

Environmental Accounting

Environmental Accounting

Nippon Kayaku calculates and discloses costs relating to environmental conservation in its business activities to effectively implement environmental conservation initiatives. Environmental accounting is calculated for the period from April 2022 through March 2023, and investment amounts are based on actual investment results for equipment relating to environmental conservation during the target period, with reference to the Environmental Accounting Guidelines (2005 version) issued by the Japanese Ministry of the Environment, and the Environmental Accounting Guidelines for Chemical Companies published by the Japan Chemical Industry Association (JCIA). Expenses are calculated based on the results of equipment maintenance costs, personnel costs, and depreciation costs, etc., relating to environmental conservation.

◆ Environmental Accounting

FY2022 Environmental Conservation Costs

Category		Scope	Unit	Investments	Expenses	Details
I. Business area costs		Non-consolidated	Million yen	530	1,551	Environmental conservation costs to limit environmental impact in the businesses area due to production and service activities
Breakdown	① Pollution prevention costs	Non-consolidated	Million yen	(288)	(333)	Investments and expenses relating to the prevention of air pollution, water pollution, underground seepage into groundwater, noise, and vibration
	② Global environmental conservation costs	Non-consolidated	Million yen	(237)	(64)	Capital investments and maintenance / management costs relating to energy conservation and measures to combat global warming
	③ Resource recycling costs	Non-consolidated	Million yen	(5)	(806)	Expenses relating to resource conservation, recycling, and appropriate treatment and disposal of industrial waste, etc.
	④ Other	Non-consolidated	Million yen	(0)	(349)	Pollution load levies, etc.
II. Upstream and downstream costs		Non-consolidated	Million yen	0	67	Costs of suppressing environmental impacts upstream or downstream from production and service activities
III. Administration costs		Non-consolidated	Million yen	3	268	ISO14001 renewal and maintenance audit costs, environmental impact monitoring, information disclosure, education and training, greening, etc.
IV. R&D costs		Non-consolidated	Million yen	0	158	Expenses relating to R&D and product development for environmentally friendly themes
V. Social activity costs		Non-consolidated	Million yen	0	10	Factory tours, community activity subsidies, organization membership fees, etc.
VI. Environmental damage handling costs		Non-consolidated	Million yen	0	0	Natural restoration costs, etc.
Total		Non-consolidated	Million yen	533	2,054	

◆ Economic Effects from Environmental Protection Measures

Economic Effects of Environmental Conservation Measures FY2022

Targets of evaluation of effects		Scope	Unit	Effective amount	Main contents
Inside business areas effects	Pollution control effect	Non-consolidated	Million yen	0.4	Installation of sludge level interface sensors, collection of scattered dust by dust collectors, etc.
	Global environmental conservation effects	Non-consolidated	Million yen	97.4	Adoption of energy-saving equipment (LED lighting, high-efficiency pumps, etc.), replacement of steam piping, replacement of substation equipment, replacement of compressors, optimization of air conditioner operating conditions, utilization of exhaust heat, outdoor unit sprinkling, roof sprinkling, heat shield films, etc.
	Resource recycling effects	Non-consolidated	Million yen	69.5	Recovery and reuse of solvents, in-house treatment of waste solvents, external sales of waste such as scrap metal and waste plastics as recycled resources
Upstream / downstream effects		Non-consolidated	Million yen	38.3	Cleaning and reuse of SUS drums and poly drums, etc.
Other		Non-consolidated	Million yen	0.0	Tree-planting activities
Total		Non-consolidated	Million yen	205.5	

Investments Related to the Environment and to Health and Safety

Nippon Kayaku makes well-planned and continual investments in projects related to the environment and safety and health. In FY2022, the total of environment related capital investments was 533.0 million yen, and the total of health and safety-related capital investments was 430.7 million yen.

Environment-related Capital Investments

Category	Scope	Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Air pollution prevention equipment	Non-consolidated	Million yen	85.9	40.2	20.9	37.1	68.1
Water pollution prevention equipment	Non-consolidated	Million yen	40.6	70.5	109.7	266.9	206.7
Underground seepage prevention equipment	Non-consolidated	Million yen	52.0	13.4	5.5	4.9	7.2
Noise and vibration prevention equipment	Non-consolidated	Million yen	4.3	2.4	17.2	6.0	6.0
Industrial waste processing equipment	Non-consolidated	Million yen	3.9	30.9	106.6	111.2	5.1
Plant greening	Non-consolidated	Million yen	0.0	1.0	1.8	0.5	3.3
Energy conservation and global warming prevention equipment	Non-consolidated	Million yen	102.9	40.3	172.6	244.6	236.6
Total	Non-consolidated	Million yen	289.6	198.7	434.3	671.3	533.0

Safety- & Health-related Capital Investments

Category	Scope	Unit	FY2018	FY2019	FY2020	FY2021	FY2022
Equipment aging measures	Non-consolidated	Million yen	327.9	469.0	292.9	490.9	245.0
Safety and work environment measures	Non-consolidated	Million yen	164.8	165.3	171.4	171.4	86.6
Explosion, fire and leakage measures	Non-consolidated	Million yen	12.8	39.4	9.2	14.1	60.6
Earthquake and other natural disasters measures	Non-consolidated	Million yen	11.0	2.6	51.4	4.4	6.5
Other	Non-consolidated	Million yen	34.9	4.0	4.5	6.4	32.0
Total	Non-consolidated	Million yen	551.4	680.3	529.4	687.1	430.7