

Promoting Activities to Achieve Targets in Three Areas

In fiscal 2006, we continued our efforts from the previous year by setting targets in three areas: “Conserving the global environment,” “Creating a recycling society” and “Maintaining and promoting the environmental management structure.”

Results in fiscal 2006 and targets for fiscal 2007

Targets in three areas and promotion activities

We established environmental targets in the areas of “Conserving the global environment,” “Creating a recycling society” and “Maintaining and promoting the environmental management structure” and are working toward these goals.

Conserving the global environment

In fiscal 2006, seven items (six domestic, one overseas) from the previous fiscal year, were set as targets.

The target of a 20% reduction in CO₂ emissions

(per added value production) compared to fiscal 1997 at all domestic operating sites was achieved by implementing an energy conservation project at Iwata Works and other projects. Overseas, eight operating sites (out of 13) achieved the target of a 2% reduction compared to the previous fiscal year.

As a result of continuous efforts from the year 2000, chlorine-containing coolant that is used in grinding or pressing operations to manufacture bearings was replaced with an alternative at Iwata Works, completing the phase out for the NTN Group.

The fiscal 2006 target for eliminating halon extinguishers that contain ozone destroying substances was achieved and we are following the plan toward complete elimination in 2010.

Environmental results in fiscal 2006

Objective	Target	Result	Evaluation*	Page	
Conservation of the global environment	Reduce CO ₂ emissions	Domestic CO ₂ emission rate*2: 20% compared to fiscal 1997	CO ₂ emission rate: 20% reduction compared to fiscal 1997	☺	P38
		Development of Energy conservation diagnosis (promotion of energy conservation issues for major Works, extension to other sites)	Renovation work for energy conservation completed in Iwata. Same project is under way at other sites.	☺	P38 P39
		Overseas CO ₂ reduction rate: 2% compared to previous year	8 of 13 sites achieved the target of 2% reduction compared to previous year.	☺	P38
	Prevent air, water and ground pollution	Domestic No. of halon extinguishers replaced with CO ₂ types: 125 units	No. of halon extinguishers replaced with CO ₂ types: 170 units (364 remaining)	☺	P39
		Elimination of coolants with chlorine	Coolants with chlorine: totally eliminated	☺	P39
		Response to Soil Contamination Countermeasures Law	Decontamination at Kuwana (5 of 6 sites completed)	☺	P39
	Participation in regional environmental preservation activities	Domestic Participation in regional green activities (all the companies)	Kuwana, Iwata, Nagano, Mikumo, Kinan et al.	☺	P40
Creating a recycling society	Reduce waste materials	Domestic Promote zero emissions: recycle rate*3 98%	Recycle rate in all sites incl. NTN Casting: 98.7%	☺	P41
		Overseas Promote zero emissions: recycle rate 94%	Recycle rate: 92.5%	☹	
	Protect resources	Domestic Paper purchase in weight: 31% reduction compared to 1998	Paper purchase in weight: 30.9% reduction compared to 1998	☺	
		Styroform: 84% reduction compared to 1999	Reduction of Styroform: 81.0% reduction compared to 1999	☹	
Maintaining and promoting the environmental management structure	Promote green procurement	Domestic Respond to EU directives	Complete response to EU directives. Replacing hazardous substances even in non-subject products.	☺	P43
		Domestic Establish and promote green procurement policy	Completed (Environmental management standards specifying revision/deletion of the green policy were also revised)	☺	P42
		Domestic Respond to customer audits	Responded and complied with customer audit	☺	P43
	Promote environmental management of the supply chain	Domestic Support suppliers' acquisition of ISO 14001 etc. (promote installation of Eco-stage entry version)	Of 281 primary suppliers, 227 obtained certifications. 13 suppliers obtained Eco-stage entry versions.	☺	P42
	Respond to new laws	Domestic Respond to revised Energy Conservation Law (extend to logistics companies)	Collecting logistics data for Yes/No judgment on specific shippers.	☺	

*1 Symbols for evaluation: ☺ Achieved/promotes ☹ Pending

*2 CO₂ emissions (ton/million yen)=CO₂ emissions (ton) / Sales of value-added production (million yen)

*3 Recycle rate (%)=(1- Final amount disposed (ton) / Total amount discharged (ton)) x 100

Creating a recycling society

In fiscal 2006, we worked toward achieving four targets (three domestic, one overseas) that were based on efforts in fiscal 2005. As for zero emissions*, the total recycling rate at all domestic operating sites was 98.7%. This was the first time that all domestic sites (incl. NTN Casting Corp.) achieved a 98% score (zero emissions). Overseas results, however, were 1.5% below target.

In fiscal 2007, we will further improve the recycling rate at NTN Casting Corp. and NTN Mikumo Corp. and aim at 99% recycling rate at every operating site.

* At NTN, a recycling rate of 98% or more is defined as zero emissions.

Maintaining and promoting the environmental management structure

In fiscal 2006, five targets (all domestic) were established based on efforts in the previous fiscal years. As a result of our efforts in supporting our business partners to obtain ISO 14001 or other certifications, 227 of NTN's 281 main business partners obtained certifications. We

supported small companies in particular to obtain certifications under our planned "Eco-stage entry version" (see p. 42), and 13 companies obtained certification.

In fiscal 2007, concrete numeric targets and deadlines were set based on the results and efforts of prior years. One new item is to enrich the ISO 14001 multi-site certification structure, and we will work for further improvement of overall environmental management.

In response to the EU's ELV and RoHS directives (see p. 42), we promoted green procurement. Going forward, we will also work to reduce hazardous substances according to our original management criteria in other applications in addition to electrical, electronic and automotive applications. Also, to respond to Japan's Amendment to the Law Regarding the Rationalization of Energy Use, we will promote energy conservation for shipping cargo.

Environmental targets in fiscal 2007 and fiscal 2010

Objective		Targets in fiscal 2007		Targets in fiscal 2010	
Conservation of the global environment	Reduce CO ₂ emissions	Domestic	<ul style="list-style-type: none"> CO₂ emission rate: 22% reduction compared to fiscal 1997 Reduction of total CO₂ emission: 261,000 tons per year 	<ul style="list-style-type: none"> CO₂ emission rate: 25% reduction compared to fiscal 1997 CO₂ total emission: 297,000 tons or less per year 	
			<ul style="list-style-type: none"> Implementation of energy conservation diagnosis results (Large-scale energy conservation measures at major Works promoted, horizontal development to overseas plants) NTN Mie receives NEDO energy conservation diagnosis. 	—	
			Drastic reduction of air leaks	—	
	Overseas	CO ₂ emission rate: 1% reduction compared to fiscal 2006	CO ₂ emission rate: 4% reduction from fiscal 2006		
	Prevent air, water and ground pollution	Domestic	<ul style="list-style-type: none"> No. of halon extinguishers replaced with carbon dioxide extinguishers: 125 units (239 units remaining at the end of fiscal year) Respond to Soil Contamination Countermeasures Law 	Phase out of all halon extinguishers	
Participation in regional environmental preservation activities	Domestic	Participation in regional green activities (through all companies)	—		
Creating a recycling society	Reduce waste materials	Domestic	Promote zero emissions: achieve recycle rate of 99% (improve recycle rate at NTN Mikumo and NTN Casting)	Continue zero emissions	
		Overseas	Promote zero emissions: recycle rate of 94% (improve recycle rate in North America and NMT)	Achieve zero emissions: recycle rate 98%	
	Protect resources	Domestic	Paper purchase in weight: 38.5% reduction compared to fiscal 1998	Paper purchase in weight: 50% reduction compared to fiscal 1998	
			Styroform purchase in price: 85% reduction compared to fiscal 1999	Complete phase out of Styroform purchase	
Maintaining and promoting the environmental management structure	ISO 14001 multi-site Certification	Domestic	<ul style="list-style-type: none"> Integrate NTN Fukuroi and NTN Kinan to ISO 14001 multi-site Obtain preliminary environmental certifications at NTN Kamiina and NTN Bizen 	Acquisition of ISO 14001 certification at all sites (global)	
		Overseas	NNTC and NTK obtain ISO certifications		
	Promote green procurement	Domestic	Promote elimination of hazardous substances in products not subjected to EU (RoHS, ELV) directives	—	
			Ensure NTN green procurement standards		
			Respond to customer audits		
Promote environmental management of the supply chain	Domestic	Encourage and support suppliers to obtain ISO 14001 certifications etc.: certification acquisition rate 95%	Acquisition of certification at all suppliers		
Respond to new laws	Domestic	Respond to revised Energy Conservation Law (Establishment and implementation of energy reduction plan as cargo owner)	—		