

Environmental Targets and Results

Results for Fiscal 2005

For fiscal 2005, we continued from the previous year by setting 13 items (11 domestically and 2 overseas) in the following three areas: "Conservation of global environment", "Contribution to a recycling society", and "Maintenance and improvement of environmental management systems". We set concrete numerical targets, etc., and worked toward achieving them.

Reducing CO₂ emissions and achieving zero emissions

Despite a variety of energy savings measures to reduce our domestic CO₂ emission rate (CO₂ emission divided by value added), we remain at the same level as that of the previ-

ous fiscal year. NTN is committed to greater improvement going forward. Meanwhile, 4 out of 10 sites overseas achieved their targets, and we will promote further energy conservation initiatives at other sites to achieve targets for all of our sites.

Regarding the progress toward zero emissions (activities to achieve zero landfilled waste and a recycling rate of 100%), we achieved a recycling rate of 99.2% domestically, the same as the previous year. The improvement in the recycling rate overseas was below the target value. We will continue to strengthen our recycling and related activities to achieve our targets.

Conserving resources and strengthening our management structure

Regarding the conservation of resources, results for reducing paper usage were better than the previous year, but results fell just short of our target reduction for the use of Styrofoam.

Because coolants containing chlorine may generate dioxins during disposal, we are voluntarily working to phase these out and will continue efforts to achieve total elimination.

Objective	Target for Fiscal 2005		Result for Fiscal 2005	※1 Evaluation	Page
Reduce CO ₂ emissions	Domestic	CO ₂ emission rate: 20% reduction relative to fiscal 1997	CO ₂ emission rate: 18% reduction relative to fiscal 1997		P34
		Energy conservation diagnosis and improvements for major Works	An energy savings diagnosis was done and the results are being released.		
	Overseas	CO ₂ emission rate: 2% reduction relative to fiscal 2004	4 out of 10 sites achieved their target.		
Conservation of the global environment	Domestic	Number of halon extinguishers replaced with carbon dioxide extinguishers: 115 units or more	Number of halon extinguishers replaced with carbon dioxide extinguishers: 110 units or more (592 remaining)		P35
		Elimination of coolants with chlorine: phase out (2 remaining)	Totally eliminated at NTN Omaezaki Corp.; still in progress at Iwata Works		
		Response to Soil Contamination Countermeasures Law	Investigation of soil /Decontamination started at Kuwana Works		
	Domestic	Sales amount for eco-friendly products: +10% relative to fiscal 2004	Sales of new eco-friendly products: 71% higher than 2004		P14
Participation in Regional Environmental Preservation Activities	Domestic	Participation in regional green activities	Kuwana Works (Planting moss phlox), Iwata Works (cutting grass on "satoyama"), NTN Mikumo Corp. (planting trees at nearby park), etc.		P22
Create a recycling society	Domestic	Promote zero emissions: recycle rate 98% or more*3	Promote zero emissions: recycle rate 99%**4		P36,37
		Overseas	Promote zero emissions: recycle rate 94%	Promote zero emissions: recycle rate 90%	
	Domestic	Paper consumption: 28% reduction relative to fiscal 1998	Paper consumption: 29% reduction relative to fiscal 1998		P38
		Styrofoam: 84% reduction relative to fiscal 1999	Styrofoam: 81% reduction relative to fiscal 1999		
Maintain and improve environmental management structure	Domestic	Establish environmental hazardous substance management structure	Database of environmentally hazardous substances being compiled		P32
		Establish green procurement policy	Being promoted		
		Respond to customer audits	Complied with customer audits (2 companies)		
		Promote elimination of phthalate esters	Completed fundamental tests for switching to alternate material		
	Domestic	Acquired certification for NTN Mie Corporation	NTN Mie Corporation certified, multi-site certification obtained		P31
	Domestic	Support suppliers' acquisition of ISO 14001 and others	Of 332 primary suppliers, 188 have received certification. Began supporting smaller businesses in Japan in obtaining the Eco Stage Introductory Level certification		P17
Domestic	Respond to ISO 14001 (2004 version) Respond to revised Energy Conservation Law Respond to VOC emission control	Revision of manuals and specifications (NTN Environmental Policy, Environmental Management Manual and NTN Environmentally Hazardous Substance List)		P32	

※1) Symbols for evaluation: achieved/promotes, not achieved *2) CO₂ emission (ton /million yen) = $\frac{\text{CO}_2 \text{ emission}}{\text{Sales added value amount (million yen)}}$ *3) Recycling percentage (%) = $1 - \left(\frac{\text{Final amount disposed of by landfill (tons)}}{\text{Total amount discharged (tons)}} \right) \times 100$ *4) NTN Casting has a separate target: achieving a 50% recycling rate.

Environmental Target for Fiscal 2006

The environmental targets for fiscal 2006 were based on the efforts and results of 2005, and featured concrete numerical targets for each of the three fields.

We will work still harder to reduce our burden on the environment and achieve NTN's fiscal 2010 targets.

“Conservation of the global environment”

With the Kyoto Protocol coming into effect, further aggressive efforts to reduce CO₂ emissions are required. In fiscal 2006, we will promote effective energy conservation initiatives at all sites (including those overseas).

Also, we will pursue greening activities company-wide and implement soil pollution countermeasures.

We will address the one site in Japan still using coolant containing chlorine and totally abolish this coolant. Also, we will methodically switch from halon extinguishers to an alternative.

“Contribution to a recycling society”

Domestically (with the exception of NTN Casting Corp.), we will maintain and continue zero emissions. NTN Casting Corp. will expand its use of waste sand and waste slag. (NTN Casting Corp.'s recycling target: at least 85%.) We will work toward achieving zero emissions from all companies. In addition, we will deploy the grinding swarf briquetting machine to overseas sites in an effort to increase the recycling rate overseas, especial-

ly in North America.

We will continue our efforts to reduce the amount of paper and Styrofoam that we use.

“Maintenance and improvement of environmental management system”

To respond to the EU's RoHS and ELV directives, we will promote total green procurement. Also, we will support our suppliers in their efforts to obtain environmental certification to improve the environmental management of our supply chain. In addition, as a way to respond to Japan's Amendment to the Law Regarding the Rationalization of Energy Use, we will be working to conserve energy, particularly with cargo shippers.

Objective		Target for Fiscal 2006		Target for Fiscal 2010
Conservation of the global environment	Reduce CO ₂ emissions	Domestic	CO ₂ emission rate: 20% reduction relative to fiscal 1997 Implementation of energy conservation diagnosis (Large-scale energy conservation measures promoted, horizontal deployment to other plants)	CO ₂ emission rate: 25% reduction relative to fiscal 1997
		Overseas	CO ₂ emission rate: 2% reduction relative to fiscal 2005	CO ₂ emission rate: 10% reduction relative to fiscal 2002
	Prevent air, water and ground pollution	Domestic	Number of halon extinguishers replaced with carbon dioxide extinguishers: 125 units or more	Phasing out of halon extinguishers
			Elimination of coolants with chlorine: phase out (1 remaining-Iwata)	—
		Completion of ground decontamination at Kuwana Works	—	
	Participation in Regional Environmental Preservation Activities	Domestic	Participation in regional green activities	—
Create a Recycling society	Reduce waste materials	Domestic	Promote zero emissions: recycle rate 98% or more ^{*5}	Continue Zero emissions
		Overseas	Promote zero emissions: recycle rate 94%	Promote zero emissions: recycle rate 98% or more (target for fiscal 2006)
	Protect resources	Domestic	Paper consumption: 31% reduction relative to fiscal 1998	Paper consumption: 50% reduction relative to fiscal 1998
		Domestic	Styrofoam: 84% reduction relative to fiscal 1999	Complete phase out of Styrofoam
Maintain and improve environmental management structure	Promote green procurement	Domestic	Total response to EU directives (RoHS, ELV) Startup of environmentally hazardous substance database	—
			Establishment and deployment of NTN Green Procurement Standard	
			Respond to customer audits	
			Promote elimination of phthalate esters	
	Promote environmental management of the supply chain	Domestic	Promoting the introduction of the Eco Stage Introductory Level certification	—
Respond to new laws	Domestic	Expansion to cargo shipping companies	—	

*5 NTN Casting has a separate target: to achieve a 85% recycling rate.