*based on Nissan's in-house calculation standards) Reduction of environmentally impacting substances Banning the use of mercury and cadmium with some partial exceptions Reducing the use of lead (to be largely phased out by the end of 2002) and hexavalent chromium (to be reduced to one-half of 1996 levels by 2005)
	Reduction of vehicle noise	Compliance by all models with voluntary standards for vehicle noise that are stricter than regulatory noise limits
	Control of air-conditioner refrigerant emissions	Attainment of Nissan's voluntary targets for reduced use of the HFC-143a refrigerant
Production	Promotion of energy savings (curbing global warming)	Reduction of total CO ₂ emissions by more than 10% from FY1999 levels by FY2005 Reduce total CO ₂ emissions by 10% or more from FY1999 levels by FY2005 (approx. 42% compared to 1990)
	Reduction of waste and promotion of recycling	All plants eliminated direct landfill disposal of waste by FY2001 Reduction of amount of waste incinerated by more than 50% from FY1999 levels by FY2005 (All plants initiated a zero emission program during FY2001)
	Improved management of chemical substances	Installation in FY2002 of a model paint line that reduces volatile organic compounds (VOCs) emissions to 20 g/m ² and promotion of efforts to reduce substances subject to the Pollution Release and Transfer Register (PRTR) system
	Environmental protection in logistics operations	Reduction of total CO ₂ emissions by more than 10% from FY1999 levels by FY2005
Sales and Service	Environmental management at dealers	Thorough the Nissan Green Shop Dealer Certification System, implementation and improvement of environmental management · Establish system of implementation of appropriate treatment of end of life vehicles (ELVs) at domestic dealers · Improvement of dealers' ability to cope with coming Japan's Automobile Recycling Law (execution of responsibility for taking back ELVs)
Recycling	Appropriate treatment and recycling of ELVs	Development and deployment of technology to promote recycling and new scrapping disposal techniques. · Design for recycling · Continued expansion of the Nissan Green Parts program
Environmental Management	Environmental management system (EMS)	Implementation, operation, and improvement of EMS in line with ISO 14001 (ongoing) Construction of a global EMS encompassing major consolidated subsidiaries Prevention of environmental issues and improvement of risk management
	Environmental communications	Publication of an annual environmental report and improvement of content Continued release of environmental communications whenever appropriate Participation in and organization of environment-related lectures and exhibitions Issuing and improvement of environmental communications to local communities
	Green procurement	Thorough management of environmentally impacting substances and requests to suppliers to acquire ISO 14001 certification by March 2005
	Employee education and training	Continued implementation and improvement of Nissan's employee education system and regular educational efforts through in-house publications and other activities
	Environmental protection in Nissan offices (Green Office Program)	Reduction of paper consumption, reuse of resources, and promotion of energy savings Examining and promoting ways of reducing emissions from company-owned vehicles

Major Results in FY2004

Achieved FY2010 gasoline passenger vehicle fuel economy standard for four of the target weight classes and for all target weight classes for gasoline trucks Achieved FY2005 diesel vehicle fuel economy standard in all target weight classes
The goals mentioned on the left, established in NGP2005, have already been attained 1. For U-LEV, certification was expanded to more than 90% of all Nissan gasoline engine passenger cars sold in Japan (April 2005) 2. For diesel vehicles, the transition was completed to new Japanese domestic regulations, while also introducing models certified as "ultra-low PM emissions diesel vehicles." The goal was further raised in the current year, setting the new target of SU-LEV certification for 80% of all gasoline passenger cars in Japan by March 2006. Efforts are currently being advanced to achieve that goal
Began lease of "X-TRAIL FCV" 2003 model to Kanagawa Prefecture, Yokohama City and Cosmo Oil Company Announced in-house developed fuel cell stack and 70MPa high-pressure hydrogen storage system Completed market launch of the Caravan CNG (compressed natural gas) vehicle
Models for which 95% recoverability was attained: March, Cube, Cube Cubic, Lafesta, Note Materials banned for use: Mercury, cadmium (some exceptions) Materials for which use was reduced: Lead: Reduced to 1/10 (or less) of 1996 levels for all new models Hexavalent chromium: Cuts being promoted to achieve goal
Achieved voluntary standards for all models
Achieved voluntary standards for 26 models
Reduced total CO ₂ emissions by 5.7% from FY1999 (2004 emissions = 38% reduction vs. FY1990) Projected to achieve goal in FY2005 while absorbing increase caused by production increase through energy conservation investment
Zero waste directly to landfill achieved in FY2001 Waste incineration volumes reduced by 85% from 1999 levels
Completed installation of model paint line at Kyushu Plant in FY2002. Promoting move to water-based paints at other plant paint lines as well
CO ₂ emission levels reduced by 12% from 1999 levels
Audits completed for all (209) dealers in Japan (among which 194 were re-certification audits)
Automobile Recycling Law enacted from January 1, 2005, commencing recovery and treatment of CFCs/HFCs, airbags, Automotive Shredder Residue FY2005 Nissan Green Parts sales: Approx. ¥1.5 billion
Operation and continuous improvement of ISO 14001 at all production facilities Reexamination of facilities improvements, maintenance, management enhancements
Published Environmental Report 2004 Held readers workshop on Sustainability Report and Environmental Report Participation in many FCV exhibitions and test-ride events Response to related environmental questionnaires, data collection
Finished investigating six new vehicle models 95% of suppliers ISO 14001 certified
Implementation of in-house educational curriculum Ongoing education through in-house publication (Nissan News)
Introduction of low-emission vehicles for use as company cars