

Our Activities Stem from a Discernment of Environmental Issues and Virtue Ethics Management

NTT Group companies work as a single corporate entity engaged in environmental issues.

1 Three Corporate Guidelines for Earning the Trust of Society

http://www.ntt.co.jp/kankyo/e/2002report/qa/chapter1/q05_1.html

The NTT Group has the following business features: (1) no manufacturing operations, (2) an active research and development division, (3) a vast number of buildings owned nationwide.

Based on these characteristics we have constructed the following three guidelines:

Green Procurement Guidelines

Compiled to promote the procurement of environmentally friendly products (Green Procurement). We assess the suppliers and products through a corporate policy assessment as well as a product assessment. We are now considering the introduction of a comprehensive assessment based on LCA.

Green R&D Guidelines

Established to reduce the harmful environment impact associated with research and development activities method and results. The effects are subject to environmental assessment.

Green Design Guideline for Buildings

Established to further promote building designs that can co-exist with the environment. From this view point, we have established seven criteria: (1) extending building life; (2) restricting the use of halon and CFCs; (3) restricting the use of and removing harmful substances; (4) conserving resources and energy; (5) reducing waste; (6) promoting reuse and recycle; (7) and considering the local environment.

2 NTT Group's Environmental Protection Promoting Systems

http://www.ntt.co.jp/kankyo/e/2002report/qa/chapter1/q08_1.html

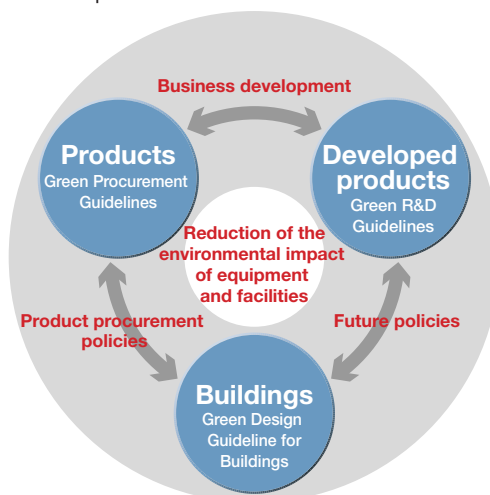
At the dawn of the 21st century, the Century of the Environment, many new laws and regulations have been introduced. The NTT Group strictly complies with these new laws and regulations and has quickly implemented new environmental measures and established a system to promote the "NTT Group Ecology Program 21."

The structure of the NTT Group organization for promoting environmental protection consists of the NTT Group Global Environmental Protection Promotion Committee as the top decision-making body and various special committees and working groups underneath. In addition, the NTT Environmental Protection Office and divisions in charge of environment-related sections of each participating company work in collaboration.

In order to guide the work of special committees and swiftly respond to any changes, NTT's Environmental Protection Office gathers information on environmental laws and regulations in Japan and overseas. The analysis and comprehensive implications of this information are provided to divisions in charge of the environment, each committee and working group in every company.

The special committees consist of the CO₂ Reduction Committee, Waste Disposal and Recycling Committee, Environmental Load Reduction Network Committee, and Environmental Technology R&D Committee. The various task-oriented committees are organized with specialists from Group companies, in collaboration with research laboratories to pursue the most efficient environmental measures.

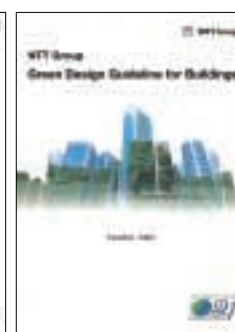
● NTT Group Environmental Guideline



● Green Procurement Guidelines

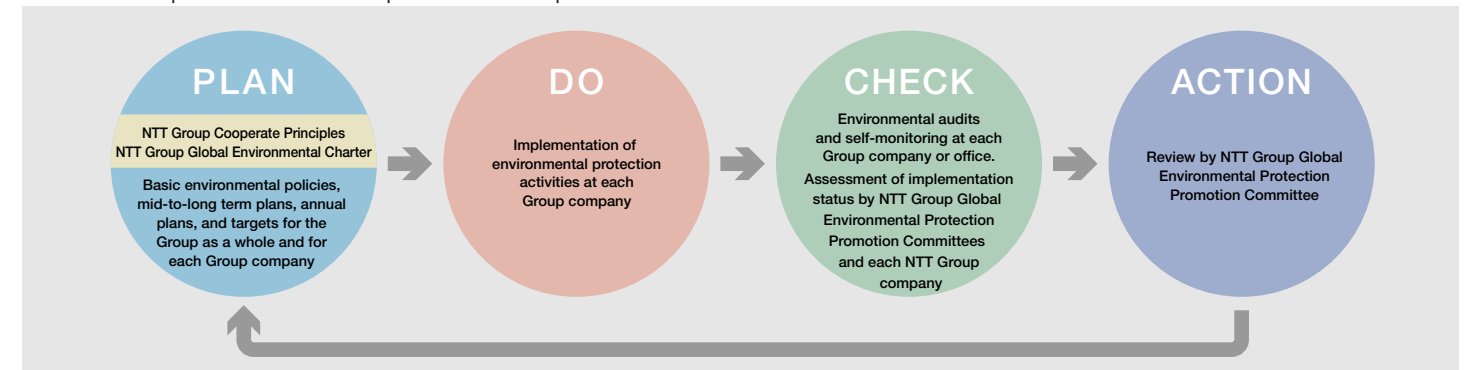


● Green R&D Guidelines

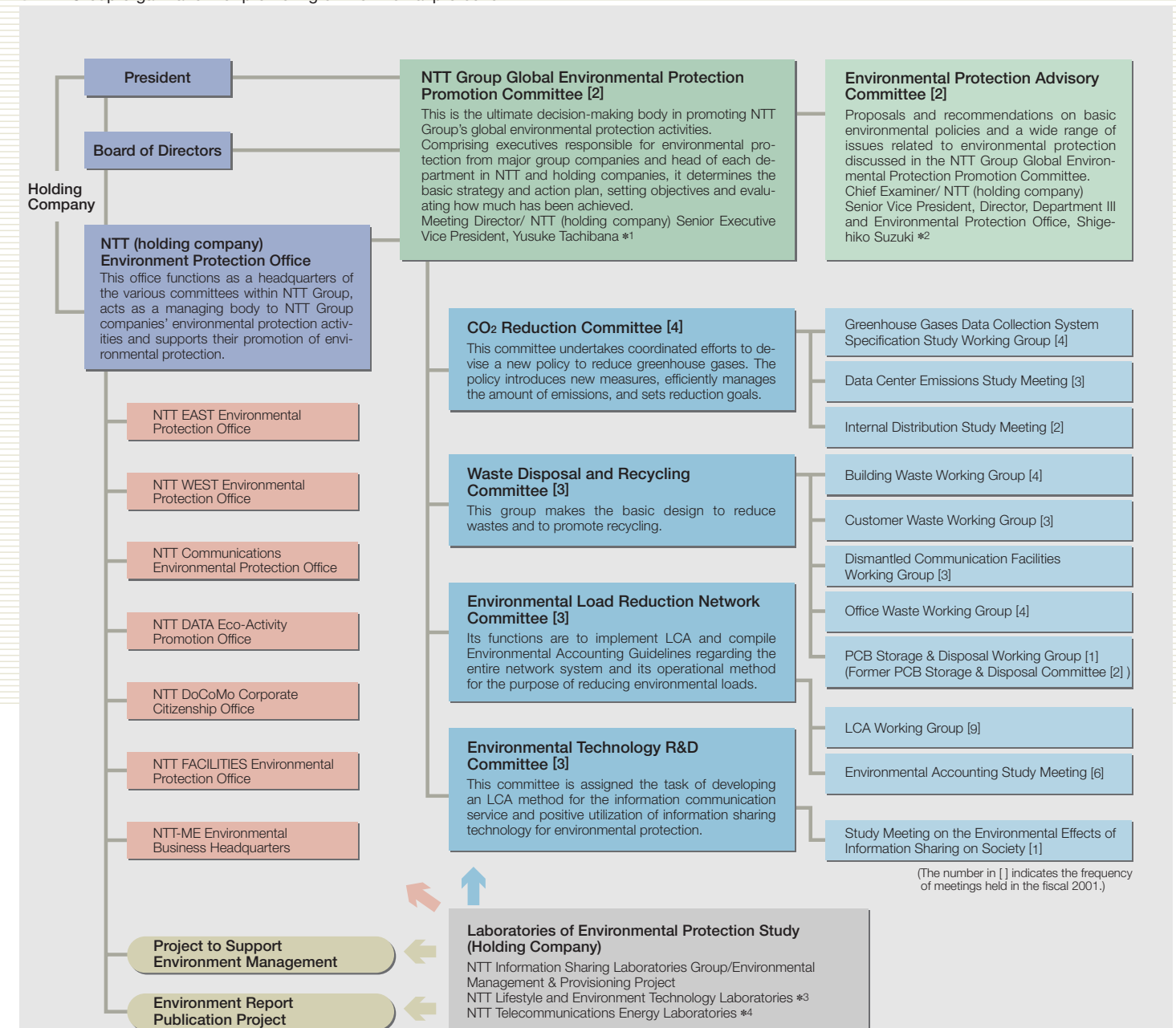


● Green Design Guideline for Buildings

● PDCA for the promotion of NTT Group's environmental protection activities



● NTT Group organization for promoting environmental protection



As of March 31, 2002

As of July 1, 2002, the following details have been revised:
 *1 Hiromi Wasai
 *2 Yuji Inoue
 *3 NTT Energy and Environmental Systems Laboratories
 *4 NTT Energy and Environmental Systems Laboratories

3 Establishing Environmental Management Systems and Risk Management

http://www.ntt.co.jp/kankyo/e/2002report/qa/chapter2/q01_1.html
http://www.ntt.co.jp/kankyo/e/2002report/qa/chapter2/q02_1.html
http://www.ntt.co.jp/kankyo/e/2002report/qa/chapter2/q04_1.html

● Acquisition of ISO 14001

The NTT Group promotes the establishment of environmental management systems in compliance with ISO 14001 to realize the “NTT Group Global Environmental Charter” and to effectively promote “NTT Group Ecology Program 21.” Our Group companies and offices adhere to the corporate mission and have developed operation-specific programs for environmental management. We acquire ISO 14001 certificates for more facilities every year, including 21 facilities in 2001, totaling 73 facilities in 55 companies as of March 2002. All our major Group companies have an ISO 14001 certificate for their entire or part of facilities.

● “Project to Support Environmental Management”

The purpose of this project is to provide environmental consulting services to each Group company, to expand the visibility of the “NTT Group Ecology Program 21,” and to promote the implementation of environmental protection activities. One of our major activities in 2001 included hearing from each Group company about its environmental protection activities. Based on the results of these hearings, we conducted a study group seminar with representatives from the environmental division of each Group company in Tokyo and Osaka.

● Environmental Risk Management

Because of its business scale, the NTT Group believes that daily efforts to reduce environmental loads associated with its business activities are fundamental to environmental risk management. We have taken action to prevent accidents and pollution through guidelines and checklists, including specific measures for soil contamination found by our voluntary soil survey, electromagnetic waves, and transferring PCB treatment from the in-house facility to a suprapregional facility led by the government.



● “Project to Support Environmental Management”

4 NTT Group Environmental Audits Function

http://www.ntt.co.jp/kankyo/e/2002report/qa/chapter2/q03_1.html

The NTT Group establishes and maintains an environmental management system, as we have stated in the “NTT Group Global Environmental Charter.” Environmental audit is essential in order to ensure the system functions properly. Our environmental audit is broken down into the three levels.

■ Level 1 ■

Initial environmental audits to ensure compliance with laws and regulations.

■ Level 2 ■

Environmental management system audits in compliance with ISO 14001.

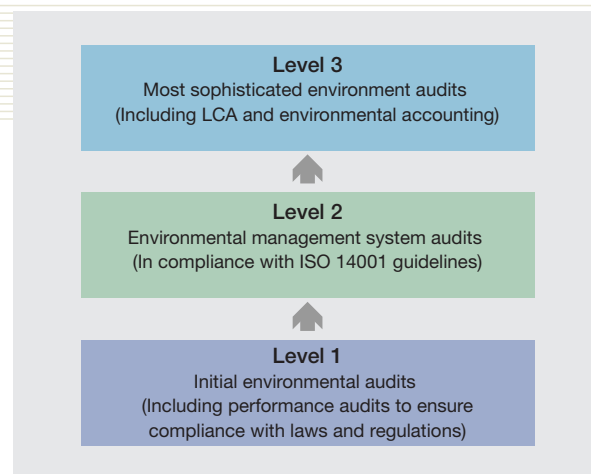
■ Level 3 ■

The most sophisticated environmental audits which apply LCA or environmental accounting.

Details of audit activities at each level include self-monitoring, internal audits in compliance with ISO 14001, external audits and inspections, and an implementation of audits by the lead division of Implementation Management Programs.

Since 1995, all business offices within NTT Group have undertaken self-monitoring at least once a year. By examining our own organization's level of environmental protection, we can promote the self-purification of environmental protection. The criteria includes compliance with environmental laws and regulations and Implementation Management Programs. Only staff with specific skills are responsible for self-monitoring, and reporting results to the NTT departments in charge of environmental protection.

The internal audits in compliance with ISO 14001 are conducted by internal auditors to ensure that the implemented environmental management system complies with ISO 14001 and that PDCA (Plan-Do-Check-Act) is functioning. We scrutinize every review, determine major and minor variances based on audit results, and take action to resolve any discovered problems.



● Levels in the environmental audit

5 Environmental Accounting that We Want to Reflect on Corporate Management

<http://www.ntt.co.jp/kankyo/e/2002report/qa/chapter2/q09.html>

In 2000, the NTT Group introduced environmental accounting to grasp the costs necessary for environmental protection activities and to quantitatively grasp the effects of these activities (in physical quantity units and monetary units) for environmental management use.

The “NTT Group Environmental Accounting Guidelines (2002 Version)” was developed in compliance with the “Environmental Accounting Guidelines (2002 Version)” issued by the Ministry of the Environment.

1. Scope of Totalization

The companies subject to consolidated environmental accounting are NTT (holding company), NTT EAST, NTT WEST, NTT Communications, NTT DoCoMo Group's nine companies, NTT DATA, and NTT FACILITIES.

2. Period of Totalization

From April 1, 2001 to March 31, 2002

3. Method of Totalization

- Accounting is conducted in accordance with “NTT Group Environmental Accounting (2002 version).”
- The NTT Group's consolidated environmental accounting table shows preservation costs (units in currency), preservation effects (units in quantity), and economic effects associated with environmental preservation measures (units in currency).
- According to amended guidelines from the Ministry of the Environment, (1) expenditure of greening outside the company is transferred from social activity costs to management costs, (2) all expenditures for the research and development division is transferred to research and development costs.
- Personnel costs are included in expenses, but depreciation expense is not.

4. Tabulated Results

- The environmental costs were approximately 14.1 billion yen as an investment and 36.6 billion as an expense.
- The economic effect was approximately 35.1 billion yen. The reduction in costs by the reuse of cables, exchange systems, and transmission equipment was of approximately 28 billion yen. The effect of energy conservation was approximately 2.7 billion yen and the benefit of using electronically tabulated bills 1.1 billion yen.
- The effects expressed in physical quantity units as a result of environmental conservation was 74,000 tons, in terms of a CO₂ emissions reduction, of which 72,000 tons was due to power consumption. The quantity recycled was 740,000 tons. The major items recycled included communications cables, concrete telephone poles, and telephone directories.
- The results of research and development were estimated. The data were reported on page 16 along with the contents of the actual measures.

5. Future Policies

- The deemed effects (those estimated by means of hypothetical calculations) and the effects expressed in physical quantity units outside of NTT (customers and society) are currently being calculated. We are working on the establishment of guidelines for the deemed effects of future disclosures.
- We plan to expand the scope of corporations which are subject to our tabulations.
- The amount of depreciation expense will be included in our future tabulations.

Environmental Preservation Costs (¥100 million)		
	Environmental preservation cost	
	Investment	Expense
(1) Total cost within business areas	63.2	155.2
■ Pollution prevention costs	0.8	4.4
■ Global environmental preservation costs	48.7	18.8
■ Resource circulation costs	13.7	132.1
(2) Fluctuation costs	4.7	32.3
(3) Management activities costs	1.2	39.2
(4) Research and development costs	71.9	138.4
(5) Social activities costs	0.0	1.2
(6) Costs corresponding to environmental damages	0.0	0.0
Total	141.0	366.4

Investments and R&D Costs (¥100 million)	
Total amount of investment for the period under review	22,919.3
Total amount of research and development costs for the period under review	3,908.9

The total amount of investments and research and development costs for the period under review is the sum total of NTT Group companies subject to consolidated accounting.

Environmental Preservation Effects	
Effects expressed in physical quantity units	
Amount of CO ₂ emission reduced (breakdown: 72,000t by electricity consumption; 2,000t by gas, vehicles and others)	74,000t
Amount of materials recycled	740,000t
Effects expressed in monetary units (¥100 million)	
Reduced expenses from decreased energy consumption	27.0
Amount gained from recycling	32.6
Reduction of waste disposal expenses with recycling	0.2
The amount of reduced expenses of new purchases through reuse	
■ Dismantled telecommunications facilities	278.6
■ Wastes at offices	1.0
Reduced postage by digitization	11.0
Other economic effects	0.6
Total	351.1