

# Environmental Accounting

## Overview of Fiscal 2009 Performance

Capital investments in environmental conservation, including efforts to save energy through the introduction of energy-efficient heating systems in the TFT-LCD manufacturing process, were valued at ¥546 million in fiscal 2009. The expenses of Casio's environmental conservation activities, including the costs of recovery and recycling of products and printer toner cartridges, maintenance of energy-saving and wastewater processing facilities, and ISO certification and management activities, were ¥2,727 million.

That investment resulted in ¥1,181 million in business profits achieved by recycling, and a cost savings of ¥412 million through the introduction of energy-saving initiatives and the reduction of resources used in product packaging, yielding a real benefit of ¥1,593 million. Also, in fiscal 2009, Casio began calculating CO<sub>2</sub> emissions reduction, which had been treated as an environmental conservation effect measured by the amount of material consumed, based on estimated economic benefit, instead. This year's total economic benefits, including those from CO<sub>2</sub> emissions reduction, were ¥1,664 million. The total value of the economic benefits and the cost efficiency of economic conservation activities both improved over the previous fiscal year.

## Employee Message

### The Measure of Environmental Accounting

Unlike ordinary financial accounting, when it comes to environmental accounting and the costs (investments, expenses) and effects it assesses, the general idea that income should always be high and expenses always low may not apply. The costs necessary for ensuring environmental conservation must be made, but a company also needs to ensure efficiency and profitability if it is going to be able to engage in environmental conservation activities on an ongoing basis. Since this report expresses the balance of these costs and their economic benefits, it shows the environmental profitability rate for the whole group (economic benefits / environmental expenses). The use of environmental accounting, which contributes to the expansion of environmental conservation effect and economic benefit, and efficient environmental conservation activities, will be an increasingly key issue in coming years.



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Environmental conservation costs (April 2008 – March 2009)

Category by business activity	Main initiatives	Environmental investment (¥ million)	Environmental expenses <sup>1</sup> (¥ million)
Business area costs (costs arising in the main areas of business activity (manufacturing, processing, sales, distribution etc.))		521	701
(1) Pollution prevention cost	Upgrading and maintenance of wastewater and exhaust gas treatment facilities	48	240
(2) Global environmental conservation cost	Introducing and maintenance of energy-saving equipment	472	291
(3) Resource circulation cost	Reducing and recycling of industrial and general waste	1	170
Upstream/downstream cost <sup>2</sup>	Recovery and recycling of products including printer toner cartridges, parts, containers, packaging etc.	0	1,094
Administration cost	Secretariat operating costs, eco trade shows	24	475
R&D cost	R&D for reduction of environmental impact	0	446
Social activity cost	Donations to environmental conservation groups, greening and beautification, support for community environmental activities	0	11
<b>Totals</b>		<b>546</b>	<b>2,727</b>

<sup>1</sup> Depreciation costs are included in the expenses. <sup>2</sup> Costs arising before and after the processes of the main business activities.

Category by type of environmental conservation measure	Environmental investment (¥ million)	Environmental expenses (¥ million)
Cost related to global warming measures	472	646
Cost related to ozone layer protection measures	0	28
Cost related to air quality measures	0	109
Cost related to noise and vibration measures	0	18
Cost related to environmental conservation measures for the aquatic, ground, and geologic environments	48	129
Cost related to waste and recycling measures	1	1,286
Cost related to measures for chemical substances	0	47
Cost related to natural environment conservation	24	20
Other cost (ISO certification, maintenance costs, secretariat operation costs, eco trade shows, etc.)	0	445
<b>Totals</b>	<b>546</b>	<b>2,727</b>

Economic benefits of environmental conservation (April 2008 – March 2009)

Economic benefit <sup>1</sup>		Amount (¥ million)
Type of benefit		
Actual benefit (benefit that contributes to profits as a result of the promotion of environmental conservation measures)		1,593
Profits	Business revenue from recycling of used products, etc.	1,181
Cost savings	Cost reduction through energy saving activities	103
	Reduction of waste treatment costs through resource saving and recycling	309
Estimated benefit <sup>2</sup>		71
Reduction in CO <sub>2</sub> emissions to energy inputs		
Conservation of power consumption during product use by customers		
<b>Totals</b>		<b>1,664</b>

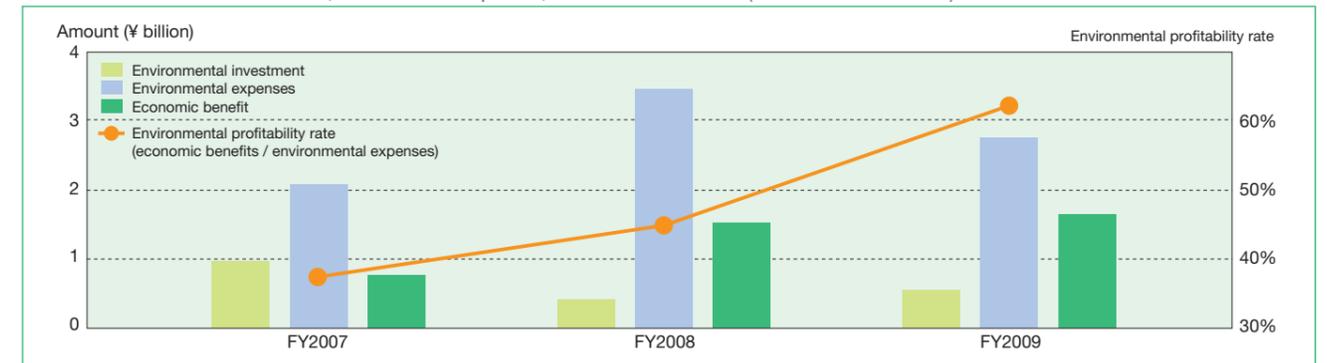
<sup>1</sup> Economic benefits are comprised of the actual benefit, which are the effects that contribute to profits resulting from environmental conservation measures, and estimated benefit, which state the reduction in the environmental impact in a monetary sum.  
<sup>2</sup> Estimated benefit is calculated by converting reductions in CO<sub>2</sub> emissions and power consumption during product use by customers into monetary figures. The effects of improved corporate image and avoiding risks are not included. The following statistical sources are used to perform these calculations: CO<sub>2</sub> unit prices are the average values for fiscal 2008 (¥2,531.6/ton) based on the Nikkei-JBIC Carbon Quotation Index. Electrical power unit prices are based on the fiscal 2007 results published by the Agency for Natural Resources and Energy of the Ministry of Economy, Trade and Industry (¥15.90/kWh).

Product contributions to greenhouse gas reductions (April 2008-March 2009)

Product contributions to greenhouse gas reductions	Amount (¥ million)
Paper consumption reduction made possible by electronic dictionaries	1,273

\*The effect of substituting electronic dictionaries for paper dictionaries is calculated using the reduction in CO<sub>2</sub> absorption caused by the cutting of forest resources (assuming a tree life span of 50 years).

Trends in environmental investments, environmental expenses, and economic benefits (fiscal 2007 - fiscal 2009)



\*The above graph corrects past figures with regard to the estimated effects that were first calculated in fiscal 2009.

Environmental conservation effect

Environmental performance indicator	Unit	FY2008	FY2009	Reduction effect <sup>1</sup>
CO <sub>2</sub> emissions	Tons-CO <sub>2</sub>	128,773	98,883	29,890
NOx emissions	Tons	18	16	2
SOx emissions	Tons	5.0	4.5	0.5
BOD emissions	Tons	34	34	0
Dust emissions	Tons	0.6	0.3	0.3
Waste emissions	Tons	9,143	6,571	2,572
Waste reutilization rate	Tons	7,123	5,539	-1,584 <sup>2</sup>
Water resources	Thousand m <sup>3</sup>	3,336	2,264	1,071
Packaging usage	Tons	13,059	12,856	204
Specially designated chemical (PRTR) emissions	Tons	17	12	5
CO <sub>2</sub> emissions of sold products	Tons-CO <sub>2</sub>	10,550	12,571	-2,021 <sup>3</sup>

<sup>1</sup> Figures are shown as positive when the effect has increased, and negative when it has decreased.  
<sup>2</sup> The waste reutilization rate to waste emissions increased from 78% to 84%.  
<sup>3</sup> CO<sub>2</sub> emissions increased due to increased sales of high-performance machines, such as information equipment.

Scope of data compilation for environmental accounting: Casio Computer Co., Ltd., and consolidated subsidiaries in and outside Japan.  
Reference guideline: *Environmental Accounting Guidelines 2005*, Ministry of the Environment, Japan