

The Sustainable Environmental Management Information System supports the decision-making process for sustainable environmental management and promotes environmentally-friendly design.

The Sustainable Environmental Management Information System is designed to identify and promote the progress of sustainable environmental management. The system utilizes the Environmental Impact Information System to collect and process data on environmental impact and the Environmental Accounting System to collect and process data on environmental costs and effects. The collected data are processed and analyzed to identify the integrated environmental impact ¹ of overall operations; draw up environmental action plans ²; support decision-making in sustainable environmental management; promote environmentally-friendly design; improve activities by each division; process Corporate Environmental Accounting ³; and disclose information to the public.

1. See page 59. 2. See page 17. 3. See page 61.

Environmental Impact Information System

This system collects and processes data on environmental impact caused by each operational process—including procurement, design, manufacturing, transportation/sales, use, maintenance/services, and collection/recycling—as well as by overall operations. Besides identifying the environmental impact of overall operations, the system automatically collects environmental data from the operational flow of each process, and such data is used to support PDCA in environmental improvement activities carried out at each process. Efforts are being made to improve the system so that it can be used more easily for data analyses and improvement activities as well as for the expansion of the items and range of collected data and improvement in precision. In fiscal 2008, we completed a system to obtain information on CO₂ emissions from the transportation phase on a global scale ¹ as well as a system to deal with the REACH Regulation ².

1. See page 50. 2. See pages 28, 29 and 30.

Environmental Accounting System

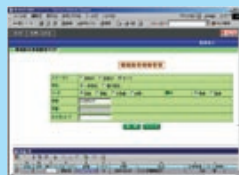
This system enables “Corporate Environmental Accounting” in a timely manner by collecting data on environmental conservation effects obtained from the Environmental Impact Information System and environmental cost data obtained from the accounting system, and processing this into sustainable environmental management indicators*.

* See pages 5 and 6.

Sustainable Environmental Management Information System

Environmental Impact Information System

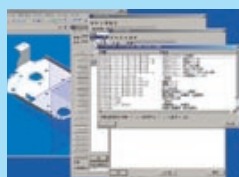
Procurement



This system promotes green procurement in accordance with environmental action plans and information on laws and regulations. The system collects information on weight, component substances, and chemical substances in raw materials and parts by utilizing a network of suppliers.



Design



This is a system to select the most suitable materials and parts from the viewpoint of environmental conservation and costs in order to promote environmentally-friendly design. This CAD system works in tandem with the procurement management system and the chemical substance control system.



Manufacturing



This system identifies the environmental impact caused by operations. It collects data on power consumption, the quantity of chemical substances used, CO₂ emissions, and waste discharged by all offices and sites, including production sites and non-production sites, such as the Ricoh Head Office.



Transportation/Marketing



This system collects data on power consumption as well as the amount of gasoline used and waste generated in order to reduce the environmental impact caused by logistics sites, transportation processes, and sales sites. The collected data are used to support the PDCA cycle of EMS at each site.



Use



This is a system to share data about environmental performances by product (power consumption, duplex copying productivity, recyclable design, etc.) and use such data for environmentally-friendly design and information disclosure in catalogs. This system compiles environmental impact information by product based on design data.



Maintenance/Services



This is a system to identify and analyze environmental impact caused by maintenance work on products. The system collects related information from the database of product maintenance records and the database of power and gasoline consumed in the maintenance sites.

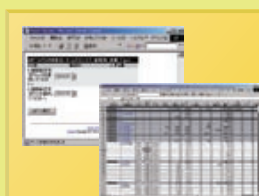
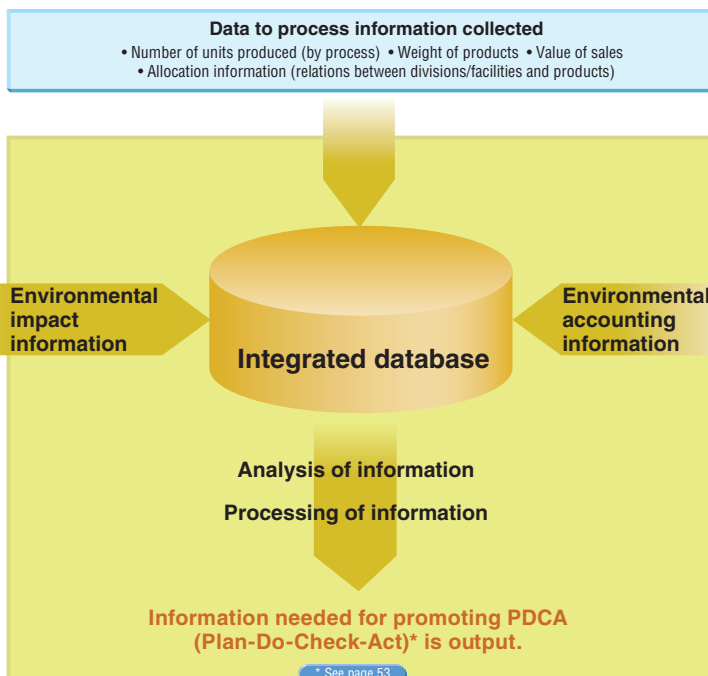


Collection/Recycling



This system provides an information infrastructure to utilize plans that were prepared at the design stage for the reuse or recycling of collected products and to store detailed information on the resource recovery process.





Understanding Integrated Environmental Impact

Using a sustainable environmental management information system, we collect extensive and diversified data covering all the operations of the Ricoh Group, allowing us to calculate the integrated environmental impact.

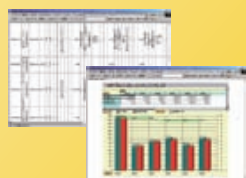
See pages 57 to 60.



Preparing and Managing Environmental Action Plans

An action plan is drawn up based on the integrated environmental impact calculated by the sustainable environmental management information system. Reduction targets are also established in the plan. We identify problems and take actions to address them as soon as possible by introducing automatic aggregation, continuously monitoring the results, and improving the precision of the data collected in each process.

See pages 17 and 18.



Environmentally-Friendly Design

The sustainable environmental management information system is used together with our product lifecycle management tool to enable designers to incorporate environmental performance into product design in areas such as energy/resource conservation, the controlling of chemical substances, and LCA design.

See page 20.



Information Disclosure

Environmental information on products is disclosed to customers, suppliers, recycling companies and so forth on our web site and environmental labels.

See page 20.

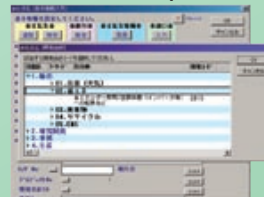
Environmental Accounting System

Accounting System

A space to enter the environmental accounting code was added to the accounting system to determine the cost of environmental conservation. Using information compiled on a daily basis makes it possible to calculate the cost of environmental conservation.



Environmental expenses



Environmental capital investment



Aggregate Database of Environment Accounting

Data on the economic benefits of environmental conservation activities and the environmental conservation costs/economic benefits for each company in the Ricoh Group are input to the aggregate database of environmental accounting on a quarterly or biannual basis to calculate these figures every six months.



環境会計集計DB Environmental Accounting Database

