## **Environmental accounting**

Environmental accounting is necessary for the people concerned inside and outside our company to understand the status of our environmental conservation activities. We try to grasp and analyze quantitatively as much as possible the cost of environmental conservation in our business activities, and the effect obtained from the activities. Then we reflect the results to our business activities. And we also disclose the results to the people concerned.

We at Kubota set up our own standards regarding environment-related accounting in 1973, and we have been calculating the expenses for environmental management, investment for environment-related facilities, and direct results.

This data is then put to use in our environmental management activities.

We calculated our environmental accounting based on the environmental accounting guideline (2002 edition) compiled by Ministry of the Environment in order to use it as a useful tool for environmental corporate management since fiscal 2002. So the depreciation cost of equipments, and the cost and plant investment expense of research and development of environment-friendly products are also added up.

## Regarding environmental conservation cost

The cost was 8.74 billion yen in fiscal 2002. The research and development cost was 5.39 billion yen in it, approxi-

mately 62% of the whole cost. And the cost excluding research and development cost and depreciation cost was 2.94 billion yen, slightly increased from 2.84 billion yen in the previous year. The plant investment cost was 1.16 billion yen.

#### Regarding environmental conservation effect

The amount of money increased in many items compared with the previous year.

### Regarding cost reduction by environmental conservation

The breakdown of the effects is as follows:

Saving energy effect: 520 million yen

Reduction of waste treatment costs by zero emission: 170 million yen

Sold amount of valuable substances regarding recycling: 280 million yen

Effect of distribution improvement measures: 490 million yen

#### Activities from now on

We consider the environmental accounting as the indispensable tool for environmental corporate management, in order to sustain our business and development, grasping the investment effect and cost-performance.

We make an effort to conduct our environmental conservation activities, and to disclose our environmental information.

Unit: million yen

Linit: million ven

### Environmental conservation cost ( on an unconsolidated basis )

Contents of main activities		Invested amount	Cost
		778(Subtotal)	2749
Cost for prevention of air pollution, water pollution, soil contamination, noise, vibration and so on		(525)	(1122)
Cost for global warming prevention and so on		(145)	(325)
Cost for elimination, reduction, and recycling of wastes		(108)	(1302)
Cost for green procurement, and making products become recycled products again		0	31
Cost for preparation and operation of EMS, tree planting and cleaning, and environmental informatio	n dissemination	0	506
Research and development of reducing environmental load of products, and environment-conservin	g equipments	377	5385
Cost for supporting local society and various kinds of foundations		0	48
Levied money on Sox emission		0	21
		1155	8740
			Unit: million ye
id period		15407	
Total amount of cost of research and development during the said period 25800			
	Cost for prevention of air pollution, water pollution, soil contamination, noise, vibration and so on Cost for global warming prevention and so on Cost for elimination, reduction, and recycling of wastes Cost for green procurement, and making products become recycled products again Cost for preparation and operation of EMS, tree planting and cleaning, and environmental informatic Research and development of reducing environmental load of products, and environment-conservin Cost for supporting local society and various kinds of foundations Levied money on Sox emission	Cost for prevention of air pollution, water pollution, soil contamination, noise, vibration and so on Cost for global warming prevention and so on Cost for elimination, reduction, and recycling of wastes Cost for green procurement, and making products become recycled products again Cost for preparation and operation of EMS, tree planting and cleaning, and environmental information dissemination Research and development of reducing environmental load of products, and environment-conserving equipments Cost for supporting local society and various kinds of foundations Levied money on Sox emission	d period 778( Subtotal )   Cost for prevention of air pollution, water pollution, soil contamination, noise, vibration and so on (525)   Cost for global warming prevention and so on (145)   Cost for elimination, reduction, and recycling of wastes (108)   Cost for green procurement, and making products become recycled products again 0   Cost for preparation and operation of EMS, tree planting and cleaning, and environmental information dissemination 0   Research and development of reducing environmental load of products, and environment-conserving equipments 377   Cost for supporting local society and various kinds of foundations 0   Levied money on Sox emission 0   d period 15407

## Environmental conservation effect ( on an unconsolidated basis )

Contents of effect	Items	Reduced amount	Reducing percentage compared with the previous year (%)
Effect from the resources used for our business activities	Energy used ( ten kl )	- 1.1	- 4.4
Ellect from the resources used for our business activities	Water used ( ten thousand ton )	- 22	-3.5
	CO2 emitted ( ten thousand ton )	- 2.5	- 4.3
	NOx emitted ( ton )	1.1	0.6
Effect on environmental lord and wastes generated	Sox emitted ( ton )	3.8	15.9
from our business activities	Emitted and transferred amount of substances subject to PRTR	143	8.0
	Discharged amount of wastes	7648	- 8
	Amount of landfill wastes	1929	20

#### Cost reduction by environmental conservation (on an unconsolidated basis)

· · · · · · · · · · · · · · · · · · ·		Onit. million yen
Classification	Contents	Annual effect
Saving energy measures	Introduction of high-efficiency gas engine cogeneration and reduction of steam loss, inverters for compressors and air conditioners, and others	517
Zero emission	Reducing and recycling industrial wastes	166
	Sold amount of valuable substances	279
Environmental conservation measures in distribution	Modal shift, reducing packing materials, and so on	489
Total		1451

Summing up method

1. The period is from April 1, 2002 to March 31, 2003.

2. Summing up is on an unconsolidated basis.

3. Summing up is based on the environmental accounting guideline of Ministry of the Environment (2002 edition ).

4. The labor cost and depreciation cost are included in the cost. The depreciation cost is calculated based on the same standards of our financial accounting, summing up the properties obtained since 1998.

5. Compound cost was calculated by dividing it proportionally.

6. Only what was measurable was summed up in cost reduction. Cost reduction based on estimation was not summed up

# **Environmental risk management**

At Kubota, each of our plants has its own self-imposed regulation standards, stricter than those of municipal regulations, regarding the emission to environment, and also controls emissions, to prevent air pollution and water pollution and to obey the environment-related laws.

In this way, we have been improving our environmental performance continuously.

## Reinforcement of environmental risk management

We at Kubota promote to obey the laws and regulations thoroughly.

We prepared measures thoroughly for crisis such as serious environmental accident and so on, including reconsideration and reinforcement of the preparation organization for serious environmental accident in advance, and the organization for environmental accident in emergency. Moreover, we have reinforced our environmental risk manage-



November 2002, to prevent dioxins contamination.

Environmental audit is also conducted to obey law, to prevent environmental problems occurrence, and to minimize environmental risk in our business activities.

We conduct regular training for trouble or emergency to minimize effluent of pollutants in case of environmental accident, making accident manual.

ment by conducting environmental audit in all the plants including affiliates to extract environment-related serious risk and to cope with it thoroughly.

In our environmental risk, chemical substances control is the most influential one.

So we promote reducing use, emission and transfer of hazardous chemicals from now on.



## Law-abiding measures

1. Status of air quality control	5. Inspections by government and municipal offices			
All the air quality items do not exceed the standards.	Sixty-six inspections were conducted in fiscal 2002. There was no problem in water quality and so on. Though a meas- uring frequency of exhaust gas was pointed out when air quality was inspected, we improved it immediately. We pro- mote our daily management increasingly to eliminate point- ing out.			
2. Status of water quality control				
All the water quality items do not exceed the standards.				
3. Status of noise and vibration emission control	6. Complaint and accident regarding environment			
Measured values of noise exceed the standards in one plant in fiscal 2002. There was no complaint because there were- no houses near the border line of the site. We promote noise reduction increasingly in this plant. Measured values of vi- bration do not exceed the standards in all the plants.	We were not charged nor fined with environmental pollution in fis 2002. Though nineteen accidents such as leaking oil and so on w occurred in our plants, we treated them properly based on the p cedures of measures in trouble or emergency. As a result, no a dent was occurred affecting people outside the company. Thoug complaint regarding odor from our neighborhood was reported,			
4. Status of controlling pollution by hazardous chemicals	improved it immediately. We also extended the improvement to the related plants in order not to receive the similar complaint.			
We measure the contamination by organochlorine com- pounds in the groundwater regularly at the observation wells	7. Providing information on environment and safety measures for our products and materials			
in our plants. As a result, there was no problem in ground- water contamination by organochlorine compounds. We en- tirely discarded the ordinary incinerators excluding the re- search facilities such as the melting furnace and so on until November 2003 to provent diaxias contamination	We made the MSDS and provide it to our customers. We also provide the information regarding environment and safety measures such as emergency measures and so on, to the distribution companies for the accident in distribution.			