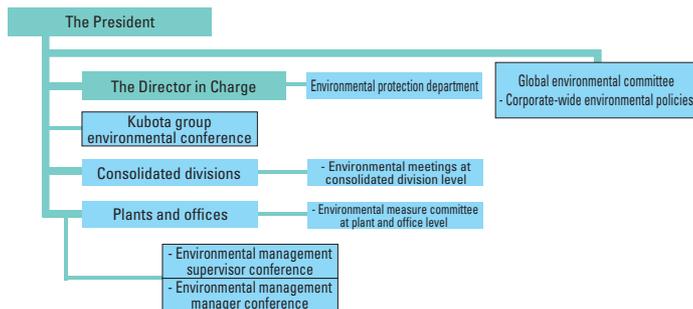


# Environmental Management

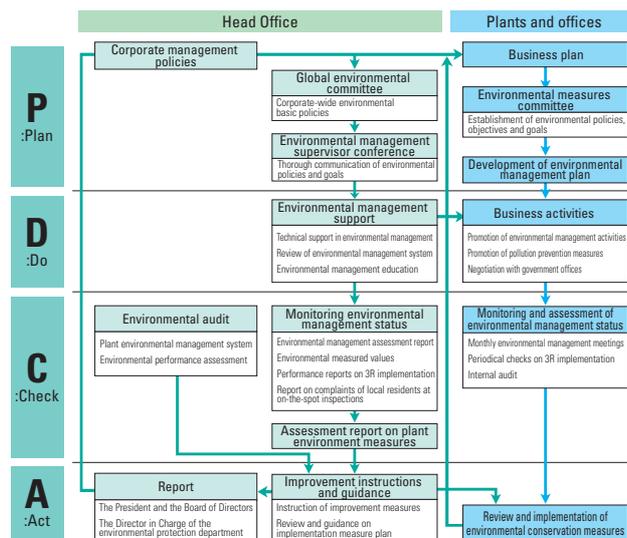
## Environmental Management Promotion Framework

Kubota installed the environmental protection department under management of the Director in Charge to promote environmental conservation measures and environmental audit, and the environmental management section in factories and plants to handle issues related to the local and global environment. The global environment committee discusses and reviews the corporate-wide environmental policies.



## Kubota Environmental Management System

Since 1972, Kubota has been collectively promoting environmental management as part of its total pollution control (TPC). In 1995, we adopted an environmental management system called the Kubota Environmental Management System (KEMS) that is ISO 14001 compliant. All of our domestic manufacturing establishments acquired the ISO 14001 certificates by the end of FY2000, and continue to maintain the ISO certified status to the present day.



## Internal Audit and Office Study Team

The Central Pollution Patrol System was started in 1973, and re-formed into the ISO 14001 compliant audit system in 1994 to reinforce audit procedures. The system was renamed the "environment office study team" in FY2003, and is in charge of environmental risk extractions focusing on the ground-level opinions and audit implementation with issue-solving approach. For those matters extracted at the study team, each plant or office works to develop plans to ensure proper improvement. In FY2004, with an emphasis on the law of compliance, we set the VOC countermeasures as our common priority issue, and reviewed the management status of deodorizing equipment and local exhaust system for organic solvent. The items requiring improvement decreased drastically from the prior year, which shows that an improvement has been made, and especially, the matters regarding compliance with the environment-related laws were reduced by half.

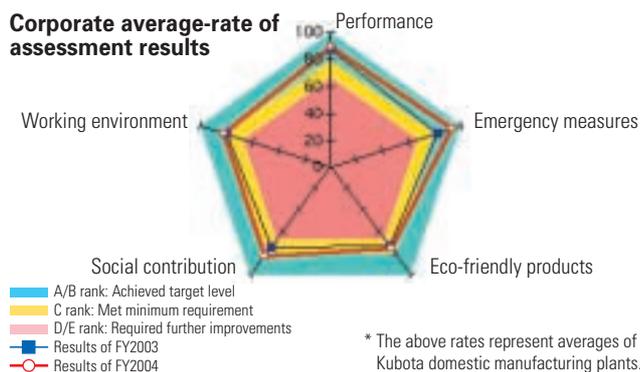
The scene of environmental discussion meeting in each plant



We will continue to review our assessment standards and promote thorough implementation of audit and its enhancement in order to upgrade environmental management activities of the Kubota Group.

The number of evaluation items and the items requiring improvement selected by each environment office study team

Evaluation items	Items requiring improvement	
	FY2003	FY2004
1. Compliance with environment-related laws	35	17
2. Environmental performance	56	58
3. Emergency measures, and their education and training	10	13
4. Eco-friendly products	56	11
5. Social contribution and accountability	17	3
6. Working environment management	40	13
Total	214	115



## Status of ISO 14001 Certification Acquisitions

All of Kubota's domestic plants acquired the ISO 14001 certificates by FY2000. Currently, Kubota's subsidiaries have been working on the acquisition of the ISO 14001 certificate.

### Kubota's domestic plants and offices

No.	Plants and offices	Organization included in the ISO certification	Main products	ISO organizations	Certificate numbers	Date of Acquisition
1	Hanshin plant	- Marushima branch - Nagasu branch	Ductile iron pipes, rolling mill rolls and potassium titanate	LRQA	YKA 0772498	March 5, 1999
2	Shin-yodogawa factory in Hanshin plant		Reinforced plastic composite tubes	JCQA	JCQA-E-0114	January 11, 2000
3	Keiyo plant (Funabashi/ Ichikawa)	- Distribution center - Gyotoku processing center	Ductile iron pipes, spiral welded steel pipes and thermal transfer pipes	LRQA	YKA 0771890	July 16, 1998
4	Sakai PVC pipe plant	Ishizu-nishi factory	Plastic pipes and fittings	JUSE	JUSE-EG-019	July 23, 1999
5	Odawara plant		Plastic pipes and fittings	JUSE	JUSE-EG-028	January 19, 2000
6	Hirakata plant	- Kubota Met Hirakata Corp. - Kubota Machinery and Construction Corporation - Kubota Valve Maintenance Corporation - Kubota System Control Co., Ltd.	Steel castings, pumps, valves, construction machinery and new materials relating to steel/ceramics	LRQA	JBC 0772527	September 17, 1999
7	Okajima plant	Ohtake ShellCo Corp.	Industrial cast iron products, ductile tunnel segments, cast-iron soil pipes and other cast iron products	JICQA	E105	December 22, 1999
8	Sakai plant	Sakai coastal plant	Engines and farm machinery	LRQA	JBC 0772673	March 10, 2000
9	Utsunomiya plant		Transplanters and harvesting equipment	LRQA	YKA 0772846	December 8, 2000
10	Tsukuba plant		Engines and farm machinery	LRQA	YKA 0771757	November 28, 1997
11	Kyuhoji business center	- Kubota Retex Corp. - Kubota Membrane Corp.	Scales, CAD systems, waste grinding/sorting/resourcing plant and submerged membrane units	DNV	1379-1999-AE-KOB-RvA Rev.1	March 19, 1999
12	Ryugasaki plant	Kubota Vending Services Co., Ltd.	Vending machines	DNV	1273-1998-AE-KOB-RvA	November 13, 1998
13	Shiga plant		FRP products	JUSE	JUSE-EG-031	May 18, 2000
14	Environmental engineering consolidated division		Environment control plant products (also providing sales, R&D, purchase, production, installation and service of the products)	LRQA	JBC 0772707	July 14, 2000

\*Keiyo plant (Ichikawa) is certified together with Keiyo plant (Funabashi) in the same certificate.

### Domestic subsidiaries

No.	Plants and offices	Organization included in the ISO certification	Main business	ISO organizations	Certificate numbers	Date of Acquisition
15	Nihon Plastic Industry Co., Ltd.	Head office and plant Mino plant	Manufacturing of plastic pipes and sheets	JSA	JSAE276	October 27, 2000
16	Kubota Construction Co., Ltd.		Construction of civil engineering structure, buildings and plants	JQA	JQA-EM1205	December 22, 2000
17	Kanto Kubota Seiki Co.		Manufacturing of hydraulic cylinders and transmission cases	LRQA	YKA 0772963	November 14, 2001
18	Kubota Environmental Service Co., Ltd.		Construction and maintenance of environmental facility and plant for processing clean water, sewage, landfill, human-waste and garbage	MSA	MSA-ES-171	November 20, 2002
19	Kyushu Kubota Chemical Co., Ltd.		Manufacturing of composite pipes	JUSE	JUSE-EG-118	March 27, 2003
20	Kubota Air Conditioner Co., Ltd.	Tochigi plant	Design, development and production of central air-conditioning systems and equipment	JQA	JQA-EM4189	August 27, 2004
21	Kubota Retex Corp.	Kitakami Recycle Center	Process and disposal of industrial and general wastes	JQA	JQA-EM4293	October 22, 2004
22	Kubota Pipe Tech. Co.		Design, construction and construction control of pipelines	JCQA	JCQA-E-0633	January 24, 2005

### Overseas subsidiary

No.	Plants and offices	Organization included in the ISO certification	Main products	ISO organizations	Certificate numbers	Date of Acquisition
23	The Siam Kubota Industry Co., Ltd. (Thai)		Manufacturing, sales and service of small-size diesel engines and farm machinery	MASCI	EMS99001/001	February 28, 2003

LRQA: Lloyd's Register Quality Assurance Limited JCQA: Japan Chemical Quality Assurance Ltd. JICQA: JIC Quality Assurance Ltd. JUSE: Union of Japanese Scientists and Engineers  
DNV: Det Norske Veritas AS JSA: Japan Standards Association JQA: Japan Quality Assurance Organization MSA: Management System Assessment Center Co., Ltd.  
MASCI: Management System Certification Institute (Thailand)

## Environment Related Education

It is important for us to promote eco-friendly business activities to raise the awareness of each of our employees regarding environmental issues.

We periodically provide stratified education to raise awareness for environmental issues, on the basis that knowing is the first step to solving environmental issues. To cope with environmental issues in an appropriate manner, we also provide systematic professional trainings, support capacity-building and qualified personnel development, and promote the practice of environmental conservation.

In FY2004, we offered four educational courses designed on the participants' job descriptions to further enhance our basic education programs. In the Environment Month in June and the Energy Saving Month in February, we organized company visits and offered environmental education assistance to outside organizations to acquire information on efforts of environmentally advanced corporations.

In FY2005, we will enhance the quality and quantity of our education based on the mid-term environment plan.

### Records of environment related education – FY2004 – (Hosted by the environment protection department; except for (\*) hosted by independent plants)

Classification	Course titles	Frequency	Number of attendants	Course descriptions	
Management-level education	Environmental issues workshop	1	68	Environmental management and disclosures, environmental management report	
	Orientation for new employees	1	97	Global environmental issues	
Stratified education	General course <1>	3	107	Global environmental issues and corporate measures	
	Intermediate education for supervisors	Environment conservation	1	26	- Kubota's involvement - Local environmental management
		Energy conservation	1	26	Theory and application of energy conservation technology
	Compliance training for Mid-level officers	3	146	Global environmental issues and Kubota's environmental management	
	Workshop for the newly promoted senior manager	3	207	Global environmental issues and Kubota's environmental management	
	Foundation courses for environmental management	For designing and R&D sections	1	10	- Environment-related laws and regulations, and Kubota's involvement - Environmental management according to the job descriptions
For construction and service sections		1	8		
For plant engineers		1	4		
For office administrations		1	17		
Professional training	Education of environmental management technology	1	27	Theory and application of environmental management technology	
	Preparation course for working environment measurement experts examination	Class 1	1	9	Dust, organic solvent, chemical substances and metals
		Class 2	1	10	Laws relating to industrial hygiene and chemical analysis
	ISO 14001: internal environment auditor course	4	89	ISO 14001 standard, environmental laws and case study	
	ISO 14001: update briefings	2	39	ISO 14001: Year 2004 update details	
	Follow-up education for internal environment auditors	1	24	ISO 14001: Year 2004 update details	
	Energy conservation technology and its applications	1	5	- Law Regarding the Rationalization of Energy Use - Energy conservation technology and its applications	
On-demand access to environment information by intranet	Chemical substances and environment	6	—	Endocrine disruptors – dioxin (1)	
				Endocrine disruptors – dioxin (2)	
				Laws and regulations concerning chemical substances – PRTR Law (1)	
	Easy to understand! "Global warming issues"	6	—	Laws and regulations concerning chemical substances – PRTR Law (2)	
				Kubota's status and issues concerning discharge of chemical substances (1)	
				Kubota's status and issues concerning discharge of chemical substances (2)	
- International framework for global warming prevention - The enforcement of Kyoto Protocol	4	—	Mechanism of global warming		
			Impacts of global warming		
			- CO <sub>2</sub> emission on global scale - Global trends in global warming (1)		
ISO 14001 (environmental management system) updates	2	—	Kyoto Protocol		
			- Global trends in global warming (2)		
			- Current conditions and involvement in Japan		
Company visits in special months	Environment Month	1	15	Efforts made by industries, Kubota, and each individual	
				Idemitsu Kosan Co., Ltd. – Aichi Refinery	The enforcement of Kyoto Protocol (1)
	Energy Saving Month	1	17	The enforcement of Kyoto Protocol (2)	
				Mitsubishi Electric Corporation - Fukuyama Works	Global trends
	Associated companies	Workshop for environment-related compliance	12	448	Japanese trends
					"Environmental policies and environmental management system" hosted by Japan International Cooperation Agency (JICA)
Environmental education assistance for outside organizations*	Internship programs for Utsunomiya Hakuyo High School and Utsunomiya Industrial High School in Tochigi prefecture	1	8	ISO 14001 updates (2)	
				Amagasaki Industrial High School in Hyogo prefecture	Environmental conservation activities and VOC elimination technology
	Comprehensive learning – environmental education	5	156	Environmental conservation activities in head office building, and high efficient offices	
				Energy conservation – case study and promotion approach	
				Workshops for farm machinery related companies	
				- Plant tour held at environment-related facilities in Sakai plant	
				- Presentation of companies' activities and efforts	
				Environmental management education at Utsunomiya plant	
				Explanation of pollution, wastes, hazardous chemical substances and global warming	

### Sample of "Explanation of chemical substances and environment" provided on intranet



### Number of qualified persons with environment-related certifications (People)

Pollution Control Managers	Air	50
	Water	62
	Noise	92
	Vibration	67
	Dioxins	5
Certified Environment Measurers	Concentration	3
	Noise and vibration	1
Environmental Management System (EMS) Auditors	Lead auditors	0
	Auditors	1
	Provisional auditors	5
Qualified Person for Energy Management of Type 1 Designated Factory	Heat management	42
	Electricity management	37
Working Environment Measurement Experts	Class 1	73
	Class 2	67

Scope: Domestic manufacturing plants of KUBOTA Corporation and Kubota's subsidiaries.

## Green Purchasing

In November 2001, we established green purchasing promotion standards regarding the designated procurement items prescribed by the Law Concerning the Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities ("Law on Promoting Green Purchasing"), and have been promoting the purchase of products meeting the law requirement. We also installed a tabulation system for calculating the amount and ratio of green purchasing. According to the system, the amount and the rate of green purchasing for F2004 were 39.9 million yen and

85.4%, respectively. We will make a further effort to increase the ratio to 100% by FY 2005.

### Number of eco-vehicles owned

	(Unit)	
(1) Fuel-cell vehicles	0	
(2) Electric vehicles	0	
(3) Compressed natural gas vehicles	2	
(4) Methanol vehicles	0	
(5) Hybrid vehicles (mild-hybrid vehicles)	3	
(6) Low emission vehicles (LEVs) certified by the Ministry of Land, Infrastructure and Transport	Good-LEVs (G-LEVs)	113
	Excellent-LEVs (E-LEVs)	51
	Ultra-LEVs (U-LEVs)	207
(7) Liquefied petroleum gas (LPG) vehicles	0	

## Environmental Risk Management

We will follow our operation standards and implement the necessary facility inspections and maintenance in order to secure compliance, to prevent environmental damages, and to reduce environmental risks in our business activities. We established accident handling procedures to minimize contaminations in case of an environmental accident, and provide periodical training to prepare for unusual events and emergencies.

We also review and reinforce our preparatory formation and emergency response structure based on the assumption that a major environmental accident is probable. We promote companywide crisis controls including countermeasures to major environmental accidents.

We reinforced our environmental risk management through companywide environmental audits in all of our plants, including subsidiaries, in order to fully implement high risk extraction and to provide countermeasures against these risks.

In our environmental risk control, we will assess environmental impacts at each plant or office, make efforts to reduce the high-risk factors detected, and provide strict controls to prevent environmental problems.



Training for unusual situations and emergencies (Sakai plant)  
Training at a hazardous materials facility (March 15, 2005)



Training was implemented with an assumption that fuel or lubricant oil was spilled from a feed opening of the tank or pipe.

### Law compliance measures

#### (1) Status of air quality control

All the air quality assessment items met the required standards.

#### (2) Status of water quality control

All the water quality assessment items met the required standards, except for the irregular water quality listed in (5).

#### (3) Status of noise and vibration control

In FY2004, the measured values of noise emission exceeded the required standards at one plant. We had no local complaint, since the relevant checkpoint was located on the border line of the site without any adjacent houses. However, we have been promoting noise reduction measures to solve the issue.

Measured values of vibration did not exceed the required standards in all the plants.

#### (4) Status of hazardous chemical pollution control

Followed by the close-down of the Naniwa factory in September 2004, we implemented a voluntary soil investigation on the premises, and found a minor contamination. This contamination has no health effects on the neighboring residents. Please see p.49 for more details.

#### (5) On-site inspections held by government and municipal offices

In FY2004, we received 44 on-site inspections concerning air and water quality, and industrial wastes. In one water quality inspection, the measured value of lead emission slightly exceeded the required standards. We promptly submitted a report for improvement to the

city administration, which was accepted. We will make continuous efforts to thoroughly conduct daily monitoring in order to prevent receiving an administrative notice in the future.

#### (6) Environmental accidents

In FY2004, we had no incidence of litigation, or required fine payments. We had a single accident related to oil leakage with a hydraulic oil cooler caused by pipe cracks. We promptly reported it to the related authorities and provided appropriate measures. As a result, there was no effect on the neighborhood. We instructed all employees to take proper preventive measures including facility maintenance improvement.

We also had 20 cases of oil leakage accidents in our plants. We took appropriate measures in accordance with the accident handling procedures for unusual events and emergency. There were no external effects in these cases.

#### (7) Environmental claims

We had a single claim of foul odor, and took prompt measures to correct the situation. We will promote daily monitoring to prevent a similar recurrence.

#### (8) Disclosures of environmental and safety measures for our products.

We compile the MSDS and offer information to our customers. Preparing for accidents in the physical distribution process, we provide information to carriers with emergency instructions concerning environmental and safety measures for our products.

# Environmental Accounting

Environmental accounting is to provide a better understanding of our commitment to the environmental conservation activities, by utilizing quantitative measurements and analysis on the environmental conservation costs in our business activities and their effects, and appropriately reflecting the outcomes, in addition to disclosing information to the related parties inside and outside the Company.

## Environmental conservation costs

Investments to environmental conservation totaled 710 million yen, an increase of 300 million yen from the prior year. Environmental conservation costs were 6,870 million yen, a decrease

of 410 million yen. R&D costs were 4,580 million yen, comprising approximately 67% of the total environmental conservation costs.

### Environmental conservation costs

(In million yen)

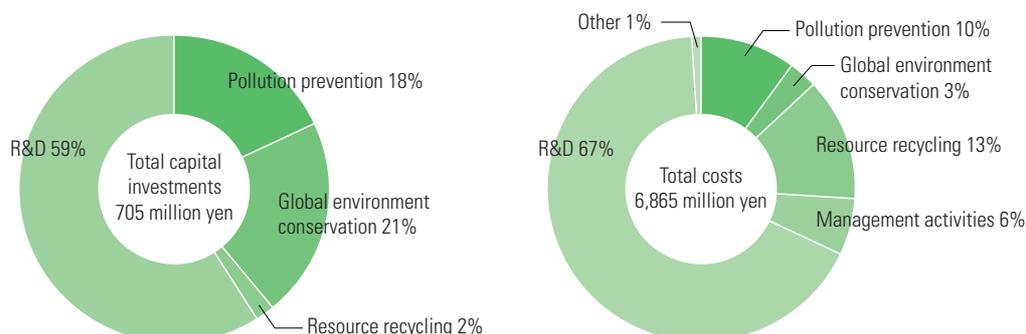
Classification of Costs	Related activities	FY2003		FY2004	
		Investments	Costs	Investments	Costs
Business area		190	2,155	291	1,741
Pollution prevention	Prevention of air pollution, water pollution, soil contamination, noise, vibration, etc.	67	773	130	667
Global environmental conservation	Global warming prevention, etc.	121	264	146	213
Resource recycling	Reduction and recycling of waste	2	1,118	15	861
Upstream and downstream cost	Collection of second-hand products and commercialization of recycled products	0	16	0	56
Management activity	Development and operation of EMS, and environmental information dissemination	0	477	0	410
R&D	R&D for reducing product environmental loads and developing environment conservation devices	216	4,564	414	4,579
Social activities	Local cleanup activities and plant tour arrangements	0	43	0	44
Environmental remediation measures	Levies on SOx emission	0	19	0	35
<b>Total</b>		<b>406</b>	<b>7,274</b>	<b>705</b>	<b>6,865</b>

(In million yen)

Total capital investments (including land)	26,100
Total R&D costs	21,960

Method of aggregation and provisions:

- 1) The period covered was from April 1, 2004 to March 31, 2005.
- 2) Scope of aggregation included Kubota Corporation, a parent company (plant, factory, R&D division, and the environment protection department in headquarters), domestic subsidiaries (Kubota Precision Machinery Co., Ltd., Kanto Kubota Precision Machinery Co., Ltd., Nihon Plastic Industry Co., Ltd., Kyushu Kubota Chemical Co., Ltd., Kubota Air Conditioner Co., Ltd., Kubota Vending Services Co., Ltd., and Kubota KCT Corporation.)
- 3) Aggregation method is based on the Environmental Accounting Guidelines 2005 issued by the Ministry of Environment.
- 4) The labor and depreciation costs were included in the total cost. The depreciation cost was calculated based on the standards applied in the Company's financial accounting. All of the assets acquired in and after FY1998 were recorded. Compound costs were appropriated by recording differences or dividing proportionately.
- 5) Only measurable economic effects were recorded. Presumed and deemed economic effects were not included therein



## Effects of environmental conservation

All the evaluation items decreased from the prior year. The industrial waste landfills decreased by 72% attributable to the promotion of zero-emission initiatives.

### Effects of environmental conservation

Effects	Items	FY2003	FY2004	Effect Indicators	Ratio against the results of the prior year
Effects from resources used in our business activities	Energy consumption [energy conversion on a calorie-basis; in petajoule (PJ*)]	10.2	8.3	1.9	81
	Water consumption (thousand m <sup>3</sup> )	6,320	5,430	890	86
Effects from environmental loads caused business activities and wastes	CO <sub>2</sub> emission (thousand ton)	581	455	126	78
	NO <sub>x</sub> emission (ton)	110.2	75.5	34.7	69
	Dust emission (ton)	23.7	15.3	8.4	65
	Releases and transfers of PRTR designated substances (ton)	1559.3	969.8	589.5	62
	Waste generation (thousand ton)	98	92	6	94
	Waste landfills (thousand ton)	3.9	2.8	1.1	72

\*PJ = 10<sup>15</sup>J

## Economic effects

Economic effects of environmental conservation activities were 1.21 billion yen, at the same level as the prior year.

### Economic effects of environmental conservation activities

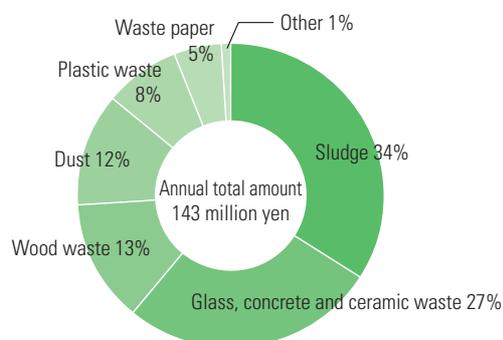
(In million yen)

Classification	Details	Annual effects
Energy conservation measures	Reduction of coke use in cupola, and highly efficient operation of compressors	412
Zero-emission measures	Reduction and recycling of industrial wastes	143
	Sales of valuable resources	627
Environmental conservation measures in physical distribution	Modal shift, and reduction of packing materials	25
Total		1,207

### Cost reduction by zero emission measures

Reduction, reuse and recycling of wastes contributed to cut outsourcing fees for industrial waste processing, and generated 143 million yen of annual cost reduction effect.

### Cost reduction effect by type of wastes



## Future comments

We will place environmental accounting as an essential tool and indicator to support monitoring of investment efficiency and cost-benefit performance, and maintaining a lasting stability

and sustainable growth. We will make continued efforts to promote environmental conservation activities and information disclosures.