

Environmental Management System (EMS)

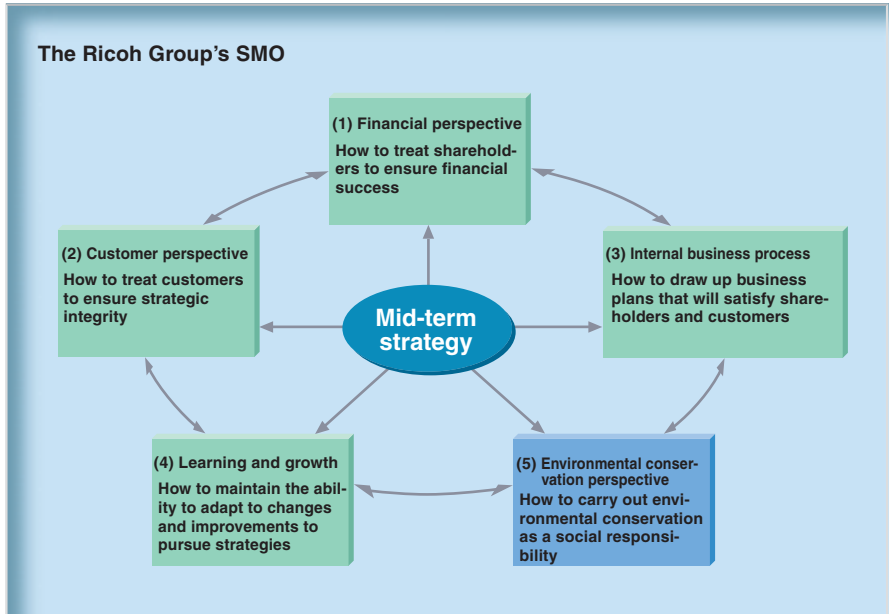
Enhance the Plan-Do-Check-Action (PDCA) cycle by integrating the item “environment” into the Strategic Management by Objectives (SMO)

The Ricoh Group’s EMS is an important tool in realizing sustainable management. By integrating the item “environment” into SMO for the Group as a whole, the Ricoh Group can evaluate the activities of all Group business sites and divisions. Furthermore, the Group uses the PDCA cycle for the Group as a whole as well as each business site and division to continuously improve its sustainable management.

* The SMO system with the additional environmental item is applied to areas that are not shown in the figure, the Environmental Management System (see page 19).

Groupwide EMS

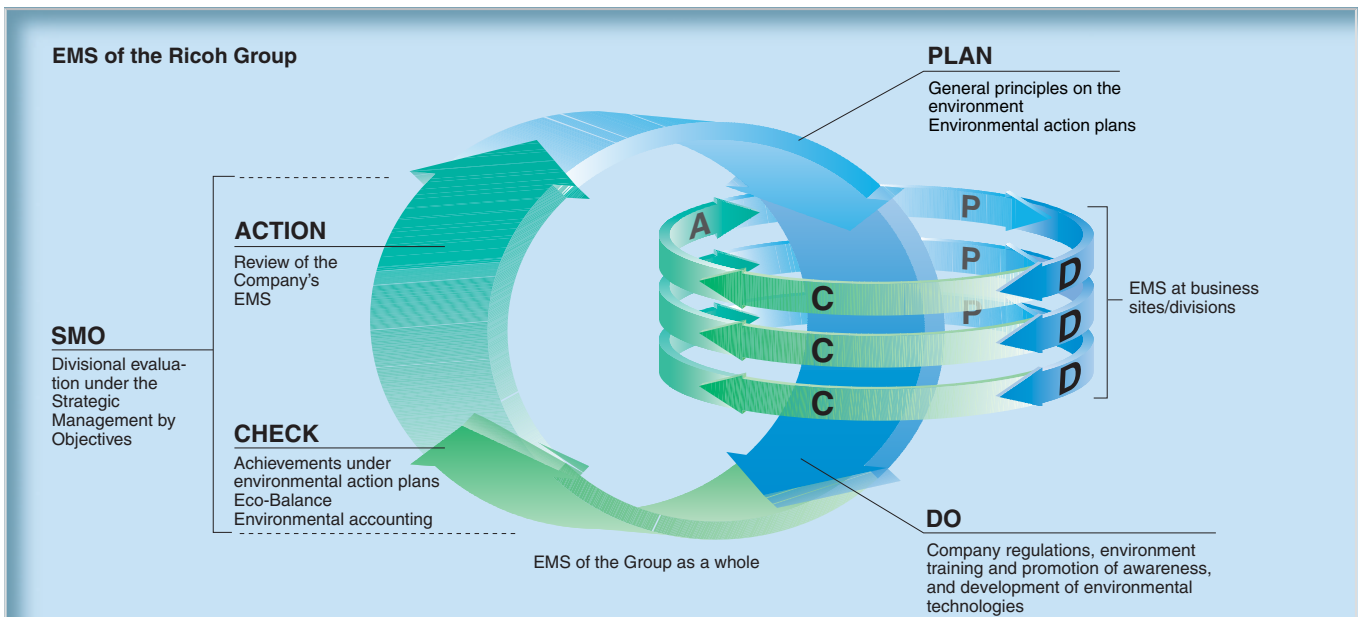
Ricoh regards environmental conservation activities as its duty as a global and corporate citizen. However, such activities must be beneficial for the Company to continue them. Ricoh therefore uses an environmental accounting system¹ to identify environmental cost-effectiveness. Fur-



thermore, Ricoh introduced SMO in 1999 to clarify evaluation standards for environmental conservation activities that are used in divisional performance evaluations. This system is based on the Balanced Scorecard system, a performance management system developed in the 1990s in the United States and characterized by the use of four perspectives. Ricoh has added a specific environmental conservation perspective to the system and is

developing it to make the PDCA cycle work more efficiently throughout the entire Ricoh Group. For this purpose, Ricoh developed SMO throughout the entire Group in several phases and made sure through management reviews² that the environmental action plans are achieved throughout the Group.

1. See pages 17, 36, 40, 48, 50, and 73.
2. The review conducted by the management to ensure appropriateness and efficiency of the environmental management system



ISO 14001 Certified Divisions and Business Sites of the Ricoh Group (April 2001—March 2002)

See *The Ricoh Group Sustainability Report 2001* for status as of March 2001 and earlier. (<http://www.ricoh.co.jp/ecology/e-report/index2001.html>)

Name of Business Site	Location	Assessing/ Registering Organization	Date of Certification				
				RICOH DEUTSCHLAND GMBH	Germany	TUV	Dec. 7, 2001
RICOH CORPORATION (SAN JOSE)	U.S.A.	BSI	April 18, 2001	Ricoh Co., Ltd. (Japanese Sales Division and its sales companies)	Japan	JQA	Dec. 14, 2001
NRG Italia S.p.A.	Italy	DNV	May 23, 2001	RICOH HUNGARY KFT	Hungary	BVQI	Dec. 14, 2001
Ricoh Electronic Technology (China) Co., Ltd.	China	SCEMS	May 23, 2001	NRG FRANCE SA	France	AFAQ	Dec. 18, 2001
Gestetner Denmark a/s	Denmark	DS CERTIFICATION	June 11, 2001	GESTETNER (ISRAEL) LTD.	Israel	IQC	Dec. 31, 2001
N.R.G. COMUNICACIONES, S.A.	Spain	AENOR	June 11, 2001	RICOH ITALIA SPA	Italy	RINA	Jan. 25, 2002
Ricoh New Zealand Limited	New Zealand	TeLaRC	June 14, 2001	Ricoh Australia Pty Ltd	Australia	QAS	Feb. 8, 2002
NRG Deutschland GmbH	Germany	TUV	July 20, 2001	Ricoh Canada Inc.	Canada	SGS	Feb. 12, 2002
Gestetner Svenska AB	Sweden	DNV	Aug. 23, 2001	Ricoh (UK) Limited	U.K.	BSI	Mar. 4, 2002
Ricoh Hong Kong Limited	Hong Kong	SGS	Sept. 11, 2001	RICOH FRANCE SA	France	BVQI	Mar. 7, 2002
RICOH BELGIUM	Belgium	BVQI	Sept. 20, 2001	NRG Ireland Limited	Ireland	BSI	Mar. 15, 2002
Ricoh Nederland B.V.	The Netherlands	BVQI	Sept. 25, 2001	Ricoh Norge AS	Norway	Nemko	Mar. 25, 2002
NRG Group UK Limited	U.K.	BSI	Nov. 15, 2001	RICOH ESPANA, S.A.	Spain	BVQI	Mar. 27, 2002
Ricoh Europe B.V.	The Netherlands	BVQI	Nov. 20, 2001	Ricoh Europe BV, Sucursal em Portugal	Portugal	PJR	Mar. 28, 2002
Ricoh Leasing Company	Japan	JQA	Nov. 30, 2001	Ricoh POLSKA Sp. zo. o.	Poland	BVQI	Mar. 29, 2002
RICOH Austria Ges.m.b.H.	Austria	BVQI	Dec. 7, 2001	RICOH (SINGAPORE) PTE LTD	Singapore	BSI	April 18, 2002*

* Assessment was completed by the end of March 2002 and an informal certification was received, but the certification issuance date was April 2002.

EMS's for Business Sites and Divisions

The Ricoh Group, as a global company successively adopted SMO and set up EMS at its business sites and divisions pursuant to ISO 14001, the internationally recognized certification. Furthermore, the Group began having its business sites ISO 14001 certified in order to establish a Groupwide environmental management system with lower costs. Starting with Ricoh's Gotemba Plant*, which was certified on December 25, 1995, 35 of the Ricoh Group's 40 bases have been certified to date, and 789 out of 794 business sites in regions covered by the Group were certified by the end of fiscal 2001. The Group is planning the same for the remaining five bases and five sites by November 2002.

* The first business site to receive certification from a Japanese organization.

Development of EMS-Oriented Activities

The Ricoh Group is developing EMS-oriented activities, taking division-specific environmental aspects into account, as illustrated on the next page. For example, nonproduction sites engage in activities that result in establishing EMS, such as designing products with less environmental impact¹ and recommending them to customers², as well as practicing energy conservation and conducting zero waste campaigns at offices.

1. See page 31.

2. See pages 32, 41, and 47.

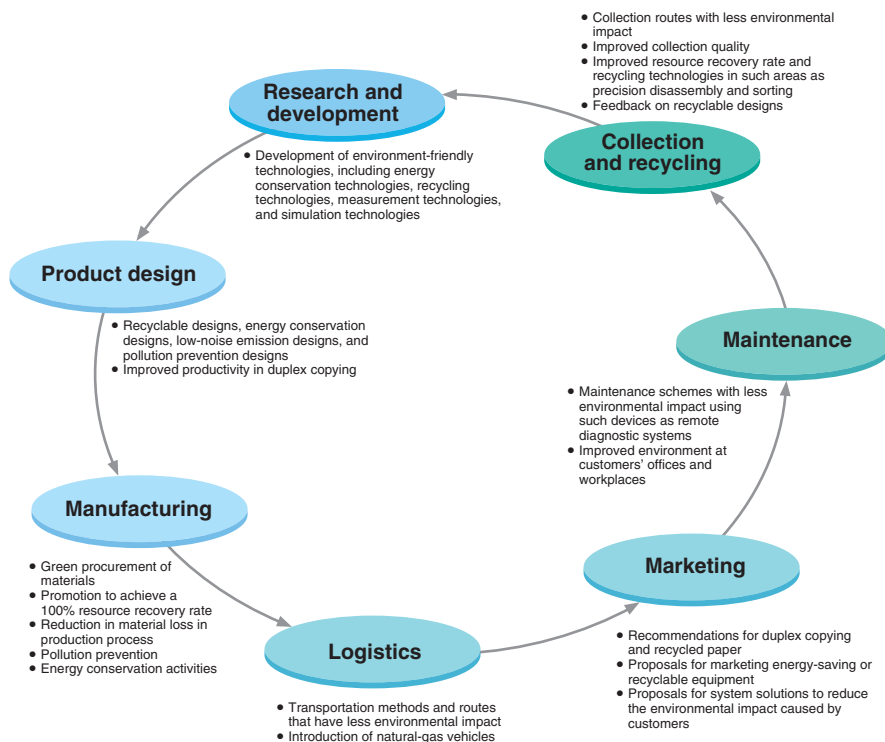
Environmental Audits

The Ricoh Group's internal environmental audits are carried out by internal auditors at each business site, and the results are given to the top management of the sites audited to make the PDCA cycle work more efficiently.

Risk Management

The Ricoh Group acquired ISO 14001 certification at its major production sites around the world and has established a risk management system based on this. All accidents are handled in a socially responsible manner and reported to the top management, following decisions made at environmental meetings around the world. Furthermore, appropriate countermeasures are taken, such as prompt information disclosure to affected communities.

Divisional Activities for Environmental Management



● Examples of Risk Management from around the World

Ricoh Group business sites are addressing the problems of environmentally sensitive substances by reducing their usage, installing contamination- and disaster-preventing equipment, and training personnel.

Safety Monitoring System

The safety control system established at the Yashiro Plant uses sensors and other devices throughout the facility to confirm its safety. In an emergency, appropriate instructions are immediately given from the control room, accompanied by alarms and warnings on monitors.



The safety control room at Ricoh's Yashiro Plant

Control of Environmentally Sensitive Substances

Plants that use environmentally sensitive substances store them in containers over a basin to prevent them from leaking into the soil.



The chemical storehouse of Ricoh Industrie France

Abolishment of Solvent-Based Paint

Ricoh Industrie France S.A. has developed an organic water-based paint to replace its solvent-based paint. The use of the water-based paint lowered the emissions of volatile organic compounds into the air by 83%. As a result, annual cost dropped approximately €27,000, or ¥2.8 million.

Preventing Pollution during a Fire

Ricoh Industrie France constructed a basin to collect water used in extinguishing fires and chemical substances, including toner, that may have mixed with the water to prevent them from leaking out of the plant and into the environment if the plant catches fire. The collected water is then pumped to a water treatment plant.



Water pool for fire fighting at Ricoh Industrie France

Training to Prevent Pollution and Deal with Emergencies

Ricoh Group plants pay careful attention to safety, especially when handling hazardous material, by engaging in 5S activities. 5S stands for five Japanese words that begin with the letter *s*: *seiri* (organizing or arranging things), *seiton* (putting things in order), *seiketsu* (cleanliness), *seiso* (cleaning), and *shitsuke* (discipline). Each plant prepares for emergencies by conducting annual training programs for pollution and disaster prevention.



Disaster drill at Ricoh Asia Industry Ltd. (RAI) in China