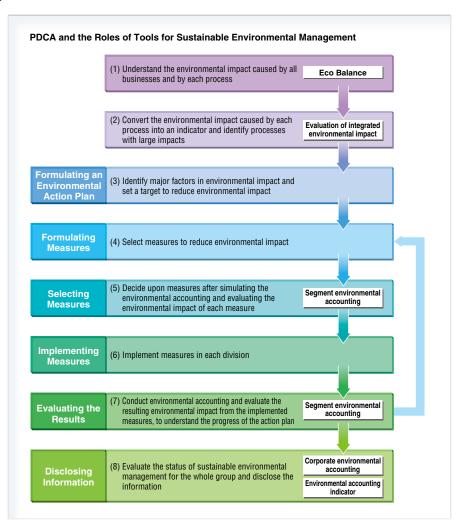
Action plans are mapped out and sustainable environmental management is evaluated using Eco Balance, integrated environmental impact, and environmental accounting as tools.

The Ricoh Group has an extra-longterm environmental vision to reduce environmental impact generated by the advanced nations to one-eighth the fiscal 2000 levels by 2050. We are striving to achieve this target by improving the level of sustainable environmental management. Improvements in the sustainable environmental management level mean that environmental impact is reduced while economic effects are enhanced as a result of promoting environmental conservation activities. To achieve this, it is necessary to map out appropriate action plans to reduce environmental impact caused by all our businesses, consider and implement effective measures, and establish a scheme to evaluate and disclose the results. The Ricoh Group is operating PDCA, evaluating action plans, measures, and activity results, using Eco Balance¹, integrated environmental impact2, and environmental accountings as tools. (1&2. See page 56.)



Understanding the Environmental Impact Caused by All Our Businesses Using Eco Balance and Integrated Environmental Impact Evaluation

The Ricoh Group obtains information on the environmental impact caused by all its businesses and by each process, using Eco Balance and integrated environmental impact as tools, to effectively reduce the environmental impact generated by processes with large environmental impact. First, Eco Balance is prepared based upon input and output data for each process and for each environmentally-sensitive substance. The data are collected by the sustainable environmental management information system1. At this stage, however, the significance of the environmental impact generated by each process cannot be compared because each process employs different environmentallysensitive substances. Therefore, an integrated analysis method is used to convert the total environmental impact caused by business activities—including impact upon human health,

depletion of resources, and impact upon ecosystems/biodiversity—into indicators to evaluate the integrated environmental impact and identify processes generating large environmental loads. The Ricoh Group has set the Year 2013 Long-Term Environmental Goals² and has prepared an environmental action plan³ based upon its evaluation of the integrated environmental impact that is identified by Eco Balance.

1. See page 53. (2. See pages 19 and 20.) (3. See pages 21 and 23.)

Selecting Measures by Environmental Accounting and Evaluating Activity Results

Reducing environmental impact using measures that will lead to the creation of benefits is crucial to promoting sustainable environmental management. The Ricoh Group uses environmental accounting to determine what measures should be taken for what processes and for what operations so that the maximum effect can be obtained. A number of improvement plans to reduce the identified environmental impact are examined in consideration of developments in society and laws/regulations and competition to improve processes generating large environmental impact identified through evaluation based upon Eco Balance and the integrated environmental impact. Then, using segment environmental accounting, we simulate how much environmental impact is reduced and how much profit is created compared with the costs for each measure, while surveying the results of the individual measures.

Eco Balance of the Ricoh Group

The Ricoh Group introduced the concept of Eco Balance in fiscal 1998 to clarify the environmental impact caused by all its businesses and effectively reduce it. Currently, the Ricoh Group is calculating the integrated environmental impact using EPS, which is an integrated analysis method developed by IVL Swedish Environmental Research Institute Ltd. We adopted EPS because we found that its characteristics agree with the Ricoh Group's ideas about environmental impact caused by the collection of resources and the Comet Circle*, Ricoh's original concept aiming at establishing a sustainable society, after evaluating various methods adopted at home and/or abroad. We have mapped out environmental action plans based upon the concept of Eco Balance since fiscal 2002 and have applied the concept in the formulation of long-term environmental goals since fiscal 2005.

* See page 18.

Ricoh Group's environmental accounting

The Ricoh Group disclosed its environmental accounting for the first time in 1999. Subsequently, the Group introduced corporate environmental accounting to determine the status of sustainable environmental management and disclose related information, as well as segment environmental accounting etc., that are used to prepare environmental action plans, select measures, and verify achievements. Thus efforts are being made to establish environmental accounting as a tool for sustainable environmental management.

Flow of Eco Balance and Evaluation of Integrated Environmental Impact (1) Collection of data by the environmental impact information system ■ Data on offices ■ Data on products Types and volumes of parts and raw materials Data on energy consumption and emissions of CO2, NOx, SOx, etc and power consumption by customers (2) Understanding of Eco Balance Based upon the data collected in (1), calculate the volumes of substances collected from the global environment in relation to the Ricoh Group's bus ess and the volumes of substances emitted into the global environmen (3) Evaluation of integrated environmental impact Based upon the volumes of substances obtained in (2), convert different types of environmental impact generated by global warming gases, chemical substances, etc., into one indicator, to determine the environmental impact (4) Analysis of the evaluation results Analyze the environmental impact that was determined in (3) and clarify its relationship with our business activities Selection of priority areas and measures Preparation of an environmental action plan

Corporate Environmental Accounting

The Ricoh Group calculates and announces the cost spent in its business activities for environmental conservation, as well as their conservation and economic effects, as quantitatively as possible. The Ricoh Group prepares such data in compliance with the Environmental Accounting Guidelines set by the Japanese Ministry of the Environment, by taking the necessary portion from the Eco Balance data and calculating the cost and effect (in quantity and monetary value) of its environmental conservation activities based on its own formulas and indicators. The calculated results are verified by a thirdparty organization. In fiscal 2007, the Group started disclosing environmental impact from a viewpoint of Eco Balance, in addition to direct environmental impact (environmental impact at business sites).

Segment Environmental Accounting

This is an environmental accounting tool to forecast the costs and environmental conservation/economic effects of individual investment activities and projects for environmental conservation from among all processes of operations and to evaluate their results, in order to judge the effectiveness of respective measures.

Material Flow Cost Accounting

This is a method used to detect processes that can be improved cost-effectively by analyzing loss in each process of the material flow of products. The Ricoh Group has introduced this accounting into some of the business areas on a trial basis and found that it is particularly effective in sectors with large amounts of material loss.

Eco Balance

Eco Balance means the preparation of a list of input and output data on environmental impact to identify, quantitatively measure, and report environmental impact caused by companies; or such a list itself. It is based upon the same concept as LCA*, and direct environmental impact as well as indirect environmental impact is calculated.

* See page 25.

Integrated Environmental Impact

This is an integrated indicator shown in ELUs (environmental load units), incorporating various types of environmental impact caused by environmental load. Substances that put a load on the environment cause various phenomena including global warming and air pollution, which negatively affect the ecosystem and human health. In addition to these, the depletion of resources is taken into consideration, and all these

factors are incorporated into one single indicator that represents the significance of environmental impact as a whole. Determining the environmental load caused by all our businesses and calculating the integrated environmental impact allow us to formulate a specific plan to reduce them. A method called EPS, which was developed by IVL Swedish Environmental Research Institute Ltd., is used for calculation.