

# Environmental Accounting

## Our Approach

“Environmental accounting” helps us to promote rational decision-making about our environmental measures. Specifically, we hope to utilize cost-benefit analyses of each of our measures in choosing the most effective measures. In addition, when we are able to assess the financial costs of environmental measures, it becomes possible to directly link them with our management strategies, thus strengthening our ability to have the best overall environmental results.

## Results and Future Goals

We conducted consolidated environmental accounting on a global scale for the entire Group, by standardizing the accounting methods as part of our corporate integration, and by designating environmental accounting officers within each of our companies, to create a system closely linked to our sites. With the aim of fully implementing our environmental policies through the practice of environmental accounting in the future, we have included environmental accounting items into our environmental objectives, to facilitate decision making and evaluation of results.

### Konica Minolta's approach

Use environmental accounting to objectively reflect the intangible aspects and results of our efforts into actual business operations.

**1** We go beyond analyzing the economic effects and reduction of environmental loads caused by our activities, assessing risks as well.

With environmental accounting, we calculate the effects and benefits from our investments and expenditures, not the revenues. At Konica Minolta, in addition to economic benefits and environmental loads reduction effects, we have established criteria and assessment methods that allow us to calculate risks and the “risk reduction effect” of our actions. The “risk reduction effect” is an estimate of the environmental impacts in the absence of a certain pollution-prevention policy, and is one way to express “intangible effects” in monetary terms.

### Assessing Risk Reduction Effects

Assessing the “risk reduction effect” of our global warming prevention measures (see page 19) and chemicals management (see page 16)

	Global warming prevention measures	Chemical risk reduction
Policies and activities implemented in fiscal 2003	Worldwide CO <sub>2</sub> reductions, based on LCA* for all product categories	Reductions in atmospheric emissions of dichloromethane, ethyl acetate, methanol and DMF
Environmental effect	CO <sub>2</sub> emissions reduced by 30,000 tons	Emissions reduced by 50 tons
Monetary equivalent of reduced risk	302 million yen	160 million yen

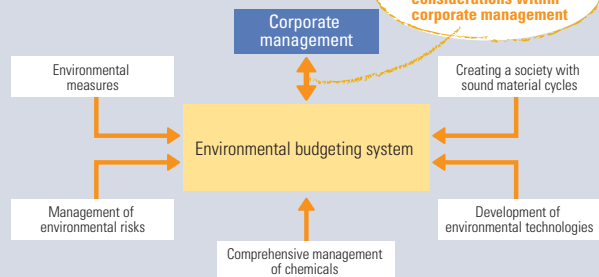
\*Based on internal calculation criteria based on the “Environmental Accounting Guidebook II” (Ministry of the Environment, March 2001). \*LCA = life cycle assessment

**2** To utilize environmental accounts more effectively, we have introduced our own environmental budgeting system.

We have introduced our own environmental budgeting system, which we use in budgeting for the entire company, to ensure that the budget for our environmental policies has been incorporated appropriately and thoroughly. By including environment-related costs, investments, effects and risk within our budgets, we can ensure that our environmental accounting framework is proactive, bringing us closer to the ultimate goal of environmental accounting—rational decision-making on environmental policies.

### Importance of Establishing Our Environmental Budgeting System

Budgeting makes it easier to include these considerations within corporate management

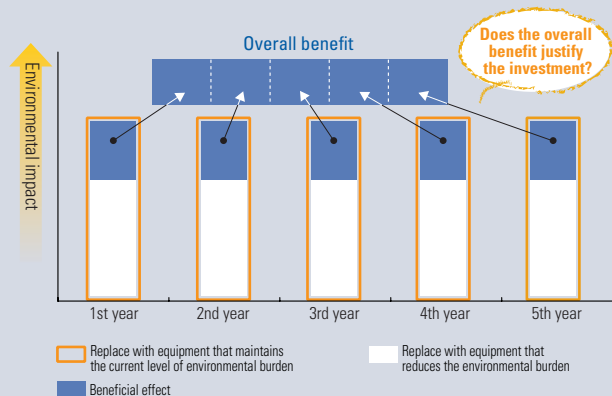


### Calculating Overall Benefits

We attempt to assess even the long-term environmental effects of new products and plant investments, which can be difficult to determine in the short term.

We feel we cannot assess the benefits of introducing environmentally sound products or equipment upgrades only by calculating the effects over a one-year period. At Konica Minolta, we therefore calculate the total improvement in terms of the cumulative effects over five years, and use these calculations to evaluate the benefits of our investments.

### Calculating the “Overall Benefit” of Equipment Upgrades



■ Environmental Accounts: Results for Fiscal 2003 and Budget for Fiscal 2004

Units: million yen

Types of environmental measures		Fiscal 2003 Results				Fiscal 2004 Budget	
		Investment costs	Expenses	Economic benefit		Investment costs	Expenses
				Fiscal 2003	Fiscal 2004-07		
Costs within business area	Pollution prevention	483	1,337	191	999	1,376	1,484
	Global warming prevention	192	1,927	1,143	944	193	2,104
	Resource recycling	303	1,914	7,499	1,258	259	2,124
Sub-total		978	5,178	8,833	3,200	1,827	5,711
Upstream-downstream costs		39	3,366	2,879	65	29	1,995
Management costs		20	1,332	2	1	9	928
Research & development costs		0	4,466	553	1,599	91	4,777
Social contribution costs		0	24	0	0	0	19
Environmental damage costs		0	97	0	0	4	51
Other costs		0	55	0	0	0	0
Total		1,038	14,517	12,267	4,866	1,961	13,483

\*This budget does not cover overseas affiliate companies.

■ Fiscal 2003 Results: Environmental Protection Benefits

[ Effect from business area cost and upstream and downstream costs ]

	Type of benefit	Fiscal 2003
Manufacturing	Reduction in water usage	475,833 tons
	Reduction in electricity usage	17,283 MWh
	Reduction in natural gas usage	4,312 thousand m <sup>3</sup>
	Reduction in heavy oil usage	1,769 kiloliters
	Reduction in materials usage	776 tons
	External recycling and reuse of waste	20,863 tons
Sales	Reduction in packing materials	325 tons
	Reuse and recycling of used products	3,744 tons

[ Effect from research & development costs ]

	Type of benefit	Overall benefit
Manufacturing	Reduction in harmful chemicals	744 tons
Use	Reduction in electricity usage	98,207 MWh

■ Fiscal 2003 Results: Customer Benefits

[ Benefits from research & development costs ]

Units: million yen

Type of benefit	Fiscal 2003	Overall benefit
Reduction in electricity usage	524	1,767

■ Companies Included in Results for Fiscal 2003

The eight main Konica Minolta companies

Konica Minolta Holdings, Inc. / Konica Minolta Business Technologies, Inc. / Konica Minolta Opto, Inc. / Konica Minolta Photo Imaging, Inc. / Konica Minolta Medical & Graphic, Inc. / Konica Minolta Sensing, Inc. / Konica Minolta Technology Center, Inc. / Konica Minolta Business Expert, Inc.

32 Japanese affiliate companies

Konica Minolta Technoproducts Co., Ltd. / Konica Minolta Supplies Manufacturing Co., Ltd. / Miki Minolta Industries Co., Ltd. / Sankei Precision Products Co., Ltd. / Aoi Camera Co., Ltd. / Konica Minolta Business Solutions Japan Co., Ltd. / Toyohashi Precision Products Co., Ltd. / Konica Minolta Repro Co., Ltd. / Konica Minolta Medical & Graphic Technosupport Co., Ltd. / Konica Minolta Opto Products Co., Ltd. / Konica Minolta Components Co., Ltd. / Nankai Optical Co., Ltd. / MYG Disk Co., Ltd. / Konica Service Co., Ltd. / Minolta Camera Service Co., Ltd. / Okayama Minolta Seimitsu Co., Ltd. / Konica Minolta Planetarium Co., Ltd. / Kansai Optim Co., Ltd. / Konica Minolta Packaging Co., Ltd. / Konica Minolta Chemical Co., Ltd. / Konica Minolta Engineering Co., Ltd. / Konica Information Systems Corporation / Famous Co., Ltd. / Konica Minolta Logistics Co., Ltd. / Konica Minolta Sogo Services Co., Ltd. / Kyoritsu Medical Co., Ltd. / Konica Medical Co., Ltd. / Konica Minolta Graphic Imaging Co., Ltd. / Konica Minolta Marketing Corporation / Konica Minolta Photo Solutions Co., Ltd. / Konica Minolta ID System Co., Ltd. / Konica Minolta ID Imaging Co., Ltd.

19 overseas affiliate companies

Konica Minolta Business Technologies Manufacturing (HK) Ltd. / Konica Minolta Business Solutions (Wuhan) Co., Ltd. / Konica Minolta Business Solutions Europe GmbH / Konica Minolta Business Solutions Deutschland GmbH / Konica Minolta Business Solutions (UK) Ltd. / Minolta Advance Technology, Inc. / Konica Supplies Manufacturing U.S.A., Inc. / Konica Minolta Supplies Manufacturing France S.A.S. / Konica Minolta Photo Imaging Europe GmbH / Konica Minolta Photo Imaging France S.A.S. / Konica Minolta Manufacturing U.S.A. / Konica Minolta Photochem (Thailand) Co., Ltd. / Konica Minolta Optical Products (Shanghai) Co., Ltd. / Konica Minolta Optical Technologies (Shanghai) Co., Ltd. / Konica Minolta Precision Engineering Malaysia Sdn. Bhd. / Minolta Malaysia Sdn. Bhd. / Konica Minolta Opto (Dalian) Co., Ltd. / Konica Minolta Medical Imaging U.S.A., Inc. / Konica Minolta Graphic Imaging U.S.A., Inc.