Environmental Accounting

JFE Holdings						
JFE Steel	JFE Engineering	Kawasaki Microelectronics	JFE Urban Development	JFE R&D		

Transition of Capital Investment

To reduce the environmental loads associated with its production activities, JFE Steel has actively invested in energy saving and environmental protection equipment based on the results of technical development.

As energy conservation measures, it developed

or introduced a wide variety of waste heat recovery equipment and invested heavily in energy-saving production processes such as continuous casting and continuous annealing. Cumulative investment since 1990 has now reached approximately ¥339 billion. Today, JFE Steel is maintaining its position as a world leader in energy efficiency.

JFE Steel has made particularly strong efforts to protect the environment, including construction

of desulfurization and denitrification plants as measures against SOx and NOx in the atmospheric environment and water treatment facilities to reduce COD and prevent water pollution. As a result of companywide investment in environmentrelated equipment, which totals approximately ¥477 billion since 1973, JFE's clean steelworks boast the world's highest levels of environmental performance.





Cumulative investment in environmental measures



Environmental Accounting

Investment in environment-related facilities was ¥14.9 billion in FY2003, which accounted for approximately 15% of total capital investment for the year. Expenses were ¥68.9 billion. The primary focus of investment was environmental protection and prevention of global warming. Primary expenses were environmental protection, effective use of resources, and prevention of global warming. Operation/maintenance and depreciation accounted for the majority of these expenses. Environmentrelated research and development expenses were ¥4 billion, or approximately 13% of total research and development expenses.

In FY2003, JFE Steel achieved a recycling rate of more than 99%. Energy-saving benefits were equivalent to \$2.8 billion.

Environmental conservation cost				
		Major item	Investment	Expenses
Environmental investment & expenses related to JFE's own business	Management	Monitoring & measurement of environmental influence, EMS-related activities, environmental education & training, etc.	_	1.2
	Prevention of global warming	Energy conservation, effective use of energy, etc.	9.4	13.8
	Effective use of resources	Recirculation of industrial water, Recycling of by-products & wastes generated in-house, waste management, etc.	0.4	16.7
	Environmental protection	Prevention of air pollution, water pollution, soil contamination, noise, vibration, ground subsidence, etc.	5.1	30.7
	Miscellaneous	Fees/charges for SOx, etc.	—	1.8
Environmental investment & expenses related to customers and society	Research & development	Technological development for the environment, energy, prevention of global warming	_	4
	Social activities	Protection of the nature, support to forestation, information disclosure, advertisement, etc.	-	0.7
		Total	14.9	68.9

The totals mentioned above were calculated on the following basis

Period: April 2003 to March 2004

•Scope: Environment-related investment and expenses at JFE's steelworks, but in the case of research and development, on a companywide basis (JFE Steel and JFE Engineering). *Calculations do not include investments made primarily for purposes other than environmental protection, for example, renovation of superannuated facilities, even when the process as a whole

realizes a net energy saving in comparison with the former process.

**Calculations include only actual effects, excluding presumed effects based on estimates or risk avoidance benefits