

# Targets and Results

## Working toward achieving environmental targets in three areas

### ➔ Fiscal 2007 results and fiscal 2008 targets

#### Newly established reduction targets for total CO<sub>2</sub> emissions

The NTN Group has environmental targets that we are working to achieve by fiscal 2010 in three areas: preservation of the global environment, creating a recycling society, and maintaining and improving the environmental management system. These targets were set in fiscal 1998, and since then, we have been methodically carrying out environmental activities.

Our results with respect to our fiscal 2007 targets is

shown below. Of the 17 targets that we had for fiscal 2007, we achieved 11 of them and failed to achieve 6 of them.

In terms of reducing our CO<sub>2</sub> emissions, we have reduced our CO<sub>2</sub> emissions rate (our CO<sub>2</sub> emissions per unit of value-added production) by 22% over fiscal 1997 levels. Our North American operating sites contributed greatly, achieving a significant reduction over 9.2%, exceeding our target. Also, our total emissions of CO<sub>2</sub> in Japan were 240,000 tons/year (at the 10 original operating sites), and we were able to achieve our target. However, the four new operating sites that

### 2007 Environmental results

☺ Achieved/In progress ☹ Not achieved

Purpose		Target	Result	Evaluation	Page	
Preservation of the global environment	Reduce CO <sub>2</sub> emissions	Domestic	·Reduce CO <sub>2</sub> emissions rate*1 by 22% over fiscal 1997 ·CO <sub>2</sub> emissions: 261,000 tons/year*2 (10 original operating sites*3)	·Reduced CO <sub>2</sub> emissions rate by 22.0% over fiscal 1997 ·CO <sub>2</sub> emissions: 240,000 tons/year (10 original operating sites) 353,000 tons/year (14 operating sites)*4	☺	P42
		Overseas	·Expand energy conservation assessments (promote large-scale energy conservation improvements and horizontal implementation at overseas sites) ·NEDO energy conservation assessment at NTN Mie Corp	·Energy conservation improvements at Kuwana Works and NTN Casting ·Energy conservation assessments and improvements carried out in NTN Mie ·Results have been attained at other operating sites	☺	P42
			·Totally and methodically eliminate air leaks	·Company wide air-leak checks were done using air leak detectors	☺	P43
	Reduce air, water, and ground pollution	Overseas	·Reduce CO <sub>2</sub> emissions rate by 1% over fiscal 2006	·Reduced CO <sub>2</sub> emissions rate by 9.2% over fiscal 2006	☺	P42
		Domestic	·Replaced 116 halon fire extinguishers with CO <sub>2</sub> fire extinguishers (with 231 units remaining at the end of the fiscal year) ·Reduce the use of substances designated by PRTR law Carry out trials and establish a long-term plan	·Replace 112 halon fire extinguishers with CO <sub>2</sub> fire extinguishers (with 235 units remaining at the end of the fiscal year) ·Established a plan to reduce substances designated by PRTR law ·Carry out trial changes at Iwata, Nagano, and Omaezaki	☹	P43
	Participate in local environmental activities	Domestic	·Participate in local greening activities (company-wide)	·This was carried out at sites including Kuwana, Iwata, Okayama, Nagano, and Mikumo ·"Kigyo no mori" (corporate forest stewardship) activities are being considered by the primary operating sites	☺	—
Creating a recycling society	Reduce waste materials	Domestic	·Work towards achieving zero emissions with a recycle rate of 99% (Both Mikumo and Casting improved their recycle rates)	·Worked towards achieving zero emissions with a recycle rate of 98.5% (Mikumo achieved its goals, while Casting did not)	☹	P44
		Overseas	·Work towards achieving zero emissions with a recycle rate of 94% (The North American sites and NMT improved their recycle rates)	·Worked towards achieving zero emissions with a recycle rate of 92.8% (NMT achieved large-sale improvements, while some North American sites did not reach their goals)	☹	P44
	Preserve resources	Domestic	·Reduce paper consumption by 39% over fiscal 1998 ·Reduce styrofoam usage by 90% over fiscal 1999	·Reduced paper consumption by 35.2% over fiscal 1998 ·Reduced styrofoam usage by 84.5% (NTN Engineering Plastics achieved their goal, while Iwata, Omaezaki, and Mie did not)	☹	—
Maintaining and improving the environmental management system	Internal systems	Domestic	·Have Fukuroi and Kinan join ISO14001 multi-site certification ·To have Kamiina and Bizen obtain simplified environmental certification	·Fukuroi and Kinan successfully joined ISO multi-site certification ·Kamiina obtained Eco-action 21 certification and Bizen obtained EcoStage 1 certification	☺	P36
		Overseas	·To have NNTC and NTK obtain ISO14001 certification	·NNTC obtained ISO14001 certification ·NTK is expected to obtain certification in May 2008	☺	P36
	Promote green procurement	Domestic	·Work to completely eliminate environmentally hazardous substances from products other than those fall under EU regulations (RoHS and ELV) ·Implement the NTN Green Procurement Standard ·Be responsive to customer audits	·Carried out internal and external meetings ·Passed customer audits	☺	P45
		Domestic	·Encourage suppliers to obtain certification such as ISO14001; achieve 86% certification acquisition	·Encouraged suppliers to obtain certification such as ISO14001 and to achieve 85% certification acquisition	☹	P45
	Comply with new regulations	Domestic	·Comply with the amended Act on the Rational Use of Energy (Have logistics companies establish a reduction plan)	·Enacted a reduction plan, which we are currently carrying out	☺	P43

\*1 CO<sub>2</sub> emissions rate (tons/1 million yen) =  $\frac{\text{CO}_2 \text{ emissions (tons)}}{\text{Value-added production (1 million yen)}}$  Value-added production is the production output minus the proportional cost.

\*2 The CO<sub>2</sub> emission factor was calculated at (0.381kg CO<sub>2</sub>/kWh) for all companies.

\*3 This does not include operating sites that joined our multi-site ISO14001 certification in 2003 or after, which are NTN Casting Corp., NTN Omaezaki Corp., NTN Mie Corp., and NTN Fukuroi Corp.

\*4 Calculated with the emission factors from each power company in fiscal 2006.

joined our multi-site ISO14001 certification since 2003 were not included in the initial target, and the total emissions for the 14 operating sites including these four was 353,000 tons.

Since 2008, to work as an industry leader towards preventing global warming, we set a total reduction target for our Japanese sites including new operating sites. Our fiscal 2008 target was to limit CO<sub>2</sub> emissions to 352,000 tons or less. This is the same level as the 353,000 tons that our 14 operating sites emitted, but because we expect large increases in production volume (mostly at our new operating sites), this is a truly challenging target for us. We are also planning more emissions reductions – fundamental ones – starting in fiscal 2008. Though our total emissions in Japan for 2010 was initially projected to be more than 400,000 tons, we have established a plan to cut this to 10% below the fiscal 2007 level, or 317,000 tons. (The 2010 emissions rate is

based on each power company's emission factor target for that fiscal year.)

In addition, in fiscal 2008 we added other targets related to reducing the use of substances designated by PRTR law, implementing internal audits related to the management of environmentally hazardous materials, and thoroughly establishing bearing inspections. We are also working to reduce the use of harmful chemicals in our manufacturing processes and to prevent the mingling of environmentally hazardous substances in our products.

In these ways, the NTN Group is working to help preserve the global environment by bolstering our efforts at each operating site and by improving environmental activities as a single supply chain including our suppliers.

## Fiscal 2008 environmental targets

Purpose		Target for fiscal 2008		Target for fiscal 2010	
Preservation of the global environment	Reduce CO <sub>2</sub> emissions	Domestic	·Achieve total CO <sub>2</sub> emissions 352,000 tons/year or less (14 operating sites) ·Reduce CO <sub>2</sub> emissions rate by 23% over fiscal 1997 (10 operating sites)	·Achieve total CO <sub>2</sub> emissions 317,000 tons/year* <sup>5</sup> or less (14 operating sites) (A 10% reduction over fiscal 2007) ·Reduce CO <sub>2</sub> emissions rate by 25% over fiscal 1997 (10 operating sites)	
		Overseas	·Reduce CO <sub>2</sub> emissions rate by 13% over fiscal 2006	·Reduce CO <sub>2</sub> emissions rate by 15% over fiscal 2006	
	Reduce air, water, and ground pollution	Domestic	·Replace 99 halon fire extinguishers with CO <sub>2</sub> fire extinguishers (with 136 units remaining at the end of the fiscal year 2008) ·Reduce the use of PRTR law-designated substances by 33.5% over fiscal 2006	·Completely phase out halon fire extinguishers ·Reduce the use of PRTR law-designated substances by 40% over fiscal 2006	
	Participate in local environmental activities	Domestic	·Promote local greening activities (e.g. "Kigyo no mori" (corporate forest stewardship) activities)	·Continue current activities	
Creating a recycling society	Reduce waste materials	Domestic	·Work towards achieving zero emissions with a recycle rate of 99% ·Reduce landfilled amount to 43 tons/month	·Maintain zero emissions ·Reduce landfilled amount to 25 tons/month	
		Overseas	·Work toward achieving zero emissions with a recycle rate of 96.3%	·Achieve zero emissions with a recycle rate of 98%	
	Preserve resources	Domestic	·Reduce paper consumption by 42.4% over fiscal 1998	·Reduce paper consumption by 50% over fiscal 1998	
		Domestic	·Reduce styrofoam usage by 88.4% over fiscal 1999	·Completely phase out styrofoam	
Maintaining and improving the environmental management system	Internal systems	Domestic	·Develop a structure to have new operating sites obtain certification	·Have all operating sites around the world obtain ISO14001 certification	
		Overseas	·Have NTN-RAB and NTK obtain ISO14001 certification		
	Promote green procurement	Domestic	·Inform everyone concerned inside and outside the company of our Green Procurement Standard ·Carry out internal audits related to the management of environmentally hazardous substances ·Thoroughly establish the practice of carrying out incoming inspections using analytical devices ·Thoroughly establish the management of inventory containing environmentally hazardous substances ·100% pass of all customer audits	—	
	Encourage suppliers and vendors to implement environmental management systems	Domestic	·Encourage suppliers to obtain certification such as ISO14001; achieve 86% certification acquisition	·Have all suppliers have some kind of environmental certification	
	Comply with new regulations	Domestic	·Totally comply with REACH regulations (pre-registration)	—	

\*<sup>5</sup> Calculated based on each power company's target emission factors for fiscal 2010.