

7. Environmental Management

7.1 Environmental Accounting



Taiwan Tit

TSMC established its environmental accounting system in 2002 and integrated environmental accounting practices with the Environmental Management System (EMS) in 2003. The integrated system not only helps each fab implement environmental management programs but also evaluates their economic efficiency at the same time. By the end of 2006, the total benefit for promoting environmental management programs, including waste recycling and industrial waste reduction, amounted to NT\$241 million. In addition, each department has improved their performance in using correct environmental account codes for annual budget planning, enhancing the accuracy of future statistics.

Environmental accounting has helped TSMC assure that environmental protection measures also have major economic benefits.

TSMC Environmental Costs in 2006

Unit: per NT\$1,000

Classification	Description	Investment	Expense
1. Direct cost for reducing environmental impact			
(1) Pollution Control	Fees for air pollution control, water pollution control and others	1,422,958	652,222
(2) Resource Conservation	Costs for resource (e.g. water) conservation	428,085	11,312
(3) Waste Disposal and Recycling	Costs for waste treatment (including recycling, incineration and landfill)	0	82,240
2. Indirect cost for reducing environmental impact (managerial cost)			
	(1) Cost of training (2) Environmental management system and certification expenditures (3) Environmental measurement and monitoring fees (4) Environmental protection product costs (5) Environmental protection organization fees	104,652	87,760
3. Other environment-related costs			
	(1) Costs for decontamination and remediation (2) Environmental damage insurance and environmental taxes (3) Costs related to environmental settlement, compensations, penalties and lawsuits	0	0
4. Total		1,955,695	833,534

TSMC Environmental Efficiency in 2006

Items	Description	Efficiency (NT\$1,000)
1. Recycling of industrial waste	Recycling of waste pallets, packaging materials, wafer boxes, wafers, computers and accessories, fluorescent lamps, metals, empty toner cartridges and other waste	90,770
2. Reduction of industrial waste	Costs of industrial waste disposal saved by reducing quantity.	150,300
Total		241,070