



August 6, 2001

"Report on NTT Group Environmental Protection Activities 2001" Released

The NTT Group has released a "Report on NTT Group Environmental Protection Activities 2001," detailing its approach, policies and measures taken during fiscal 2000 for protecting the environment. This is the third time such a report has been issued. The report reflects the special nature of the NTT Group.

Highlights of the report include trial calculations on the effectiveness of information technology (IT) in the information distribution industry on reducing the burden on the environment, and the specific attempts being made by the NTT Group in this regard; the first environmental accounting report made as the NTT Group ; the results of measuring emissions of six so-called greenhouse gases; the involvement of the NTT Group as a whole in environmental issues; and a description of "Ecommunication"^{*}-- which refers to communication with customers through public relations campaigns on environmental issues and disclosures, etc..

*A coinage combining ecology and communication.

The highlights of the report are outlined below.

Effective use of information technology (IT) toward reducing environmental impact

NTT made a trial calculation to assess how IT can be used effectively in the information distribution industry toward reducing the impact on the environment, and has included the results in the report.

While the IT revolution has increased the number of networks, servers and terminals, which can be expected to raise energy use, that same technology is bringing about new efficiency in distribution and production, for what is seen to be an overall lowering of energy consumption. (See <u>Attachment 1</u>.)

By 2010 the IT-related energy consumption in Japan is forecast to increase to around 1.5 times the present level, amounting to 1.1 percent of the total energy consumption in this country. At the same time the use of IT is expected to reduce the amount of energy consumed, for an estimated savings of 3.6 percent in overall energy consumption nationwide. The overall result will therefore be a reduction in energy use thanks to information technology. (See <u>Attachment 2</u>.)

Some of the specific ways the NTT Group is using IT include the Internet Town Pages (online telephone business directory), the use of video conferencing systems, and conducting R&D on environment education systems using information sharing technology. In these and other ways NTT is committed to continuing its leadership role

in the IT revolution and to contributing toward reduced energy use.

Trial introduction of environmental accounting

For the first time the report includes an environmental accounting^{*1} for the main companies^{*2} of the NTT Group. The accounting was made with reference to the document, "Toward establishment of an environmental accounting system (2000 Report)".^{*3}

During fiscal 2000 the "cost of environmental protection" for the NTT Group was 16.1 billion yen in capital investment, 38.55 billion yen for environmental expenditures, and 25.72 billion yen as the economic benefits of environmental protection. (See <u>Attachment 3</u>.)

There is a growing movement among Japanese corporations toward introducing environmental accounting. What is required is an accounting system that will enable companies to clearly indicate the effectiveness of environmental management in their particular business.

Future issues for the NTT Group will be to improve the accuracy of assessing environmental costs, to devise ways of calculating the benefits to society of telecommunications services, and to create mechanisms by which the true benefits of the costs in terms of reducing the burden on the environment (assessed in more than simple deficit/profit terms) can be put to use in environmental management. The NTT Group will then consider drawing up guidelines aimed at realizing a more accurate group consolidated environmental accounting, and will work to establish an NTT Group environmental accounting system.

*1: Calculated on a cash-flow base

*2: NTT, NTT East, NTT West, NTT Communications, NTT DATA, NTT DoCoMo Group

*3: May 2000, Environment Agency (now the Ministry of the Environment)

Calculating six greenhouse gas emissions

The NTT Group has taken the lead in calculating emissions not just of carbon dioxide but of all six types of gases designated as greenhouse gases^{*4} in the Kyoto Protocol drafted in 1997. These calculations were not limited to the major NTT companies but were expanded to the NTT Group companies.^{*5}

The results of these calculations showed that for fiscal 2000 the greenhouse gas emissions of the NTT Group were approximately 2.51 million metric tons of carbon dioxide equivalents. Of these, the level of non-CO2 greenhouse gas emissions was 14,000 metric tons of carbon dioxide equivalents, indicating that nearly all the greenhouse gas emissions by the NTT Group are of carbon dioxide. Of these, around 90 percent are the result of electrical power use. (See <u>Attachment 4</u>.)

Since 1997 the NTT Group has been carrying out a program to reduce energy use through a "Total Power Revolution Initiative," which it will continue to pursue

aggressively.

*4: Greenhouse gases are defined as CO2 (carbon dioxide), CH4 (methane), N2O (nitrogen dioxide), HFCs (hydrofluorocarbons), PFCs (perfluorocarbons) and SF6 (sulfur hexafluoride).

*5: For this fiscal year calculations were made for a total of 80 NTT Group companies, including NTT, NTT East, NTT West, NTT Communications, NTT DATA, NTT DoCoMo, and each of the group companies.

Involvement of the NTT Group as a whole in environmental protection

Three sets of environmental guidelines have been drawn up reflecting the features of the NTT Group, with the aim of engaging the entire NTT Group in environmental protection efforts.

A major feature of the NTT Group is the lack of manufacturing divisions. For this reason the guidelines focus on procurement, R&D, and building design. The Green Procurement Guidelines cover the purchasing of materials and products from suppliers. The Green R&D Guidelines are aimed at ensuring consideration for the environment from the research and development stages. The Green Design Guideline for Buildings is intended to reduce environmental impact from the design stage to actual operation. Together these sets of guidelines function to make sure the entire NTT Group carries out its operations with due consideration for the global environment.

ECOmmunication^{*}

The NTT Group undertook a public relations campaign in fiscal 2000 on the theme of "ECOmmunication," placing environmental ads in newspapers and magazines as well as on Web sites aimed at informing the public of concrete steps being taken to deal with environmental issues. It also conducted a survey to find out how customers view this effort. The results show that approximately three out of four respondents approve of advertisements regarding corporate involvement in environmental issues. (See <u>Attachment 5</u>.)

Many of the respondents also wrote in comments, providing valuable feedback on the topic of environmental PR. The NTT Group intends to continue its commitment to "ECOmmunication" with customers.

*A coinage combining ecology and communication.

The "Report on NTT Group Environmental Protection Activities 2001" contains much more information than could be given here on environmental protection measures being taken by the NTT Group, along with data on the activities and their results. The report will be made available shortly on the NTT Web site (URL: <u>http://www.ntt.co.jp/kankyo/index.html</u>).

- <u>Attachment 1</u>

- Attachment 2

- <u>Attachment 3</u>
- Attachment 4
- Attachment 5

For more information, please contact: Nippon Telegraph and Telephone Corporation, Environmental Protection Office (Nishi, Ibata) Phone: 03-5205-5326, FAX: 03-5205-5329 E-mail: kankyo@hco.ntt.co.jp

