

# Environmental Accounting

In our Third Environmental Action Plan, established in August 2000, one of the policies which we listed was the establishment of an environmental accounting system for use in the management of our operations. Environmental accounting is positioned as one of our key issues.

By actively disclosing the findings of our environmental accounting, we can provide a better picture of our environmental activities to a larger number of interested parties. At the same time, we aim to use environmental accounting as a method to assess our operations and to support the further promotion of our environmental conservation activities and improve performance.

## Environmental Accounting in FY 2001

The following is a report on our findings for FY 2001.

Environmental accounting during FY 2001 was done on a parent-only basis (excluding the Higashiura Plant).

### Environmental Conservation Costs (Units: millions of yen)

Cost Categories	FY 2001 Cumulative Results			Purpose	Page	
	Investment	Expense	Total			
Business area costs	Pollution prevention	1,394	944	2,338	• Management of chemical substances • Prevention of pollution (air, water, noise, vibration, and odors)	20-25
	Prevention of global warming	113	1,123	1,236	• Curtail the greenhouse gas emissions (CO <sub>2</sub> , CFCs, etc.)	23, 26, 27
	Resource recycling	58	421	479	• Suitable disposal of waste emitted from business sites and reduction of such waste • Effective use of resources	28-30
Upstream/downstream costs	9	30	39	• Gap between cost of materials procured through environmentally preferable purchasing and through normal channels • Reduction of environmental impact such as from packaging and distribution	31	
Management costs	1	513	514	• Establishment and operation of an environmental management system • Communication and environmental training • Plant greenery around offices and in areas surrounding the business site	6-9, 32, 33	
R&D costs		1,512	1,512	• Personnel costs related to the development of environmentally conscious products • Personnel costs related to the development of production technology for reducing environmental impact	14-18	
Social activity costs		5	5	• Social activities encompassing contribution, support, and information exchange with groups and local residents to preserve the environment	33	
Environmental damage costs	297	331	628	• Survey and treatment of past pollution (soil, underground water, etc.)	24	
Total	1,872	4,879	6,751			

Note: We measure the effects of our investments over a one-year period. For this reason, depreciation is not included under expenses. The difference and proportions of investments and expenditures that serve several purposes have been calculated.

### Effects of Environmental Performance

Business area benefits	Environmental Conservation Categories		Effects in FY 2001 (Reduction)	Page
	Input resources	Energy [Figures in ( ) have been converted to represent CO <sub>2</sub> emissions]	23,889 MWh (15,767 t-CO <sub>2</sub> )	26-27
	Water resources	104,400 m <sup>3</sup>	30	
Substances of concern	Release and transfer of PRTR-designated substances	364 tons	20-21	
	VOC emissions	298 tons	22	
	Greenhouse gas emissions*1 [Figures in ( ) have been converted to represent CO <sub>2</sub> emissions]	HFC-134a*2: 2 tons (2,600 t-CO <sub>2</sub> )	23	
	Industrial waste	Emission of sludge from the treatment of wastewater	72 tons	28-29

Note: Effects of environmental performance are actual effects stemming from our environmental conservation measures. The effects obtained were measured over a one-year period.

\*1 This figure represents hydrofluorocarbons and other greenhouse gases (excluding CO<sub>2</sub>). CO<sub>2</sub> emissions are calculated under the effects of energy reduction from the input of resources.

\*2 HFC-134a is another name for 1,1,1,2-tetrafluoroethane.

### Economic Effects of Environmental Conservation Measures (Unit: millions of yen)

Categories	FY 2001	Purpose	Pages
Energy savings	346	• Reduced expense for energy savings	26-27
Reduced usage of substances of concern	7	• Lower raw material costs through reducing usage of substances of concern	20-23
Resource recycling	Gain on sale of reusable materials	• Business profit from the sale of reusable materials	28-29
	Disposal and recycling of waste	• Lower disposal cost owing to reduction of industrial waste	
Water conservation	3	• Lower water bill owing to conservation and more effective usage of water	30
Total	1,004		

Note: Earnings included above are those actually recorded in the company's FY 2001 financial statements.

Reductions in expense are mainly only those for which actual effects were obtained from environmental conservation measures. The effects obtained were measured over a one-year period.

## Environmental Accounting

In FY 1999, we began environmental accounting, at which time we also began to accumulate relevant data.

Up until FY 2000, we had accumulated data on a company-wide basis. In accordance with the environmental accounting guidelines released by the Ministry of the Environment, our headquarters amassed data on investment and those expenses related to environmental conservation for the entire company.

From FY 2000, to improve the reliability of the information in our environmental report, we began implementing independent review. At that time, an independent review agency proposed a method for tallying environmental accounting data, as a means of helping us to improve our environmental conservation activities.

We not only incorporated this proposal, but decided to further improve the precision of our calculations and enhance the internal usage of environmental accounting. In FY 2001 we worked to create well-defined, in-house standards, using the ministry's 2002 Environmental Accounting Guidelines as a reference, and began implementing these accounting practices at each of our plants.

To ensure full compliance with these standards, we held meetings at each of our plants to explain procedures and conducted environmental accounting for FY 2001 on a site basis.

## FY 2001 Environmental Accounting Results

During the fiscal year, our environmental conservation costs totaled ¥6.75 billion, including investments of ¥1.87 billion and expenses of ¥4.88 billion.

Investments accounted for 27.7% of all environmental conservation costs. The core of this investment was used for facilities at the Higashichita Plant. Other major spending was related to the introduction of pollution prevention facilities such as underground water purification and an exhaust gas combustion system to reduce VOC emissions.

The major portion of expenses covered maintenance and management costs for environmental facilities and personnel costs. Environmental damage costs associated with measures to purify underground water represented 9.3% of environmental conservation costs, or ¥630 million.

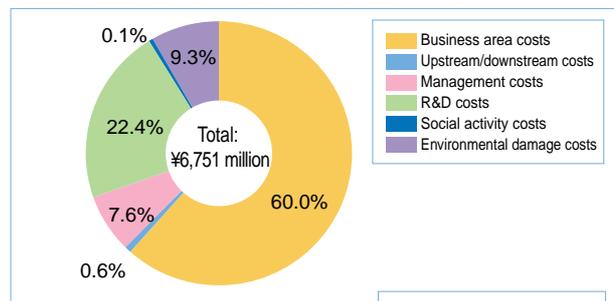
In addition, R&D costs for developing environmentally conscious products accounted for 22.4% of all environmental conservation costs, or ¥1.5 billion. In contrast, the economic effects from the implementation of environmental measures was ¥1.0 billion.

Energy savings and the gain of sale of reusable materials were the two largest contributors to economic effects. In FY 2001, we added items that enabled us to achieve reliable expense reduction.

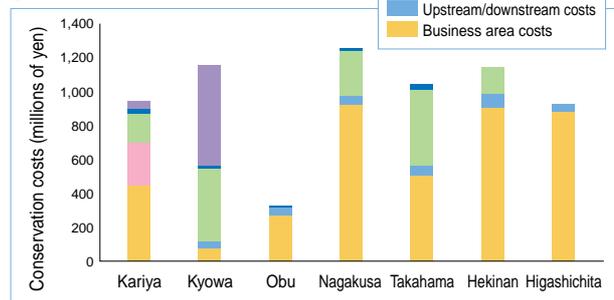


Environmental Accounting Information Session

## Environmental Conservation Costs



## Environmental Conservation Costs for Each Plant



## Breakdown of Environmental Costs for Each Plant

Plant	Main Business Activities	Key Features
Kariya	Maintaining headquarter functions, developing and manufacturing textile machinery, developing compressors, processing and assembling parts	<ul style="list-style-type: none"> <li>Headquarters are based here, therefore management activity costs are high</li> <li>Incur environmental damage costs</li> </ul>
Kyowa	R&D of various technologies, R&D of electronics technologies, manufacturing electronic components, developing and manufacturing press equipment and facilities used in the automotive industry, performing engine assessments, processing compressor parts, producing plastic/glass for automobiles	<ul style="list-style-type: none"> <li>Incur environmental damage costs</li> <li>R&amp;D costs were high as this plant handles the development of technologies</li> </ul>
Obu	Dissolution of aluminum, processing compressor parts, manufacturing foundry parts (This line is to be transferred completely to Higashichita in FY 2002.)	<ul style="list-style-type: none"> <li>Environmental conservation costs were relatively low owing to a revision of business operations in FY 2000</li> </ul>
Nagakusa	Developing and assembling automotive equipment	<ul style="list-style-type: none"> <li>Business area costs were high in FY 2001 owing to the implementation of VOC and zero emissions measures</li> </ul>
Takahama	Developing industrial equipment, processing and assembling parts	<ul style="list-style-type: none"> <li>R&amp;D costs were high owing to the development of a green fuel vehicle</li> </ul>
Hekinana	Developing engines, processing and assembling parts	<ul style="list-style-type: none"> <li>Business area costs were high owing to the implementation of energy conservation measures in FY 2001</li> </ul>
Higashichita	Began operation in FY 2000 (fully operational in FY 2001) Manufacturing foundry parts	<ul style="list-style-type: none"> <li>Incur business area costs (investment) owing to the building of a new plant</li> </ul>