

# Environmental Accounting

Nikon introduced its first comprehensive environmental accounting system in fiscal 2001. Environmental accounting involves accounts that show the cost and the effects of environmental conservation activities. Through the introduction of environmental accounting, we aim to improve the effectiveness of our conservation activities,

## Features

Nikon's environmental accounting features the classification of environmental costs and effects in line with our environmental preservation activities.

## Basic Policy

The figures contained in our environmental accounts for fiscal 2005 include those for Nikon Corporation and our major manufacturing subsidiaries. Environmental costs (investments and expenses) are based on Nikon environmental targets and measures, as well as standards set forth in the Environmental Accounting Guidelines (2005 version) of the Japanese Ministry of the Environment.

and implement sustainable environmental policies over the long term with quantifiable results. We are also working to heighten awareness of our environmental conservation activities, through the publication of related information and the clarification of our stance on the environment.

## Development

We established an "Environmental Accounting Sub-Committee" within the "Environmental Committee" in June 2000, with the aims of creating an environmental accounting system and an appropriate means of operation. This Sub-Committee is active on an ongoing basis.

## Effects

The effects of our environmental activities are shown under the heading "Fiscal 2005 results" in the Environmental Action Plan in the next chapter. These results are the actual results of strategies implemented in response to our environmental target values.

### Cost of Environmental Conservation (Fiscal 2005: Nikon Corporation only)

Unit: millions of yen

Category		Main Activities	Investment	Expenses	Total
Product environment	Product development: Energy conservation, reduced use of resources, reduction in use of harmful chemical substances, ozone layer protection	Energy-saving design, design products that use Eco-glass	-	93	93
	Production and inspection	Analysis of harmful chemical substances	24	8	32
	Containers and packaging	Reduction in use of plastics in packaging materials	-	0	0
	Green procurement	Investigation of harmful chemical substances	-	7	7
	Product Environmental Accounts		24	109	133
Workplace environment	Energy conservation	Replacement of air conditioning systems, installation of inverters	101	15	115
	Resource recycling	Recycling of waste plastics, promotion of paper reuse, reducing water use	7	29	36
	Reduction in use of harmful chemical substances	Promotion of use of alternative solvents, refurbishment of wash machines	51	1	52
	Green procurement	Enforcement of Green Purchasing Implementation Guidelines	-	3	3
	Improvement of office	Improvement of office environmental performance	-	29	29
	Workplace Environmental Accounts		159	77	236
Response to laws and regulations		Operations management for gas and water emissions processing equipment, maintenance of noise and vibration-emitting facilities, waste management, control of dangerous substances	220	398	618
Management activities		ISO 14001 related (EMS management, workplace education), introduction of greenery	-	380	380
Total			403	965	1,367

### Classified According to Guidelines of the Ministry of the Environment (Fiscal 2005: Nikon Corporation only)

Unit: millions of yen

Category	Main Activities	Investment	Expenses	Total
Cost within business area		378	443	822
Pollution prevention costs	Operations management for gas and water emissions processing equipment, maintenance of noise and vibration-emitting facilities	190	179	369
Global environment conservation costs	Energy conservation, reduction in use of harmful chemical substances, control of dangerous substances	181	96	277
Resource recycling costs	Waste reduction (recycling of waste plastics, promotion of paper reuse), waste management, reducing water use	7	168	176
Upstream/Downstream costs	Investigation of harmful chemical substances, enforcement of Green Purchasing Implementation Guidelines	24	19	43
Management activities costs	ISO 14001 related (EMS management, workplace education)	-	406	406
R & D costs	Energy-saving design, design products that use Eco-glass	-	93	93
Social activity costs	Financial sponsorship for a wide range of activities	-	4	4
Environmental damage costs	Pollution Load levy	-	0	0
Total		403	965	1,367

Scope of Data:  
Applicable Period: April 1st, 2004 to March 31st, 2005

\* Costs which could not be clarified are in principle not included in these accounts.  
\* Depreciation and amortisation have not been factored into these accounts.  
\* Where a facility has been utilised for several purposes and breakdown is considered complex, the entire cost has been included in the investment cost.  
\* All costs have been rounded up or down to the nearest whole number, so in some cases the totals do not match the figures indicated.

### Fiscal 2005 Nikon Group Cost of Environmental Conservation Activities (Tochigi Nikon, Mito Nikon, Sendai Nikon, Zao Nikon, Kurobane Nikon)

Unit: millions of yen

Category	Cost within business area							Upstream/Downstream costs	Management activity costs	Social activity costs	Environmental damage cost	Total				
	Pollution prevention		Global environment conservation		Resource recycling		Expenses					Expenses	Expenses	Expenses	Investment	Expenses
	Investment	Expenses	Investment	Expenses	Investment	Expenses										
Product environment	Product development	-	-	-	-	-	-	-	-	-	-	-	-			
	Containers and packaging	-	-	-	-	-	-	-	-	-	-	-	-			
	Green procurement	-	-	-	-	-	-	0.8	-	-	-	-	0.8			
	Product Environmental Accounts	-	-	-	-	-	-	-	-	-	-	-	0.8			
Workplace environment	Energy conservation	-	-	20.6	1.9	-	-	-	-	-	-	20.6	1.9			
	Resource recycling	-	-	-	-	-	2.1	-	-	-	-	-	2.1			
	Reduction in use of harmful chemical substances	-	-	-	0.1	-	-	-	-	-	-	-	0.1			
	Green procurement	-	-	-	-	-	-	0.1	-	-	-	-	0.1			
	Improvement of office	-	-	-	-	-	-	-	4.0	-	-	-	4.0			
	Workplace Environmental Accounts	-	-	-	-	-	-	-	-	-	-	-	6.2			
Response to laws and regulations		11.2	104.5	-	2.9	3.2	68.5	-	-	-	-	11.2	179.1			
Management activities		-	-	-	-	-	-	109.9	0.5	1.4	-	-	110.4			
Investment		11.2	-	20.6	-	-	-	-	-	-	-	35.0	-			
Expenses		-	104.5	-	4.9	3.2	70.6	0.9	113.9	0.5	1.4	-	296.8			
Total													331.7			

## The Ongoing Challenge

In addition to faster, more efficient collection of environmental cost data, we also seek to improve our methods for gauging the effects of our

activities, in order to clearly illustrate the relationship between costs and effects.

# Environmental Action Plan

Nikon implemented its corporate policy statement for Group activities, known as “Vision Nikon 21”, in March 2000. This was the basis for the midterm environmental targets we specified in our “Nikon Environmental Action Plan for Fiscal 2001”. Now we have the revised plan as “Environmental Targets for Fiscal 2005”, which

comprises the first year’s target of the “Nikon Environmental Action Plan for Fiscal 2005”. It separates the targets into 12 categories representing the product and workplace environments as shown below.

The following evaluation is for fiscal 2005.

## The Nikon Environmental Action Plan for Fiscal 2005

### Product Environment

Theme	Fiscal 2004 environmental targets	Fiscal 2005 results	Evaluation
<b>Energy conservation (prevention of global warming)</b>	[Energy consumption efficiency] • More than 30% improvement in overall energy efficiency of new products released, compared with figures of similar products already released.	• For the 23 applicable newly released products, 19 achieved a 30% or greater improvement in energy efficiency, with a simple average improvement of 62%. Some examples are introduced on pages 15–16.	○
	[Eco-glass usage ratio] • Use of Eco-glass in 100% of new optical designs for consumer products, and at least 94% for industrial products.	• Consumer products: 100% (97%). Industrial products: 95.5% (94.5%).	○
<b>Reduction in use of harmful chemical substances</b>	[Lead-free solder] • Use of lead-free printed circuit boards for electronic components in more than 50% of consumer products and at least 20% of new industrial products.	• Consumer products: 28%, boards: 61%. New industrial products: 20%.	○
	[Hexavalent chrome, lead, cadmium, mercury, PBB, PBDE, PVC] • Major reduction of levels of the above hazardous substances in consumer products.	• Newly released products achieved the targets. Products released earlier made progress in investigations and operations. They achieved the targets to an extent.	○
	[Ozone layer-damaging substances] • Reduction of IC and LCD steppers using HCFC as a refrigerant to fewer than 20% of all products.	• 23% (23%).	△
	[Green procurement] • Performance investigation and management implemented for key consumer products and selected industrial components.	• Target achieved.	○
<b>Containers and packaging</b>	[Plastic containers and packaging] • Reduction per net sales of at least 20% compared with figures from fiscal 2003 for consumer products.	• 5% reduction (37% increase).	△

### Workplace Environment

Theme	Fiscal 2005 environmental targets	Fiscal 2005 results	Evaluation
<b>Energy conservation (prevention of global warming)</b>	[Greenhouse gas emissions] • Reduction in annual emissions per net sales of at least 3%, compared to levels for fiscal 2002.	• 25% reduction (8% increase).	○
<b>Waste reduction</b>	[Zero emissions] • Establishment of zero-emission systems at major manufacturing subsidiaries.	• Zero-emission systems were established for five major Japanese manufacturing subsidiaries. (Three major Japanese manufacturing subsidiaries established the system.)	○
	[Waste generation] • Reduction in amount of waste generation of at least 20%, compared with figures from fiscal 2001.	• 18% reduction (25% reduction).	△
<b>Reduction in use of harmful chemical substances</b>	[Chlorinated organic solvents] • Reduction in use of chlorinated organic solvents in wash at workplaces including major manufacturing subsidiaries, by at least 95% compared with figures from fiscal 1999.	• 98% reduction (95% reduction).	○
<b>Green procurement</b>	[Eco-procurement products] • Conformity with guidelines for at least 70% of all products.	• 79% (66%).	○

\*In the section titled, “Fiscal 2005 results”, the data in parentheses are results through fiscal 2004.

Symbols: Circle indicates progress on-schedule; triangle denotes insufficient effort; “X” represents significant gap between stated goal and actual performance.

Nikon introduced a new three-year plan, “Nikon Environmental Action Plan for Fiscal 2005” (from fiscal 2005 to fiscal 2007), which incorporates considerable revisions to the previous plan. The long-term target for fiscal 2011 — the reduction of greenhouse gas

emissions — is also displayed.

Nikon is committed to reaching every one of the targets during the coming period.

## The Nikon Environmental Action Plan for Fiscal 2006

### Product Environment

Theme	Midterm/long-term environmental targets	Targets for fiscal 2006
<b>Energy conservation (prevention of global warming)</b>	[Energy consumption efficiency] • More than 30% improvement in overall energy efficiency of new products released between fiscal 2006 and the end of fiscal 2008, compared with figures for similar existing products.	• Improvement of 30% or greater.
<b>Reduction in use of harmful chemical substances</b>	[Eco-glass usage ratio] • Use of Eco-glass in 100% of new optical designs for consumer products, and at least 98% for industrial products by fiscal 2008.	• 100% of consumer products, at least 96% of industrial products.
	[Lead-free solder] • Use of lead-free printed circuit boards for electronic components in 100% of consumer products (as covered in RoHS Directive) by the second half of fiscal 2006, and in 100% of industrial products shipped by fiscal 2008.	• 100% of consumer products by the second half of fiscal 2006, and at least 50% of industrial products by the second half of fiscal 2006.
	[Hexavalent chrome, lead, cadmium, mercury, PBB, PBDE, PVC] • Total elimination of these substances in consumer products shipped, excluding non-alternative materials, by the second half of fiscal 2006.	• Total elimination of aforementioned substances in consumer products by the second half of fiscal 2006.
	[Ozone layer-damaging substances] • Total elimination of HCFC as a refrigerant in IC and LCD steppers shipped in fiscal 2008.	• Reduction of models utilising HCFC to 10% or fewer of total models shipped.
<b>Green procurement</b>	[Reduction in use of harmful chemical substances] • Completion of investigation of special hazardous substances in all consumer products (including sales promotion and RP items) by fiscal 2007, and major industrial products, by fiscal 2008.	• Performance investigation and management implemented for all consumer products and major industrial components of flagship products.
<b>Packaging and distribution</b>	[Greenhouse gas emissions] • Reduction in CO <sub>2</sub> emission, per t · km, of 5% compared with fiscal 2006 for Japanese domestic distribution, by fiscal 2008.	• Understand the CO <sub>2</sub> emission rate in Japanese domestic distribution.

### Workplace Environment

Theme	Midterm/long-term environmental targets	Targets for fiscal 2006
<b>Energy conservation (prevention of global warming)</b>	[Greenhouse gas emissions] • Reduction in annual emissions per net sales of 35% by fiscal 2011 and at least 29% by fiscal 2008, both compared to levels for fiscal 2002.	• Reduction of at least 25%
<b>Waste reduction</b>	[Zero emissions] • Maintenance of zero-emission systems at all plants and major Japanese manufacturing subsidiaries, with plans to expand to other plants from fiscal 2006. [Waste generation] • Reduction in amount of waste generated by at least 35% by fiscal 2008, compared with figures for fiscal 2001.	• Maintenance of the system. • Reduction of at least 25%
<b>Reduction in use of harmful chemical substances</b>	[Chlorinated organic solvents] • Elimination of chlorinated organic solvents in wash used at all workplaces, including major Japanese manufacturing subsidiaries by the end of fiscal 2006.	• Total elimination.
<b>Green procurement</b>	[Eco-procurement products] • Conformity with guidelines for at least 90% of all products by fiscal 2008.	• Conformity with guidelines for at least 80% of all products.
<b>ISO14001</b>	[Integration of certification] • Obtain integrated ISO14001 certification for Nikon Corporation by the end of fiscal 2006. Obtain integrated ISO14001 certification for Nikon and major Japanese manufacturing subsidiaries by the end of fiscal 2007.	• Obtain integrated ISO 14001 certification for Nikon Corporation.