



# Environmental Accounting

Green Management

## Evaluating environmental activities from both the “cost” and “effect” perspectives

Fujitsu introduced environmental accounting in March 1999 to provide quantitative assessments of the costs and effects of environmental protection measures throughout the company. Despite a revision of the environmental accounting guidelines in fiscal 2000 in accordance with guidelines published by Japan’s Ministry of the Environment, new items were added to the system without altering the central focus on existing effect collation methods to maintain consistency with the previous year.

### Environmental Accounting System

#### System Objectives

- To disclose information and the company’s position to those concerned
- To implement continuous environmental activities with a long-term perspective
- To raise the effectiveness of environmental investments
- To vitalize Fujitsu’s program of environmental protection activities

#### Principal Points Amended Since Fiscal 1999

- Amendment of accounting criteria to conform to guidelines issued by the Ministry of the Environment in 2000
- Replacement of previous cost-inclusion criterion of “environmental purpose exceeding 50%” with system of counting all costs incurred in lowering environmental burden of operations
- Addition of wastewater treatment fees as new criterion; elimination of paperless costs and effects for purposes of business improvement
- Introduction of intranet-based environmental accounting support system to facilitate input of costs and effects at source

### Fiscal 2000 Environmental Accounting Results

		Item	Scope
Costs	Costs in business operations	Pollution prevention costs	Costs of preventing air/water pollution and soil contamination and other activities
		Environmental protection costs	Costs incurred through energy-saving measures, plus costs of measures to combat global warming
		Resource recycling costs	Costs of waste reduction and disposal, plus costs of efficient resource usage measures, such as water conservation and rainwater use
		Wastewater treatment fees	Fees for water treatment utilities
	Upstream/downstream costs		Costs of lowering upstream/downstream environmental burden of manufacturing and service activities (recycling/re-use costs for waste products and packaging, costs of Green Procurement, etc.)
	Management costs		Management-related environmental protection costs (personnel expenses for environmental promotion activities, costs of gaining/maintaining ISO14001 certification, costs of measuring environmental burden, etc.)
	R&D/solutions business costs		Environmental protection costs for R&D activities and costs associated with environmental solutions business (design/development costs for Green Products and environmental technologies, environmental solutions business costs)
	Social activities costs		Environmental protection costs of social activities (costs of greenification programs, environmental report production and environmental publicity)
Environmental clean-up costs (Risk avoidance)		Costs of environmental clean-up operations (costs of eliminating soil/groundwater contamination, environmental compensation, etc.)	
			Total
Effects	Effects in business operations	Pollution prevention effects	Savings from avoiding losses*1 from plant closure due to failure to observe environmental laws and regulations, plus contribution of environmental protection activities to the value added*2 by manufacturing activities
		Environmental protection effects	Cost savings from reductions in consumption of electricity, oil and gas
		Resource recycling effects	Cost savings from reductions and effective use of waste
	Upstream/downstream effects		Sales value of recycled and re-used products
	Management effects		Efficiency improvements due to ISO14001 systems, effects of in-house employee training
	R&D/solutions business effects		Sales contribution of Green Products, other eco-friendly products and environmental solutions business
	Social activities effects		Value of corporate image enhancement from environment-related publicity
	Environmental pollution prevention effects (Risk avoidance)		Savings from avoiding compensation payments to residents for groundwater and soil contamination
			Total

\*1: Savings from avoiding losses = Value added/Days of operation × Days lost

\*2: Contribution of environmental protection activities to the value added = Value added × Maintenance and management costs to facilities related to environmental protection/



## Third-party Audits

As in previous years, Fujitsu ensured the reliability and transparency of its data by receiving third-party auditing of its environmental accounting (from Shin Nihon Environmental Management and Quality Research Institute\*1). Conducted at local sites, the audit covered a sample of Fujitsu's manufacturing plants and affiliated companies in Japan and overseas. It examined the data collection processes used to assess environmental costs and effects, and checked the various internal control processes associated with environmental accounting procedures. An audit of the documents used to provide data for all the other Fujitsu plants and affiliates was also conducted.

\*1: Formerly Ota Showa Environment & Quality Research Institute



Year-end environmental accounting audit at FDK

## Results of Implementation of Environmental Accounting

Environmental accounting is required to assess the cost increases associated with efforts to improve environmental efficiency and manage the effects. Its introduction has shed light on various environmental costs and effects that were previously difficult to measure, with the following results:

Increased consciousness of involvement in environmental protection (Expansion of activities to include marketing and service as well as plant-oriented activities)

Increased program effectiveness due to intra-company cooperation (Improved effect from thorough applications of energy-saving/waste reduction guidelines among all plants and affiliates)

Increased transparency of cost reduction items (Extraction of items to be improved in facilities' maintenance and management costs related to the environment by analysis and evaluation of environmental costs)

(Unit: 100 million yen)

	Fiscal 2000 results			See pages
	Fujitsu	Affiliated companies	Total	
	27	31	58	27, 28, 33 ~ 36
	19	20	39	29, 30, 32
	14	26	40	25, 26
	4	4	8	—
	1	5	6	19, 20, 24
	12	13	25	11, 12, 15, 16
	3	7	10	21 ~ 23, 37, 38
	1	2	3	17, 18, 39
	1	1	2	31, 32
	<b>82</b>	<b>109</b>	<b>191</b>	—
	82	69	151	27, 28, 33 ~ 36
	9	7	16	29, 30, 32
	5	43	48	25, 26
	1	5	6	19, 20
	2	2	4	11, 12, 15, 16
	9	4	13	21 ~ 23, 37, 38
	1	1	2	17, 18
	2	4	6	31, 32
	<b>111</b>	<b>135</b>	<b>246</b>	—

Total generated cost

### Environmental Impact-reduction Improvement Indicators: Fiscal 2000

(Fujitsu)

Item	Result
Environmental improvement indicator (EI)*2 [Ton-C/100 million yen]*3	176*4
Environmental efficiency indicator (EE)*5 [100 million yen/Ton-C]	0.18

\*3: Ton-C is a unit denoting the weight of carbon contained in the corresponding carbon dioxide (CO<sub>2</sub>).

\*4: The environmental improvement indicator has registered improvement since fiscal 1999 due to reductions in CO<sub>2</sub> emission volumes resulting from energy savings achieved through the adoption of co-generation systems. (Approx. 1.55 X fiscal 1999 indicator)

### Fiscal 2000 Environmental

#### Burden-reduction Effect (for reference)

(Fujitsu)

Effect/CO <sub>2</sub> equivalents [Ton-C]
14,600*6

\*6: This value shows the fiscal 2000 environmental burden reduction effect achieved through energy savings (lower consumption of electricity, oil and gas) and waste reduction (reduced disposal of wastepaper, waste plastic, waste oil and wood chips).