

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 2003 are for Nikon Corporation only. Environmental costs (investments and expenses) are based on Nikon environmental targets and measures, as well as standards set forth in the Environmental Accounting Guideline (2002 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 "Results through Fiscal 2003" on 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 2003)

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, switch to hot-runner moulds, design products for use with eco-glass	-	109	109
	Containers and packaging	Reduction in use of plastics in packaging materials	-	0	0
	Green procurement	Operation of green procurement guide	-	3	3
	Product Environmental Accounts		-	112	112
Workplace environment	Energy conservation	Replacement of air conditioning systems, installation of inverters	96	7	103
	Resource recycling	Recycling of waste plastics, promotion of paper reuse, reducing water use	6	38	45
	Reduction in use of harmful chemical substances	Promotion of use of alternative solvents, refurbishment of wash machines	9	0	9
	Improvement of office	Improvement of office environmental performance	-	26	26
	Workplace Environmental Accounts		112	72	184
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	72	409	481
Management activities		ISO 14001 related (EMS management, workplace education), introduction of greenery	3	364	366
Total			187	957	1,143

Classified According to Guidelines of the Ministry of the Environment (Fiscal 2003)

Unit: millions of yen

Category	Details	Investment	Expenses	Total
Cost within business area		184	454	638
Pollution prevention costs	Operations management for gas and water emissions processing equipment, maintenance of noise and vibration-emitting facilities	72	226	298
Global environment conservation costs	Energy conservation, reduction in use of harmful chemical substances, control of dangerous substances	106	68	174
Resource recycling costs	Waste reduction (recycling of waste plastics, promotion of paper reuse), waste management, reducing water use	6	160	167
Upstream/Downstream costs	Containers and packaging measures (reduction of plastics in containers and packaging materials)	-	4	4
Management activities costs	ISO 14001 related (EMS management, workplace education)	-	387	387
R & D costs	Energy-saving design, switch to hot-runner moulds, design products for use with eco-glass	-	109	109
Social activity costs	Financial sponsorship for a wide range of activities	-	2	2
Environmental damage costs	Processing contaminated soil	3	0	3
Total		187	957	1,143

Scope of Data:
Nikon Corporation
(Non-consolidated)
Applicable Period: April 1,
2002 to March 31, 2003

* 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.

The Ongoing Challenge

In addition to trying to collect environmental cost data more quickly and efficiently, we are also aiming to improve our methods for gauging the effects of our activities, so that we can clearly illustrate the relationship between cost and effect. Furthermore, we are

considering more extensive environmental accounting training, and looking at ways in which environmental accounting procedures could be put into use by our manufacturing subsidiaries, whose environmental impact is relatively significant.

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 21 for Fiscal 2001”. Now we have the revised plan, “Nikon Environmental Action Plan 21 for

Fiscal 2003”, which separates the targets into 13 categories representing the product and workplace environments as shown below. The results achieved to fiscal 2002 are shown below.

The following evaluation encompasses fiscal years 2001 through 2003, as this is the final year of our midterm environmental plan.

The Nikon Environmental Action Plan for Fiscal 2003

Product Environment

Theme	Midterm environmental targets	Results through fiscal 2003	Evaluation
1. Energy conservation (prevention of global warming)	<ul style="list-style-type: none"> Improvement in energy efficiency of 30% or greater for functions on products newly released during fiscal 2003, compared with products sold since fiscal 1998. 	<ul style="list-style-type: none"> 11 out of 16 products selected from among products newly released during fiscal 2003 achieved a 30% or greater improvement in energy efficiency. Some examples are introduced on pages 14 and 15. 	△
2. Reduction in use of harmful chemical substances	<ul style="list-style-type: none"> Use of eco-glass in 90% or more of all optical designs in fiscal 2003. Begin employing lead-free solder in Printed Circuit Boards from fiscal 2003, progressing so that in fiscal 2006, 100% of PCBs in consumer products and 50% of PCBs in industrial products will be lead-free. 	<ul style="list-style-type: none"> 92% (78%). Unable to implement lead-free solder on PCBs in fiscal 2003, but positive results are expected from trial production and testing. 	○ △
3. Ozone layer protection	<ul style="list-style-type: none"> Reduction of models using ozone layer-damaging HCFC, used as refrigerant for IC and LCD steppers to fewer than 30% of all products shipped in fiscal 2003, with ultimate goal of total elimination of use of HCFC by the end of fiscal 2005. 	<ul style="list-style-type: none"> 38% (46%). 	△
4. Containers and packaging	<ul style="list-style-type: none"> 40% reduction in plastic containers used in consumer products in fiscal 2003, compared with figures for fiscal 1999. Total elimination of non-separable multi-material for new packaging from fiscal 2001 onward. 	<ul style="list-style-type: none"> Use of plastic containers increased by 95% (53% reduction). As in the previous period, no non-separable multi-materials were used. 	× ○
5. Green procurement	<ul style="list-style-type: none"> Increase suppliers' average environmental conservation evaluation by 20 points by the end of fiscal 2003, compared with fiscal 2000. 	<ul style="list-style-type: none"> Increased by 21 points, compared with fiscal 2000. (Increased by 7 points, compared with fiscal 2000.) 	○

Workplace Environment

Theme	Midterm environmental targets	Results through fiscal 2003	Evaluation
1. Energy conservation (prevention of global warming)	<ul style="list-style-type: none"> 20% or better reduction in energy consumption per net sales in fiscal 2003, compared with figures for fiscal 1999. 	<ul style="list-style-type: none"> Reduction rate fell to 13% in fiscal 2003, compared with fiscal 1999. (Reduction rate fell to 16% in fiscal 2002, compared with fiscal 1999.) 	△
2. Waste reduction	<ul style="list-style-type: none"> Develop zero-emission system for at least two plants by the end of fiscal 2003, and for all plants by the end of fiscal 2005. Boost waste recycling rate to at least 85% in fiscal 2003. Reduce amount of waste generation per net sales by at least 40% in fiscal 2003 compared with figures for fiscal 1999. 	<ul style="list-style-type: none"> All plants developed zero-emission systems in fiscal 2003. 89% (78%). Reduction rate fell to 31% in fiscal 2003, compared with fiscal 1999. (Reduction rate fell to 19% in fiscal 2002, compared with fiscal 1999.) 	○ ○ △
3. Reduction in use of harmful chemical substances	<ul style="list-style-type: none"> Reduce use of chlorinated organic solvents in wash by at least 70% in fiscal 2003, with goal of elimination of these solvents by the end of fiscal 2006. 	<ul style="list-style-type: none"> Reduction rate fell to 84% in fiscal 2003, compared with fiscal 1999. (Reduction rate fell to 62% in fiscal 2002, compared with fiscal 1999.) 	○
4. Green procurement	<ul style="list-style-type: none"> Increase the number of new or replacement ecological office supplies by at least 300 over fiscal 2001 level, by the end of fiscal 2003. 	<ul style="list-style-type: none"> 352 new ecological items added since fiscal 2000. (259 new ecological items added since fiscal 2000.) 	○

*In the section titled, “Results through fiscal 2003”, the data in parentheses are results through fiscal 2002.

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 2004” (from fiscal 2004 to fiscal 2006), which incorporates considerable revisions to the previous plan. The targets for fiscal 2004 are also displayed.

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

The Nikon Environmental Action Plan for Fiscal 2004

Product Environment

Theme	Midterm environmental targets	Targets for fiscal 2004
Energy conservation (prevention of global warming)	<ul style="list-style-type: none"> More than 30% improvement in overall energy efficiency of product models newly released during fiscal 2006, compared with figures for fiscal 2001. 	<ul style="list-style-type: none"> More than 10% improvement.
Reduction in use of harmful chemical substances	<ul style="list-style-type: none"> Use of eco-glass in 100% of new consumer product optical designs and in at least 95% of industrial products by fiscal 2006. 100% of printed circuit boards in consumer products and more than 50% of new printed circuit boards in industrial products shipped in the second half of fiscal 2006 will be lead-free. 	<ul style="list-style-type: none"> More than 95% in consumer products and more than 91% in industrial products. Some PCBs in both consumer and industrial products will be lead-free.
	<ul style="list-style-type: none"> Elimination of hexavalent chrome, lead, cadmium, mercury, PBB, PBDE and polyvinyl chloride from all consumer products shipped, excluding special materials, by the first half of fiscal 2006. 	<ul style="list-style-type: none"> Notable progress.
	<ul style="list-style-type: none"> Total elimination of HCFC as a refrigerant for IC and LCD steppers shipped by fiscal 2006. 	<ul style="list-style-type: none"> Reduction of models utilising HCFC to less than 15% of total models shipped.
	<ul style="list-style-type: none"> Reduced purchases of products containing hexavalent chrome, lead, cadmium, mercury, PBB, PBDE and polyvinyl chloride to less than 50% of total purchases by fiscal 2006. 	<ul style="list-style-type: none"> Identification, communication, clear indication and investigation of specific harmful chemical substances.
Containers and packaging	<ul style="list-style-type: none"> More than 40% reduction in use of plastic containers for consumer products by fiscal 2006, compared with fiscal 2001. 	<ul style="list-style-type: none"> More than 30% reduction.

Workplace Environment

Theme	Midterm environmental targets	Targets for fiscal 2004
Energy conservation (prevention of global warming)	<ul style="list-style-type: none"> More than 3% reduction of greenhouse gas emissions per net sales from fiscal 1998 to fiscal 2002 (converted for yearly average of CO₂ over 5 years) by fiscal 2006. 	<ul style="list-style-type: none"> More than 1% reduction.
Waste reduction	<ul style="list-style-type: none"> Development of a zero-emission system for major manufacturing subsidiaries by fiscal 2006. Reduction of the amount of waste discharge per net sales compared with figures for fiscal 2001 by at least 20% by fiscal 2006. 	<ul style="list-style-type: none"> At least one subsidiary. More than 5% reduction.
Reduction in use of harmful chemical substances	<ul style="list-style-type: none"> Total elimination of chlorinated organic solvents in wash, including at major manufacturing subsidiaries, by the end of fiscal 2006. 	<ul style="list-style-type: none"> More than 80% reduction, compared with fiscal 1999.
Green procurement	<ul style="list-style-type: none"> Introduction of “Nikon Green Purchasing Guidelines” in fiscal 2004, with at least 80% of purchases conforming to the “Nikon Green Purchasing Guidelines” by fiscal 2006. 	<ul style="list-style-type: none"> Introduction of “Nikon Green Purchasing Guidelines”, with at least 60% of purchases conforming to the guidelines.