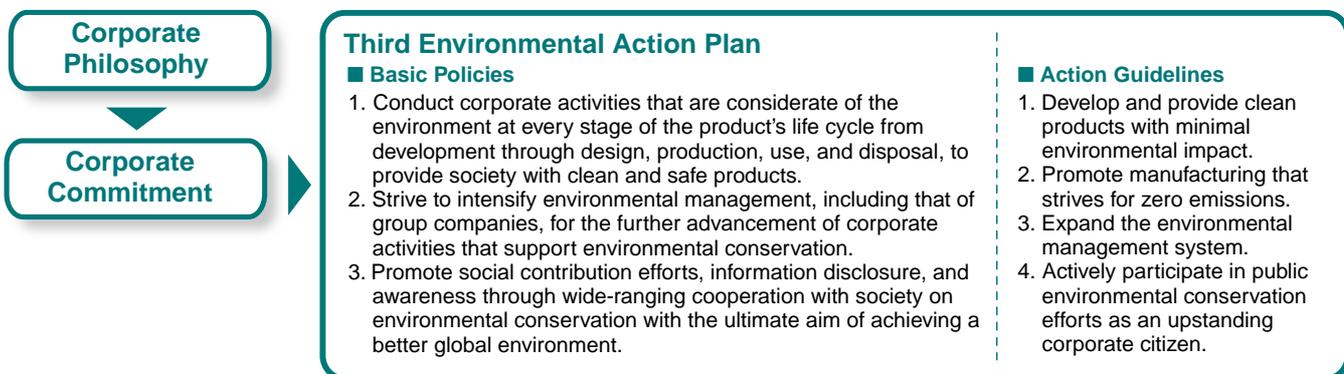


Environmental Management

Environmental Action Plan and FY 2003 Results

Third Environmental Action Plan



Action Policies, FY 2003 Targets, and Results for the Third Environmental Action Plan (non-consolidated)

Product Development and Products Assessment scores indicate the level of achievement against the FY 2003 targets.
 Action Guideline: Develop and provide clean products with minimal environmental impact
 : Target achieved : 90% or better rate of achievement
 x: Less than 90% rate of achievement

Targets	Action Policies	FY 2003 Targets	Results	Assessment	Reference
Improve fuel efficiency	<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 	Improve compressor fuel efficiency	Developed ES18 electric compressor for new Toyota Prius		p.24
		Develop lighter vehicle bodies	Developed upper body for new Toyota Prius		p.25
Reduce exhaust gases	<ul style="list-style-type: none"> Tailor measures in accordance with usage environments 	Achieve cleaner diesel engine emissions	Developed 14Z engine compliant with Japanese exhaust gas regulations for special vehicles		p.25
Develop clean-energy vehicles	<ul style="list-style-type: none"> Launch new vehicles in accordance with market conditions Develop clean products that meet market needs 	Improve performance of shovel loaders	Introduced model change for 4WD Shovel Loader (4SDT) compliant with exhaust gas regulations for special vehicles (Ministry of Land, Infrastructure and Transport)		p.25
Improve recyclability	<ul style="list-style-type: none"> Promote recyclable designs contributing to the target of a 95% recycling rate by 2015 Increase the use of recycled materials 	Establish materials regulation guide	Established materials regulation guide		-
		Monitor wrecking companies on-site	Conducted on-site monitoring at 11 locations		p.23
Control and reduce substances of concern	<ul style="list-style-type: none"> Develop a world-class system for global management of chemical substances 	Revise technical standards regarding substances of concern	Revised 170 technical standards		p.20
		Discuss with suppliers switchover to EU-compatible parts	Held special conference on hexavalent chromium		
Reduce noise	<ul style="list-style-type: none"> Further reduce noise from all sources in automobiles and forklift trucks 	Reduce noise levels for shovel loaders	Introduced model change for 4SDT compliant with new standards for low-noise construction equipment (Ministry of Land, Infrastructure and Transport)		p.25
Prevent global warming due to car air conditioners	<ul style="list-style-type: none"> Develop compressors that are compatible with new alternative refrigerants to HFCs 	Develop compressor that uses new refrigerant	Continued development on electric compressor that uses CO ₂ refrigerant		-
Strengthen environmental assessment at the development and design stages	<ul style="list-style-type: none"> Conduct prior assessments of all the environmental impact throughout the product life cycle from the very first stage of development and design 	Establish environmental data system	Established environmental data system		p.22-23
		Consider life cycle assessment guidelines	Examined establishment of life cycle assessment		
Strengthen cooperation with business partners	<ul style="list-style-type: none"> Promote green procurement** through strengthened cooperation with business partners 	Examine revised green procurement guidelines	Examined revised green procurement guidelines		p.21
		Assist in establishment of EMS	Provided guidance and workshops for EMS		

Manufacturing and Logistics Action Guideline: Promote manufacturing that strives for zero emissions

Targets	Action Policies	FY 2003 Targets	Results	Assessment	Reference
Set global warming preventive measures	<ul style="list-style-type: none"> Actively promote CO₂ reduction measures Reduce total emissions by 5% compared with FY 1990 levels by March 2006 (10% by FY 2010) Promote thorough energy conservation programs Develop technology to reduce CO₂ emissions during manufacturing 	Total CO ₂ emissions: 261.7 kt-CO ₂	Total CO ₂ emissions: 264.6 kt-CO ₂		p.26-29
		Emissions per net sales CO ₂ emissions: 374 t-CO ₂ /billion yen	Emissions per net sales: 353 t-CO ₂ /billion yen		
		EReduction in CO ₂ emissions (from FY 2001): 20.5 kt-CO ₂	Reduction in CO ₂ emissions: 22.5 kt-CO ₂		

*1 Green procurement: procurement of parts and raw materials from ISO 14001 certified suppliers that contain reduced levels of substances of concern.
 *2 Zero landfill waste: defined by Toyota Industries as a 95% or greater reduction in direct landfill waste compared with FY 1998 levels, and a 95% or greater reduction in indirect landfill waste compared to 1999 levels.
 *3 Water consumption: the total water consumption of six plants, excluding Higashichita and Higashiura Plants, which began operations in 2001 and 2002, respectively.

Third Environmental Action Plan

The Environmental Action Plan expands on the basic philosophy of Toyota Industries, which states, "Toyota Industries believes that economic growth and conservation of the natural environment are compatible. It strives to offer products and services that are clean, safe, and of high quality." The Plan sets forth major policies and guidelines for environmental activities, so that Toyota Industries may promote the environmental action plan throughout the company.

Toyota Industries established its Third Environmental Action Plan in 2000, covering a five-year period ending in FY 2005. During FY 2003, which marked the midpoint for the plan, the company sought to address specific areas for improvement as it worked to meet the overall objectives set by the plan. These company-wide efforts are implemented under the direction of the specialized subcommittees that work under the Environmental Committee.

Manufacturing and Logistics Action Guideline: Promote manufacturing that strives for zero emissions

Targets	Action Policies	FY 2003 Targets	Results	Assessment	Reference
Strictly control and reduce the use of substances of concern	<ul style="list-style-type: none"> Heighten proper control and voluntary reduction of chemical substances used in production processes PRTR: Reduce total emissions of targeted substances by 50% compared with FY 1998 levels by March 2006 VOCs: Promote total emissions reduction and reduce emissions from painting lines by 50% compared with FY 1998 levels by March 2006 	Total emission of PRTR-designated substances: 619 tons	Total emissions: 685 tons	x	p.30-32
		VOC emissions per net sales: 3.1 tons/billion yen	Emissions per net sales: 3.3 tons/billion yen		
Reduce waste and conserve resources	<ul style="list-style-type: none"> Reduce waste for achievement of zero landfill Zero landfill: Eliminate direct landfill disposal at all plants by March 2004 Promote paperless operations by enhancing in-house IT network systems 	Direct landfill industrial waste volume: 1,120 tons	Volume: 1,097 tons		p.34-35
		Indirect landfill industrial waste volume: 300 tons	Volume: 74 tons Zero landfill waste*2 achieved at all plants		
Curtail water use	<ul style="list-style-type: none"> Various activities 	Consumption per vehicle: 4.4 m ³ /vehicle	3.8 m ³ /vehicle		p.35-36
		Water consumption*3: 3,080 km ³	2,605 km ³		
Conduct logistics streamlining measures	<ul style="list-style-type: none"> Improve transport efficiency and promote CO2 reduction and resource conservation through the reduction of packing materials 	CO ₂ emissions from logistics operations: 6.8 kt-CO ₂	Emissions: 6.3 kt-CO ₂		p.36-38
		Packing material consumption: 3,880 tons	Consumption: 4,398 tons		
				x	

Environmental Management Action Guideline: Expand environmental management system

Targets	Action Policies	FY 2003 Targets	Results	Assessment	Reference
Expand environmental management system	<ul style="list-style-type: none"> Develop basic policies and organize administration system for group companies Acquire ISO 14001 certification at group companies 	Plants: Conduct workshops with personnel from overseas manufacturing-related companies Conduct briefing sessions on adoption of green procurement and environmental accounting practices	Conducted workshops during month of July 2003 Conducted briefing sessions		p.18-19
		Sales companies: Conduct workshops on EMS and provide guidance for calculating environmental indicators	Conducted workshops and provided guidance		
		Provide support for acquisition of ISO 14001 certification	ISO 14001 certification acquired by six companies		
Enhance environmental accounting system	<ul style="list-style-type: none"> Develop environmental accounting system 	Improve efficiency and accuracy of calculation system	Linked with in-house accounting system		p.15

Corporate Citizenship Action Guideline: Actively participate in public environmental conservation

Targets	Action Policies	FY 2003 Targets	Results	Assessment	Reference
Make efforts to create a recycling-oriented society	<ul style="list-style-type: none"> Participate in efforts in the public sphere aimed at the achievement of a 95% recycling rate by 2015 	-	-	-	-
Promote community involvement	<ul style="list-style-type: none"> Broaden dialogue with local communities and intensify commitment to "greenery activities" 	Offer support based on the theme of the global environment	Provided support to Keidanren Nature Conservation Fund (3 events)		p.45
		Employee volunteer activities	Clean-up activities, support of iris cluster environmental preservation activities (29 events)		
Promote public relations and disclosure activities	<ul style="list-style-type: none"> Expand environmental disclosures 	Publish an environmental report	Published the Environmental Report 2003 (July)		p.46
		Use environmental advertising for external PR	Monthly post of advertisement with an environmental theme in newspapers		
		Improve internal communications	19 articles on the environment in the company magazine		