

Environmental Action Plan and FY 2001 Results

Third Environmental Action Plan

Our basic corporate principle states that "Toyota Industries believes that economic growth and conservation of the natural environment are compatible. It strives to offer products that are clean, safe and of high quality." In accordance with this principle, we devised our First Environmental Action Plan in March 1993 which clarified our basic policies and action guidelines related to environmental issues.

In the dawning of the 21st century, we made environmental awareness a key management issue. In August 2000, we revised the second plan and established the Third Environmental Action Plan to guide our environmental conservation activities, aiming to realize harmony between our corporate activities and the global environment and to engage in the creation of a recycling-oriented society.

In FY 2001, we implemented the environmental activities described on the following page, each with its individual target, based on this action plan.

Third Environmental Action Plan

Basic Policies	Action Guidelines	Targets	Action Policies
1. Conduct corporate activities that are considerate of the environment at every stage of the product's life cycle from development through design, production, use, and disposal, to provide clean and safe products to society.	1. Develop and provide clean products with minimal environmental impact (1) Thoroughly implement environmental considerations in development and design (2) Promote environmentally preferable purchasing ^{*1}	Improve fuel efficiency Reduce exhaust gases Develop clean-energy vehicles ^{*2} Improve recyclability Control and reduce substances of concern Reduce noise Prevent global warming due to car air conditioners Strengthen environmental assessment at the development and design stages Strengthen cooperation with business partners	<ul style="list-style-type: none"> Achieve best-in-class fuel efficiency in all countries and regions and reduce CO₂ emissions Improve fuel efficiency and reduce CO₂ emissions through the development of energy-conservation technologies Tailor measures in accordance with usage environments Launch new vehicles in accordance with market conditions Develop clean products that meet market needs Promote recyclable designs contributing to the target of a 95% recycling rate by 2015 Expand the use of recycled materials Conduct worldwide management of chemical substances Further reduce noise from all sources in our automobiles and forklift trucks Develop compressors that are compatible with new alternative refrigerants to HFCs^{*3} Conduct prior assessments of all environmental impacts throughout products' life cycles from the very first stage of development and design Promote environmentally preferable purchasing through strengthened cooperation with business partners
2. Strive to intensify environmental management, including that of consolidated subsidiaries, for the further advancement of corporate activities that support environmental conservation.	2. Promote manufacturing that strives for zero emissions ^{*4} (1) Further reduce environmental impact through resource and energy conservation (2) Voluntarily set, carry out, and monitor targets through the Environmental Committee	Set global warming preventive measures Strictly control and reduce the use of substances of concern Reduce waste and conserve resources Curtail water use Conduct logistics streamlining measures	<ul style="list-style-type: none"> Actively promote CO₂ reduction initiatives CO₂: Reduce total emissions by 5% compared with FY 1990 levels by March 2006 (10% by FY 2010) Promote thorough energy conservation programs Heighten proper control and voluntary reduction of chemical substances used in production processes PRTR^{*5}: Reduce total emissions of targeted substances by 50% compared with FY 1998 levels by March 2006 VOCs^{*6}: Promote total emissions reduction and reduce emissions from painting lines by 50% compared with 1998 levels by March 2006 Reduce waste for achievement of zero emissions Zero emissions: Eliminate direct landfill disposal at all plants by March 2004 Promote paperless operations by enhancing in-house IT network systems Various initiatives Improve transport efficiency and promote CO₂ reduction and resource conservation through the reduction of packing materials
3. Promote social contribution efforts, information disclosure, and awareness through wide-ranging cooperation with society on environmental conservation with the ultimate aim of achieving a better global environment.	3. Expand environmental management systems (1) Strengthen cooperation with our subsidiaries and suppliers (2) Grasp environmental conservation costs and their benefits	Expand environmental management systems Enhance environmental accounting systems	<ul style="list-style-type: none"> Develop basic policies and organize administration systems for group companies Acquire ISO 14001 certification at group companies Develop environmental accounting systems
	4. Actively participate in public environmental conservation efforts as an upstanding corporate citizen (1) Engage in the creation of a recycling-oriented society (2) Thoroughly implement active information disclosure and communicate with local communities	Conduct efforts to create a recycling-oriented society Promote community involvement Promote public relations and disclosure activities	<ul style="list-style-type: none"> Participate in initiatives in the public sphere aimed at the achievement of a 95% recycling rate by 2015 Broaden dialogue with local communities and intensify commitment to greenery activities Expand environmental communications

*1 Environmentally preferable purchasing: Procurement of parts and materials that takes into consideration the supplier's ISO 14001 status and the presence of substances of concern in the procured materials and parts

*2 Clean-energy vehicles: Electric forklift trucks and compressed natural gas (CNG)-powered forklift trucks

*3 HFCs: Hydrofluorocarbons. HFCs were used as substitutes for CFCs, but pressure has risen to reduce their use because they contribute to global warming.

Results of Activities in FY 2001

To promote our third action plan, each specialized subcommittee and the General Secretariat act as the main contacts. Each theme is passed through the specialized subcommittees and then implemented by the related department. The following outlines our targets for FY 2001 and the results achieved.

In FY 2001, owing to the fact that the Higashichita Plant became fully operational and because of increased production, we were not able to achieve our comprehensive targets for energy, VOCs, and waste. However, we made improvements in our energy consumption and VOC emissions against sales over the previous year.

In July 2002, a launch was planned for a plant in Higashiura. We are carrying out environmental activities based on last year's results. Moreover, we established concrete numerical targets for the usage of water resources, distribution, and packaging materials, in an effort to further our environmental activities.

FY 2001 Targets and Results

Assessment: ○ Target achieved △ Unattained portion of stated target was less than 10% × Unattained portion of stated target was more than 10%

FY 2001 Targets	Results	Assessment	Reference
Develop energy-saving weaving machinery	• Reduced the energy consumption of the water-jet loom	○	P.18
Cleaner exhaust gases from diesel engines	• Developed the 1HD-FTE diesel engine	○	P.18
Plans for a clean energy vehicle	• Plans under consideration	—	—
Review the Recyclability Evaluation Method	• Surveyed a method connected with evaluating recycling potential	○	P.17
Survey on hazardous substances	• Surveyed the lead, cadmium, and hexavalent chromium content in parts	○	P.16
Lower noise level of diesel engines	• Developed the 1HD-FTE diesel engine	○	P.18
Develop a compressor that uses a new type of refrigerant	• Development under consideration	—	—
Create an LCA manual	• Reviewed LCA method	×	P.14-15
Incorporate into Design Review (DR)	• Established DR rules at 6 divisions	○	P.10
Expand environmentally preferable purchasing know-how	• Surveyed the level of environmental awareness at suppliers • Held a meeting to explain environmentally preferable purchasing	○	P.19
Total CO ₂ emissions: 366,400 t-CO ₂	• Total CO ₂ emissions: 388,300 t-CO ₂	△	P.26-27
CO ₂ emissions against sales: 56.8 t-CO ₂ /¥100 million (sales)	• CO ₂ emissions against sales: 56.1 t-CO ₂ /¥100 million (sales)	○	
Reduce CO ₂ : 12,800 t-CO ₂	• Reduced CO ₂ : 15,800 t-CO ₂	○	P.20-23
Total emission of PRTR-designated substances: 825 tons	• Total emission of PRTR-designated substances: 689 tons	○	
Total VOC emissions: 1,268 tons	• Total VOC emissions: 1,814 tons	×	P.28-29
Promote zero landfill waste	• Achieved zero emissions at Nagakusa, Kariya, Kyowa, Takahama, and Hekinan plants	○	
Survey current conditions at the divisions	• Surveyed all plants and pinpointed processes with large consumption • Installed a flow meter (Compressor Division, Nagakusa Plant)	○	P.30
Survey current conditions at the divisions	• Surveyed at all plants • Established in-house standards to measure CO ₂ emissions and materials used for packaging during distribution	○	P.31
Expand range covered by ISO 14001 certification (development/design)	• Acquired certification for Textile Machinery, Compressor, and Engine Divisions and TOYOTA Material Handling Company	○	P.9-11
Establish a group environmental management system	• Established a working plan (domestic production plants)	○	
Support the acquisition of ISO 14001 certification (4 domestic subsidiaries)	• Acquired ISO 14001 certification at Tokyu, ST-LCD, Nishina, and Tokaiseiki	○	
Clearly define in-house accounting standards	• Established standards for environmental accounting	○	P.12-13
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Offer support based on the theme of the global environment (5 cases)	• Provided support to the Japan Eagle and Hawk Research Center and Keidanren Nature Conservation Fund (5 events)	○	P.32-33
Employee volunteer activities (10 cases)	• Clean-up activities, support of iris cluster environmental preservation activities (11 events)	○	
Publish an environmental report	• Published the Environmental Report 2001 (August 2001)	○	
Disclose in-house activities on an environmental Web site	• Created an environmental Web site (opened from April 1, 2002)	○	
Enhance internal communications using a newsletter (6 cases)	• 11 articles on the environment in the in-house magazine	○	

*4 Zero emissions: Toyota Industries defines zero emissions as the reduction of more than 95% of landfill waste, compared to FY 1998 levels.

*5 PRTR: Pollutant Release and Transfer Register

*6 VOCs: Volatile Organic Compounds