Environmental Accounting

Use of Environmental Accounting in Company Management

Toyota Industries regards environmental accounting, which evaluates the effectiveness of the company's environmental activities from the perspective of cost, as a critical tool for corporate management and information disclosure. Toyota Industries is continually striving to enhance its environmental accounting system.

Until recently the main focus of this form of accounting had been application in information disclosure, through such media as the Social & Environmental Reports. In future the company will work to improve the system to allow its use in managerial decision-making by clarifying its compilation objectives and the target areas of environmental accounting.

FY 2006 Results

Environmental Conservation Costs Table 1

In fiscal year 2006, environmental conservation costs totaled 9.82 billion yen, consisting of 3.16 billion yen in investments and 6.66 billion yen in expenses. In the area of production, five plants had the co-generation system additionally introduced to them during this period, with approximately 2 billion yen being invested in this area. The proportion of money Toyota Industries spent on measures to counter global warming (costs of global environmental conservation) has grown substantially.

Examples of spending on research and development include the developments of electric compressors for the Harrier and Kluger hybrid cars manufactured by Toyota Motor Corporation, fuel cell lift trucks, and the low-emission gas-diesel engine for the Avensis (intended for the European market), also manufactured by Toyota Motor Corporation.

Management activity costs have increased, including costs for newspaper advertisements that inform the public about the company's environmental considerations. Additionally, the detoxification of polychlorinated biphenyls (PCBs) which was planned for fiscal year 2006, had 30 units of a total 901 outsourced for processing as of the end of June 2006.

Environmental Conservation Benefits Table 2

The benefits of environmental conservation are expressed in the resulting accrual of year-on-year measures to conserve our environment.

As an example of the effect of individual investment, the fiscal year 2006 proactive introduction of the co-generation system brought about an approximately 21,500 tons reduction in CO_2 emissions.

Table 1 Performance of Environmental Investment and Expenses*1 (million yen)

Category		Principal approaches in FY 2006	FY 2006 Investment	FY 2006 Expenses	FY 2005 Investment	FY 2005 Expenses
Business area costs	Pollution prevention cost •Preventing atmospheric pollution •Preventing air quality pollution	Expanding number of plants in which water-based painting of vehicles is introduced	224	925	1,090	1,181
	Global environmental conservation costs	Additional introduction of co-generation system into 5 plants	2,397	2,357	624	863
	Resource recycling costs	Converting waste into valuable resources (material recycling of waste plastics, etc)	96	1,275	90	1,122
Upstream/downstream costs		Promoting green procurement	—	0.5	—	1
Management costs		Newspaper advertising promoting environmental considerations, publication of Social and Environment Reports	—	1,160	6	693
Research and development costs		Development of electric compressors for hybrid cars / Development of fuel-cell lift trucks, and battery-powered Tugnova traction vehicle / Development of low-emission gas engine	386	869	—	704
Social contribution activity costs		Support for environmental organizations, co-sponsoring of EXPO 2005 Aichi Japan	60	60	—	216
Environmental remediation costs		Purification of soil and groundwater contamination, measures to prevent occurrence of oil and grease ground seepage	1	18	—	31
Total			3,163	6,664	1,810	4,811
			9,826		6,621	

Table 2 Effects of Environmental Conservation*2

Environmental Impact	Comparison with previous fiscal year	Environmental Impact	Comparison with previous fiscal year
CO_2	(65,000 t decrease)	Watar	1,078 t increase
VOC	(9 t decrease)	SOx	±0 t
Generation of waste products	(31,243 t decrease)	NOx	48 t increase
		COD	(5 t decrease)

Table 3 Economic Benefit (million yen)

Item	Details	FY 2006	FY 2005
Revenue	Returns from sale of recycled waste products	4,429	1,545
	Energy cost reductions	1,932	—
Cost reductions*3	Resource saving (including reductions in amount of water use and amount of waste water disposal)	137	115
Total		6,498	1,660

*1 Depreciation component not included in costs of environmental conservation. Costs and investments that include objectives other than environmental aspects either have the difference aggregated or the component removed.
*2 Figures calculated after correcting the sales volume difference as the difference between the volume of environmental impact in the previous fiscal year and the volume of environmental impact in the current applicable period.
Effects of environmental conservation = Amount of environmental impact in previous year x (sales volume in applicable period/sales volume in previous year) - environmental impacts of applicable period
*3 Cost saving is calculated by multiplying the volume of reduction in environmental impacts by the unit cost.

(Scope of tabulated figures: Toyota Industries Corporation and TIBC Corporation. Period covered: 1 April 2005 to 31 March 2006)

Economic Benefits P63 Table 3

Toyota Industries calculates the actual economic effects through effects that can be calculated, including energy cost reductions, waste water treatment cost reductions, and profit from the sale of valuable resources.

The economic benefits for fiscal year 2006 came to 6.49 billion yen, a 4.83 billion yen increase on the FY 2005 level. In the breakdown the largest component was the 2.88 billion yen increase in the profit from the sale of valuable resources. The main contributing factor to this was a jump in the sale price, including factors such as promotion of waste product transition to valuable resources, increased production, and increased prices for scrap aluminum.

The 6.3% reduction in CO_2 emissions over the previous year's figures made a substantial contribution to the energy cost reduction effect. As Toyota Industries already uses electricity and gas as its main sources of energy, no substantial impact came from increases in the cost of crude oil.

Plan for Major Environmental Expenditure in FY 2007

As a part of Toyota Industries' eco factory activities (See page 13) for fiscal year 2007, environmental improvement goals and anticipated effects will be incorporated into discussions on capital investment, and also used as review materials for investment decision-making. In this way the company intends to launch a system for the evaluation of costs and effects. Additionally, for internal managerial purposes, the company plans to organize methods of compilation according to the activities stipulated in the Fourth Environmental Action Plan, and to make improvements to allow ready evaluation of environmental activities and costs.

Changes in Environmental Efficiency During the Period Covered by the Third Environmental Action Plan

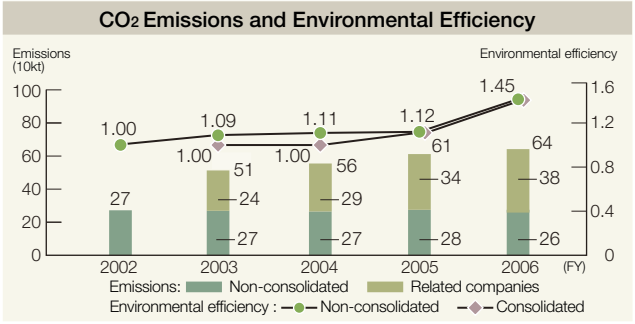
Environmental efficiency is calculated to reveal the compatibility of project scale expansion and environmental approaches.

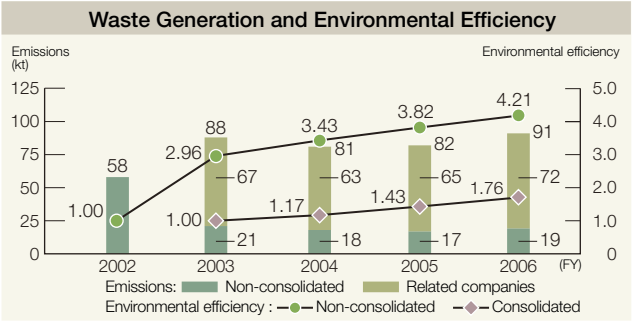
Based on fiscal year 2002, a target year of the Third Environmental Action Plan, the environmental efficiency of the company's own fiscal year 2006 CO_2 emissions and generated waste volumes saw 1.45-fold and 4.21-fold increases respectively.

It is the company's future task to set further appropriate environmental efficiency as its management indicator, considering influences such as the company's business characteristics and changes in product sale price.

Example:
CO_2 environmental efficiency

		FY 2006		FY 2002
1.45 times	=	9,507 hundred million yen (Net Sales) / 258kt (CO_2 emissions)	÷	6,933 hundred million yen (Net Sales) / 272kt (CO_2 emissions)





Reference: Energy Use Trends by Energy Type