DNP

DNP Group Environmental Report 2012

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Editorial Policy

- While most of our 2011 environmental activities are covered in our CSR Report 2012, this DNP Group Environmental Report 2012 was created to announce all of the environmental activities of the DNP Group, and is based on the Environmental Reporting Guidelines (2012 edition) issued by Japan's Ministry of the Environment.
- The DNP Group Environmental Report 2012 is published in a page format designed to be easy to read on the Web.
- We have interspersed columns throughout, covering specific topics.
- The information in this report was subjected to a third-party review conducted by the Ernst & Young Sustainability Co., Ltd. and received the Environmental Report Assurance and Registration Mark from the Japanese Association of Assurance Organizations for Sustainability Information for compliance with its standards.

Period covered by this report

This report focuses on activities carried out in the period of April 1, 2011 to March 31, 2012. It may also include reporting on important items not occurring within this period.

Scope of environmental data

Starting in fiscal 2011, environmental accounting was applied to DNP and to all domestic companies in the Group that are subject to consolidated financial accounting. Through the end of fiscal 2010, 37 domestic manufacturing companies plus one distribution company (see pp. 44, 45) were included in the scope, expanded to include non-manufacturing sites (two development centers, office buildings, sales offices, etc.) of all domestic Group companies. The data prior to fiscal 2010 were then recalculated. A report on our overseas manufacturing firms is presented separately on p. 42.

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Message from the Director in Charge of the Environment

For Realizing a Sustainable Society

Managing Director
Chairman of the DNP Group
Environmental Committee

Yoshiki Nozaka

Our Group Code of Conduct gives the long-term objective in all of our environmental conservation efforts as being to contribute to building a sustainable society so as to pass on the rich blessings of the Earth to future generations. Under the umbrella of the DNP Group we are working together to utilize resources efficiently and prevent further global warming through many types of environmental action.

We also strive to meet societal expectations and the environmental report that we have issued since 1998 is our way of reporting to stakeholders the results of our actions and initiatives each year. This year's comprehensive report has been edited according to the 2012 Environmental Reporting Guidelines issued by the Ministry of the Environment and provides continuity from previous years. You can be assured of its reliability and the fact that no important environmental data has been omitted thanks to a third-party review by the Ernst & Young Sustainability Co., Ltd.

Environmental conservation efforts

This report covers both our targets and the outcomes of our environmental efforts.

To reduce greenhouse gas emissions we have set total volume targets and are implementing improvement measures through energy conservation sub-committees, which promotes energy conservation working group activities throughout the DNP corporate group. One specific action we have taken in this area is the development of an energy monitoring system introduced at all business sites to render visible the amount of energy being used. This has been a key step in reducing group-wide energy use to meet our targets. The DNP Group is also trying to reduce environmental impact in transporting products, but in this area we experienced an increase in environmental load units due to a drop in sales. We will continue to put into practice planned actions, promote the use of renewable energy, and strive to reduce our peak-time electricity use.

Steady progress is being made toward achieving our target numbers in reducing air emissions of volatile organic compounds (VOCs), lowering industrial waste output environmental load units, developing and selling environmentally conscions products, and green purchasing.

In fiscal 2010 improvements were made toward achieving zero emissions, as we aim for less than 0.5% landfill, with measures aimed at the sources of the problem.

In March 2010 we established the DNP Group Biodiversity Declaration to announce the start of full-fledged efforts to protect biodiversity. In fiscal 2011 we analyzed the relationship between our business activities and biodiversity to determine key themes for action. The two areas we decided would have the most beneficial effect on the environment or would minimize our dependence on certain natural resources were in creating green areas on the premises of our business sites and examining the procurement of raw materials. We have already surveyed 65 domestic manufacturing sites and one overseas site on their current practices and conditions, and completed a lifecycle assessment (LCA) of Biomatech PET, a biomass-based plastic film. We have also reviewed our guidelines on the procurement of printing paper and coated paper.

Future efforts

Going forward, the DNP Group plans to take further steps toward reducing environmental impact from procurement of raw materials to final disposal in order to grow our business sustainably balanced by a constant view toward maintaining harmonious viability within the global environment. One way to accomplish this is by developing and introducing new environmental technologies. In the new wing of our Tanabe Plant that went into operation in November 2011, for example, we worked from the initial design and development stage to implement an energy-saving heat pump technology-based drying system along with a solvent recycling system.

Our employees group-wide already participate in various environmental initiatives and we aim to encourage more active engagement in these programs. As the global reach of the DNP's business expands, it remains vital that we gain the cooperation of our suppliers and subcontractors to take environmental measures in addition to implementing improvements at our own overseas business sites.

The DNP Group has been putting tremendous effort into the use of LCA methodology, including carbon and water footprints, as well as CSR procurement.

We will continue our steady efforts to implement sustainable business practices that reduce our impact on the environment, which will in turn earn our Group a reputation as a reliable, responsible corporation.

Outline of the DNP Group

DNP Corporate Profile (as of March 31, 2012)

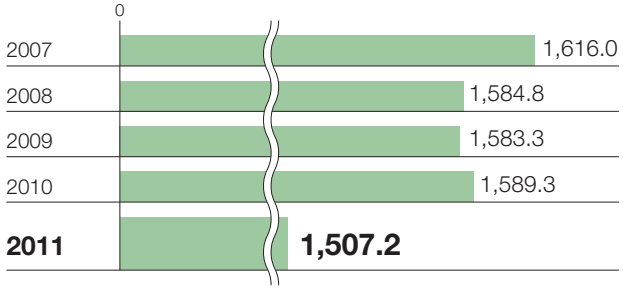
Company Name Dai Nippon Printing Co., Ltd.

Head Office 1-1, Ichigaya Kagacho 1-chome,
Shinjuku-ku, Tokyo 162-8001, Japan
Tel: +81-3-3266-2111
URL http://www.dnp.co.jp/

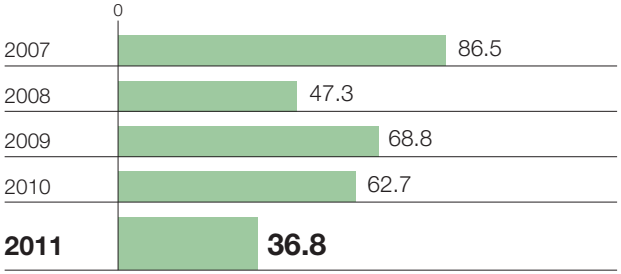
Established	October 1876
Incorporated	January 1894
Capital	¥114.464 billion
Employees	10,812 (Non-consolidated) 39,986 (Consolidated)
Sales Offices	48 locations in Japan 25 locations overseas (including local affiliates)
Main Plants	58 domestic plants 12 overseas plants (including affiliates)
R&D Facilities	13 locations in Japan

FY2011 Financial Data (FY ending March 2012)

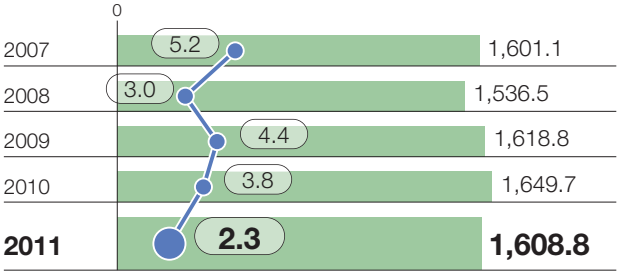
Net sales (Yen billions)



Ordinary income (Yen billions)

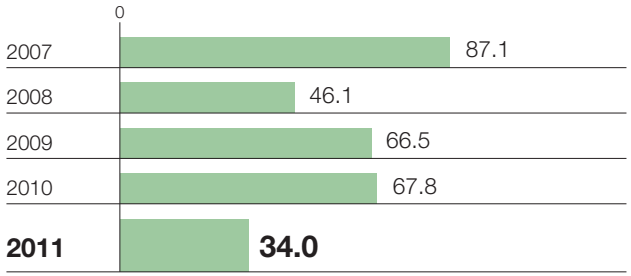


Total assets (Yen billions) Bar graph / **ROA (%)** Line graph

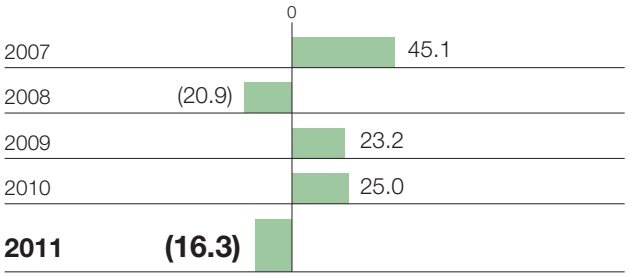


*ROA (Return On Assets): Calculated using ordinary income.

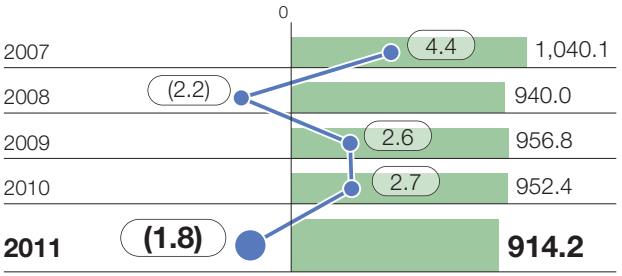
Net operating income (Yen billions)



Net income (net loss) (Yen billions)



Net assets (Yen billions) Bar graph / **ROA (%)** Line graph



*ROE (Return On Equity): Calculated using net income.

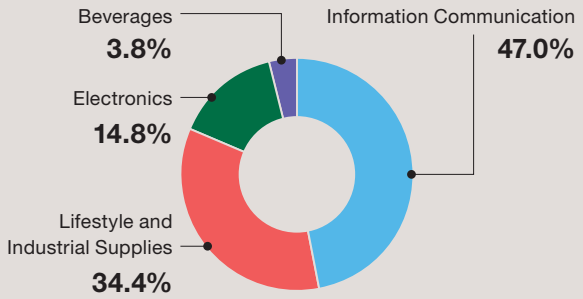
The DNP Group's Fields of Business

The business of the DNP Group is made up of our Printing Operations and Beverages Operations.

* **Printing:** We are developing our printing business across a broad range of applications.
These include the Information Communication segment, made up of operations such as publishing/commercial printing, smart cards, and network businesses; the Lifestyle and Industrial Supplies segment, which includes packaging, lifestyle materials, and industrial supplies; and the Electronics segment, which includes display products and electronics devices.

* **Beverages:** We produce and market carbonated beverages, coffee, tea, and other beverage products, mainly through Hokkaido Coca-Cola Bottling.

Sales distribution (FY ending March 2012)



Printing

Information Communication

Publication printing	Magazines, books, e-books, e-publishing 1, etc.
Commercial printing	Catalogs, pamphlets, posters, flyers, POP, digital signage 2, etc.
Business forms	Passbooks 3, smart cards 4, IPS (services for printing and dispatching mail to individuals based on input data), etc.


1


2


3


4

Lifestyle and Industrial Supplies

Packaging	Container packaging materials 5 and sterile filling systems for food, beverages, confectioneries, daily necessities, medical, and other products
Lifestyle materials	Exterior and interior finishing materials 6 (flooring, decorative sheet metal, etc.) for home, office, rail cars, etc.
Industrial supplies	"PrintRush" self-service printing systems 7, ink ribbons, softpacks for lithium ion batteries 8, etc.

5


6

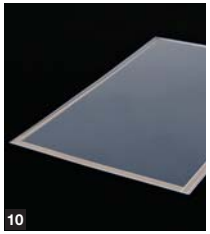

7


8

Electronics

Display products	LCD color filters 9, touch panel sensors 10, etc.
Electronic devices	Semiconductor photomasks 11, lead frames, electronic modules 12, MEMS products, etc.


9


10


11


12

Beverages

Beverages

Production and marketing of beverages 13 through Hokkaido Coca-Cola Bottling.

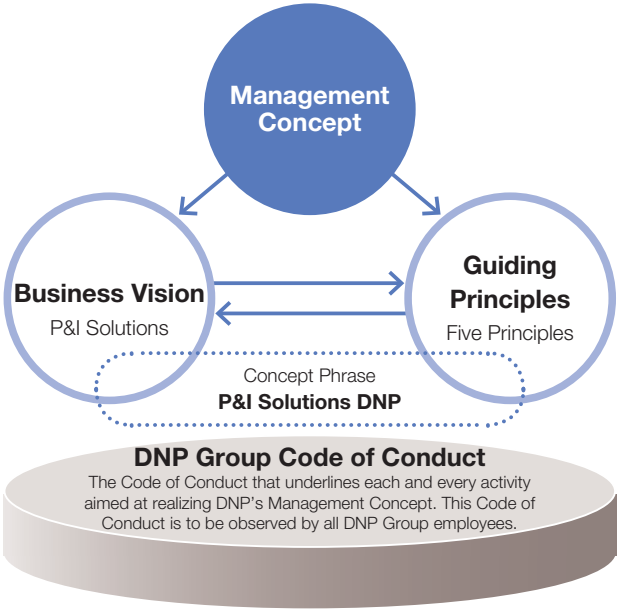

13

The DNP Group Vision for the 21st Century

The DNP Group Vision for the 21st Century consists of our Management Concept, Business Vision, and Guiding Principles, and is an expression of our basic philosophy of co-existence and co-development with society and the environment.

Our Management Concept is the DNP Group's social mission, and is an expression of the most important value held by all DNP employees. Our Business Vision and Guiding Principles provide direction for the business and employee conduct that will enable us to make our Management Concept a reality.

The DNP Group Code of Conduct establishes the behavioral standards for all activities undertaken in realizing our Management Concept. The Code is intended to ensure that all employees conduct themselves with integrity at all times.



Management Concept

The DNP Group will contribute to the emergently evolving society of the 21st century.

Business Vision

P&I Solutions

We will identify and solve the problems and issues that consumers and corporate clients face within the emergently evolving society by fusing our Printing Technologies (PT) and Information Technology (IT).

Guiding Principles

1. Engage in *TAIWA* (Japanese for "dialogue") with all persons concerned

Through *TAIWA*, we can identify the hopes and dreams of consumers and corporate clients, as well as uncover our own problems of which we had been unaware. By pursuing *TAIWA* on the identified problems and issues with various members of the company as well as people outside the company, we will be able to find solutions to these problems and issues.

2. Work with an independent and collaborative mind-set in order to solve problems

Acquiring specialized knowledge and skills, thereby becoming independent, allows us to sharpen our sensitivity for perceiving the problems and issues that surface within *TAIWA*. We should collaborate on these issues with other members while recognizing one another's sense of values and roles in order to propose solutions that will meet the satisfaction of our clients.

3. Challenge courageously, even in the face of difficult issues

As professionals, the expectation and confidence entrusted upon us are proportionate to the level of difficulty of a problem or issue. Therefore, we should approach problems and issues with a spirit of challenge and courage, which will enhance our professional skills all the more.

4. Act with integrity, fairness, and impartiality, at all times

We are, of course, obliged to abide by the law and conform to social codes. At the same time, we should also be considerate of others, speak honestly, and act with integrity. By conducting ourselves in this manner, we will be able to win the sympathy and trust of society, which will in turn augment the 'value' that we provide to society.

5. Be responsible for your own decisions and conduct

Each of us should be responsible for our own decisions and conduct. A strong sense of responsibility will not only lead to our colleagues' greater trust in us, but will also enable us to make objective and appropriate evaluations of our own work processes, which will assist us in making greater strides at our next opportunity.

DNP Group Code of Conduct

The DNP Group has established the DNP Group Code of Conduct as the set of principles upon which our efforts toward realizing our Management Concept are based. The Code of Conduct is founded upon strong ethical principles in accordance with our own rules as well as the law of the land, and is built around themes we consider to be of mutual importance to both the DNP Group and society as a whole.

The conduct of business with integrity at all times in accordance with this Code of Conduct is the foundation of our CSR activities.

1. Contributing to the development of society	We shall contribute to the development of society by offering new values through our business.
2. Social contribution as a good corporate citizen	We, as good corporate citizens living in harmony with society, shall deepen our ties with society and make social contributions through our solutions to various social issues and through our cultural activities.
3. Compliance with the law and social ethics	We shall contribute to the sustainable development of free and orderly market competition while assuming a fair and honest attitude at all times, in compliance with the law and social ethics.
4. Respect for human dignity and diversity	The dignity of humanity is of supreme importance to us. We shall respect diversity in the culture, nationality, creed, race, ethnicity, language, religion, gender, age, and ways of thinking of all persons, and conduct ourselves in a disciplined manner.
5. Environmental conservation and the realization of a sustainable society	We are contributing to building a sustainable society so as to pass on the rich blessings of the Earth to future generations.
6. Realization of a 'universal society'	We shall work on the development and diffusion of easy-to-use functional products, services and systems so that everyone can live in safety and comfort, and thus contribute to the realization of a "universal society" in which all kinds of people can lead pleasant lives.
7. Ensuring the safety and quality of our products and services	We shall strive to win over the satisfaction and trust of consumers in general and of our corporate clients by ensuring the safety and quality of our products and services.
8. Ensuring information security	We shall strive to ensure thorough security measures to protect information assets entrusted to us by our clients as well as those retained by the DNP Group itself (industrial secrets, personal information, intellectual property, etc.).
9. Proper disclosure of information	We shall take the initiative to disclose information in a timely and appropriate manner so as to have our own business and activities properly understood by our various stakeholders with the goal of maintaining a high degree of transparency.
10. Realization of a safe and vibrant workplace	We shall exert ourselves for the maintenance and improvement of the safe and hygienic conditions of our workplace and shall always endeavor to seek ways to implement new improvements. At the same time, we shall respect working styles suited to the diversity of our employees and make efforts to create a safe, healthy and vibrant working environment.

DNP Group Environmental Policy

As a manufacturer, the DNP Group is constantly considering how we can coexist with the global environment. We value the gifts of nature, and strive for coexistence with it so we can pass those gifts on to the next generation. Our efforts to do so are of primary importance to us now in the 21st Century, which is being called the "Environmental Century."

We do our best for the planet day in and day out, as required by our DNP Group Code of Conduct, which states that "We shall strive to use resources effectively without destroying or polluting the global environment, so as to pass on a beautiful planet to the generations that follow."

The DNP Group seeks to minimize the impact our businesses have on the environment and supports biodiversity, first by complying with environmental laws and regulations and also by recognizing the relationship that each of our business activities has with the environment. In this way we hope to create a sustainable society in a world with limited resources.

1. Each member of the DNP Group establishes and periodically reviews its own environmental policies and environmental targets, and puts into effect continuous improvement of its activities and the prevention of environmental pollution.
2. For all construction projects, and before designing and commissioning new facilities, we carry out a full and detailed environmental survey to assess the impact that the project will have on the environment to make proper efforts to protect the environment. We shall also make aggressive efforts to use renewable energy.
3. When carrying out research, development, design, manufacture, and sales of a new product, we consider the impact of the product on the environment throughout its lifecycle, including materials procurement, production, distribution, use, and disposal, especially in terms of energy conservation, resource conservation, and reducing the use of harmful chemicals.
4. When purchasing raw materials, stationery, and equipment, we choose items that are ecologically-friendly and easy to recycle.
5. In manufacturing a product, we aim to comply with environmental laws and regulations, and moreover we set up more stringent standards to reduce the emissions of pollutants into the air, watershed, and soil, and to prevent unpleasant odors, noise, vibration, and land subsidence. We are constantly improving facilities, techniques, and manufacturing processes to promote the targets of energy conservation, resource conservation, and the reduction of industrial waste.
6. When generating waste from business operations, we strive to achieve zero emissions by separating and recycling waste as much as possible.

DNP Environmental Committee (March 21, 2000, revised March 16, 2010)

The DNP Group is a signatory of the United Nations Global Compact and a "promotion partner" of the Nippon Keidanren's 2009 Declaration on Biodiversity.

Environmental Management Structure

All companies in the DNP Group are striving to build an environmentally sustainable world through the efficient use of resources and various efforts—to prevent global warming, protect the environment, and preserve biodiversity.

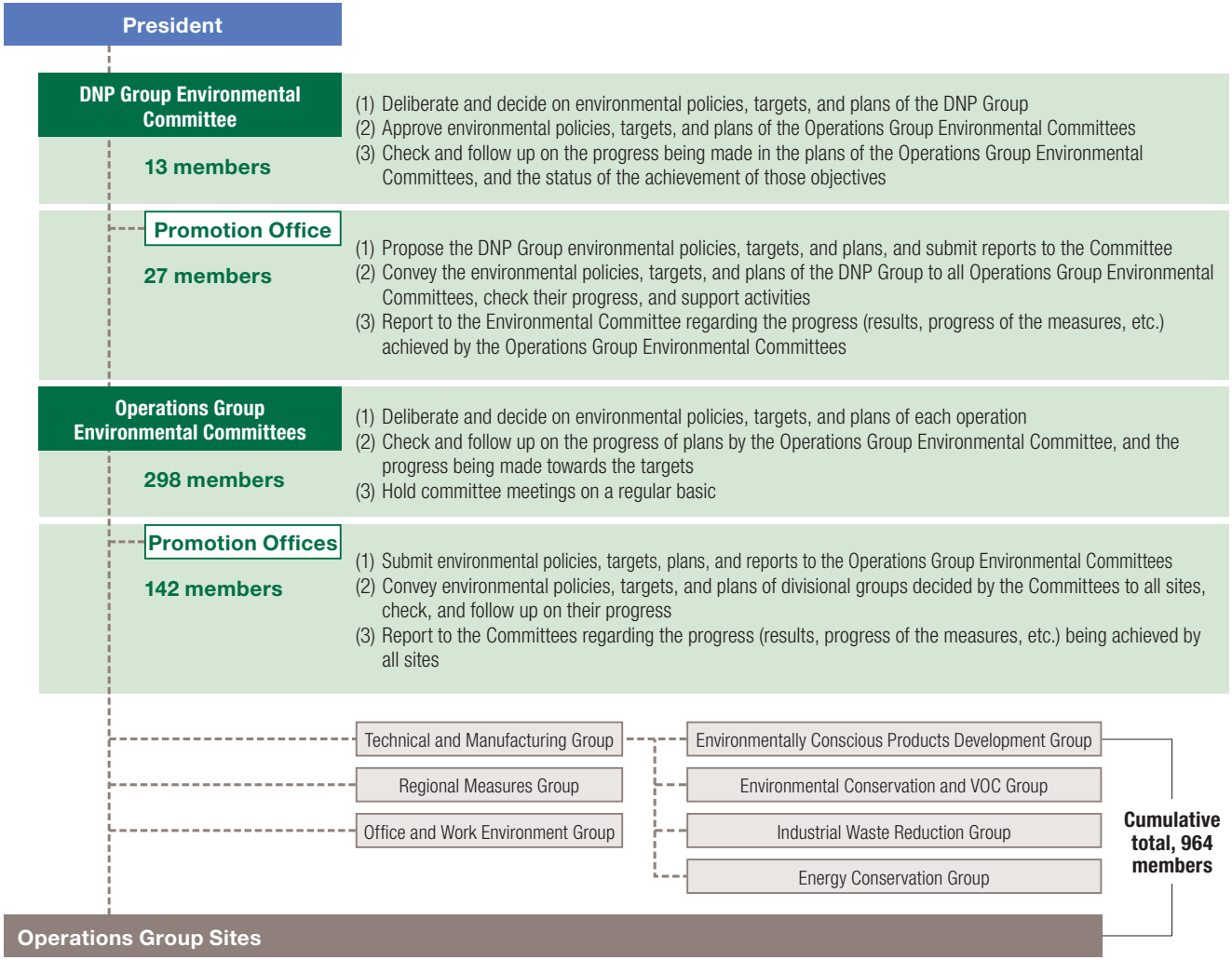
The DNP Group Environmental Committee was established to coordinate group-wide environmental activities, while Operations Group Environmental Committees oversee activities within each business area. Each committee has its own promotion office.

• DNP Group Environmental Committee

This is made up of the directors of the basic organizations at company headquarters, who are responsible for the environment. The Committee deliberates and makes decisions concerning the environmental policies, objectives, and plans of the entire Group, and monitors the progress of the plans and the status of the achievement of those objectives.

• Operations Group Environmental Committees

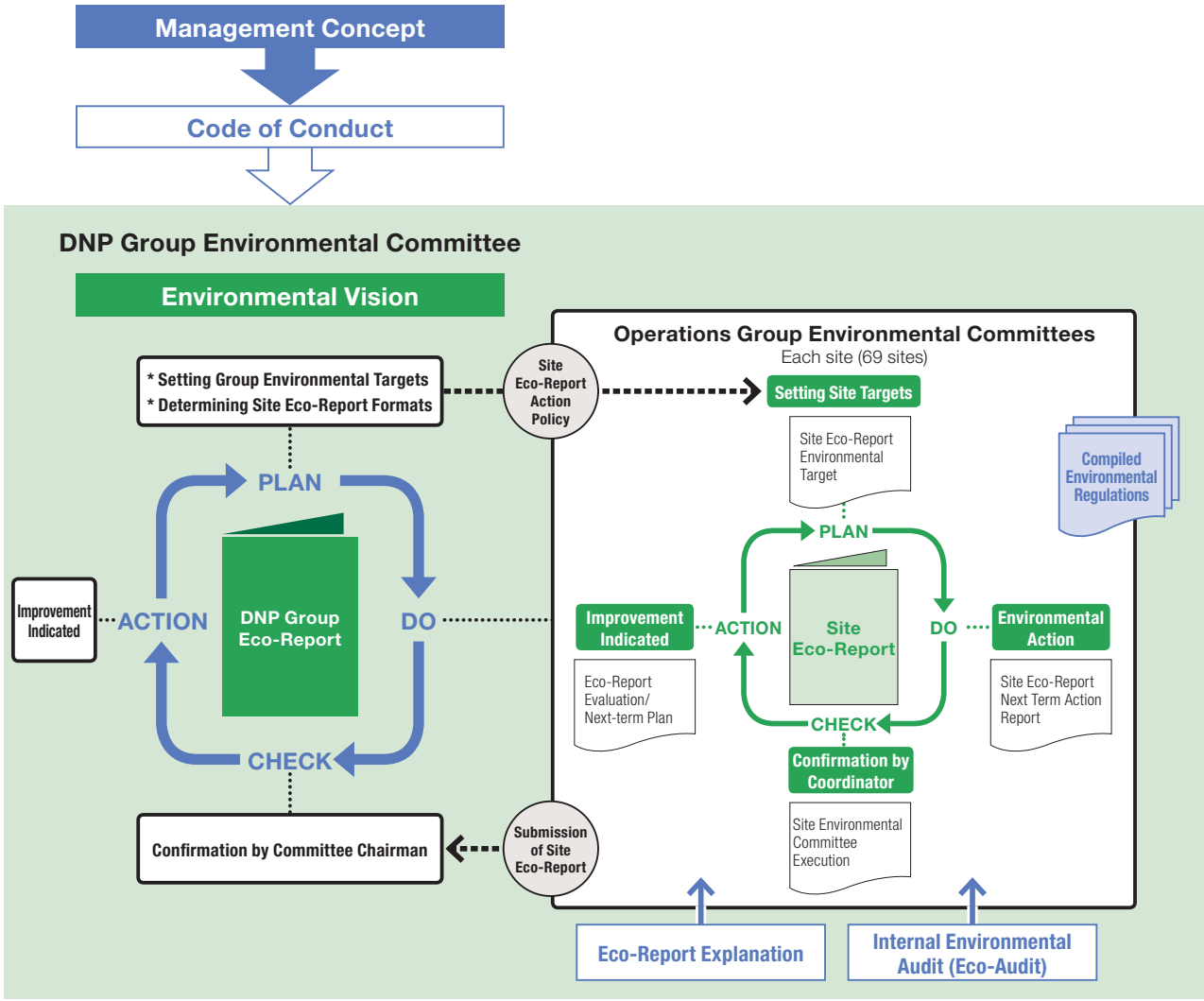
The decisions made by the DNP Group Environmental Committee are developed by the Operations Group Environmental Committees after considering the special characteristics of the particular sphere of business.



Environmental Management System

The DNP Group created our own EMS (environmental management system) in 1993, prior to the publication of ISO14001. Our EMS uses the twin tools of Eco-Reports and Site Eco-Reports, and executes the "Plan-Do-Check-Action" cycle every six months, setting the pace for the DNP Group environmental management efforts.

Outline of the DNP Group Environmental Management System



Eco-Audit Content and Flow

We began implementing “Eco-Audits” in 1996, so as to make our Environmental Management System (EMS) more effective. When an audit reveals that corrective measures are needed at a site, a “corrective action request” is issued in writing and such actions as necessary are managed by the DNP Group Environmental Committee.

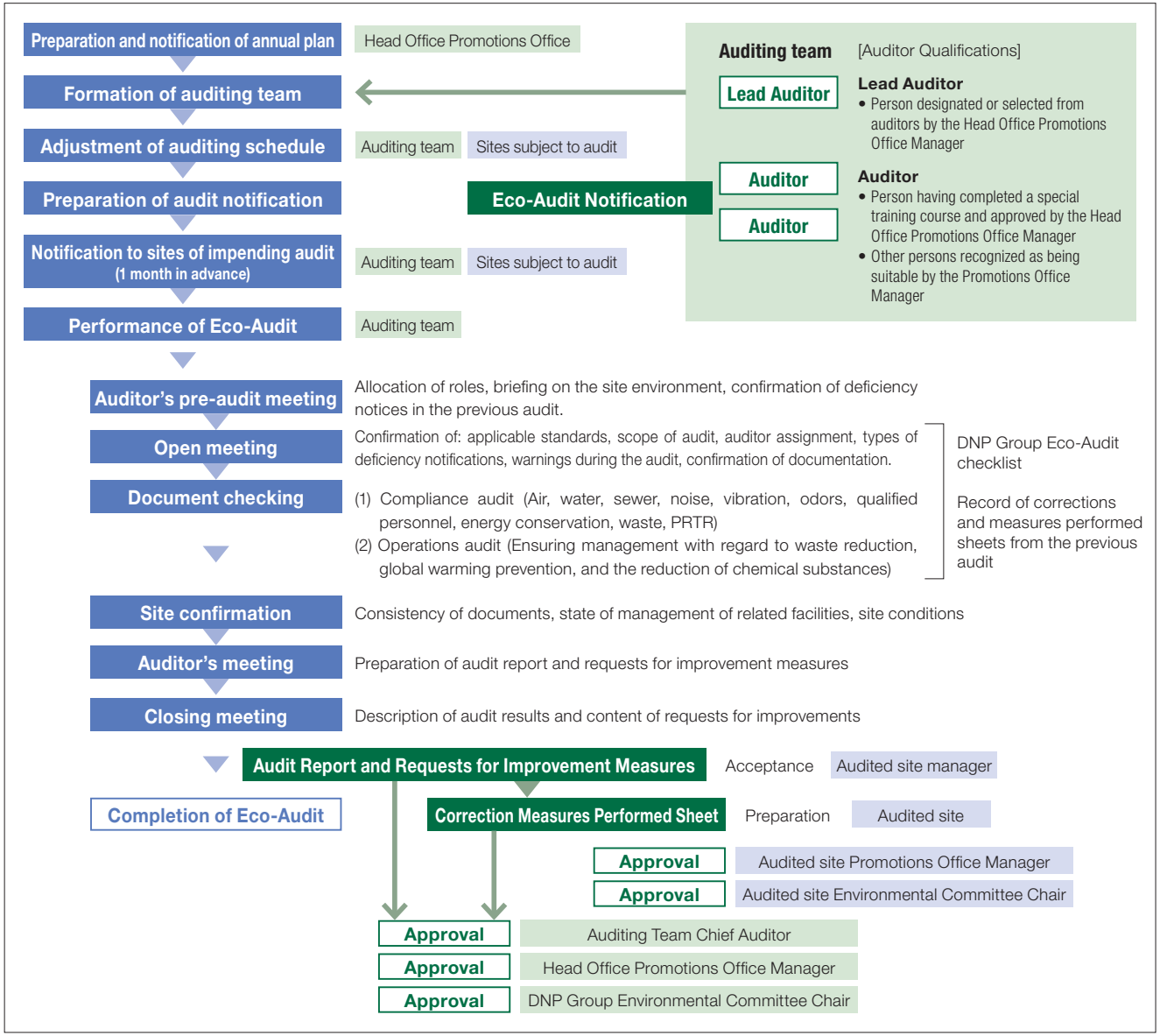
• Special characteristics of Eco-Audits

	Eco-Audit	ISO14001	
		External audit	Internal audit
Auditor specialization in products and processes	○	△	○
Independence of auditors in regard to the audit scope (at each site)	○	○	—

(1) By bringing together their expertise, which is inherent in the products and manufacturing processes, and their independence regarding the sites, the auditors are able to obtain significant and objective results from their auditing.

(2) In the Eco-Audit we place importance on on-site confirmation of actual items. In addition, we point out factors for which danger is projected and request preventive action when needed.

(3) In addition to confirmation of compliance, we confirm the status of continuous improvements and corrections being made towards the achievement of the environmental targets. When necessary, we require audited sites to review plans.



2011 Eco-Audit Performance

Number of sites audited	69 sites
Number of attendees at sites	479 persons
Cumulative auditor numbers	128 persons
Cumulative auditing hours	296 hours

• Notification level and improvements required

Improvement required	➡	Submission of a written description of correction measures performed or improvement plans
Improvement consideration & examination	➡	Submission as necessary of a written description of results of consideration/ examination or improvement plans

Indications of "improvement required" included items such as insufficient reporting at specific sites and other legal violations, but we confirmed that the necessary improvement measures were being taken in each case.

The areas indicated as requiring improvement are analyzed and follow-up Eco-Audits will be carried out in FY2012.

Eco-Audit Content

Compliance Audit

(1) Document Audit

- Site location
- Type and number of legally-designated facilities
- Types of waste
- Energy consumption
- Exhaust and wastewater channels
- Changes in facilities, production processes since the last audit
- Applicable laws and their range
- State of improvement of notifications of deficiencies in previous audit
- State of submission of and changes to legal notifications and reports
- Frequency of measurement, validity and traceability of measured data
- Changes in management personnel due to internal transfers

(2) On-site Inspections

- Site location and relationship with surrounding sites
- Conformity to statutory facility document audit (type, number, scale, etc.)
- State of management of individual facilities and equipment, existence of abnormalities
- Emergency containment in case of abnormality or emergency
- Site picture-taking
- Appropriateness of actual work performed

Operations Audit

PLAN

Validity of Policy, Targets and Action Plans

- Consistency with DNP Group policies and targets
- Consistency with action plans and targets
- Implementation system and schedule
- Awareness level of employees

DO

Confirm status of plan implementation and target achievement

- Progress status of plan
- Achievement of targets

CHECK

Status of progress management of plan

- Holding of environment-related meetings
- Content of environment-related meetings

ACTION

Status of reviews by term

- Review of previous term results and reflection in plan

Environmental Risk Management

The DNP Group publishes regular Eco-Reports which cover trends in environmental regulations, and also conducts Eco-Audits to ensure full compliance with all laws and regulations. Our compliance efforts also include the establishment of and strict adherence to our own voluntary standards (air, water, noise, vibration, odor) and voluntary guidelines (chemical substance management, soil contamination measures), which exceed what is legally required.

The DNP Group handles many chemicals in its production processes. We have drawn up a Chemical Substance Management Guide for chemical substance handling, and have set up levees and emergency shut-off systems to prevent liquids from overflowing and installed two-tier holding tanks for the prevention of accidents at plants handling chemicals. We also stock up on materials that can be used during emergencies and hold emergency response drills to ensure the proper response in the event of an occurrence.

• Soil and Groundwater Contamination

The DNP Group conducts soil inspections based upon our voluntary management guidelines. When soil contamination is discovered, we file a report with the office of the governor or mayor in charge of that prefecture or city, and upon receiving instructions from the local authorities, we implement appropriate measures for removing the contamination.

In addition to continuing the purification of pump water at one site in FY2011, we also inspected tanks, waste storage sites, and areas for storing equipment that handles waste PCBs to prevent soil contamination.

• PCB Storage

PCBs are currently in storage at 19 sites, with a total of 166 condensers and 27 transformers, for a total of 193. The PCBs are contained in electric equipment that was used in substation facilities formerly used in our plants. The PCBs are stored in special containers in special storage rooms at each site, and are managed under the strictest of conditions in accordance with applicable regulations to ensure prevention of leakage or loss. They will gradually be disposed of as required by law according to the disposal plans for each region.

• Status of Legal Compliance

While we make all efforts to comply with environmental laws and regulations, over the past three years we have experienced four incidents in which water quality standards for wastewater were exceeded. There are no ongoing legal disputes involving environmental issues. We have unfortunately had some complaints from areas neighboring our plants concerning noise and odors. Whenever we receive such complaints, we respond promptly by launching a thorough investigation into the cause of the problem and working to make improvements and prevent recurrence.

Strengthening flow volume gauge checks and monitoring

Improving inspections of carbon gas vaporizers

Occurrences (causes, improvements, and recurrence prevention measures)

October 29, 2009 Tanabe Plant, DNP Technopack Kansai
Water quality inspection by authorities → Measured levels of n-hexane (animal and plant fats) exceeded the standards.

The cause was thought to be insufficient grease trap* capacity, so larger grease traps were installed as a preventative measure.

February 4, 2010 Izumizaki Plant, DNP Technopack
Malfunction of ink mixing equipment → Ink leaked out of the industrial site via the rainwater gutters.

The cause was found to be an excess supply of solvent caused by a malfunctioning flow volume gauge, causing an overflow from the mixing tank. Flow volume gauge testing procedures were revised and the monitoring system strengthened as preventative measures.

December 3, 2010 Tokyo Plant, DNP Fine Chemicals
Storage of disassembled pieces of concrete → Leakage from industrial site of rainwater exceeding regulatory pH standards was discovered through voluntary checking.

The cause was the on-site storage of broken pieces of concrete. Under the guidance of the authorities the concrete was removed, and ongoing monitoring has confirmed that levels are within the legal limits.

September 8, 2011 Chikugo Plant, DNP Nishi Nippon
Governmental water analysis → pH and BOD measurement values exceeded regulatory standards, so an improvement report was submitted.

The cause of excessive pH levels was a broken CO_2 vaporizer in the boiler drain water neutralizing apparatus. To prevent recurrence, inspections will be improved. The cause of excessive BOD was the use of too much boiler corrosion inhibitor. To prevent recurrence, the type of corrosion inhibitor was changed and the amount for injection was revised downward.

* Grease trap: This is a device for temporarily holding raw sewage, grease, and other pollutants contained in effluent from kitchens after separating and collecting it, thereby preventing discharge into the sewer. Work kitchens are required to be outfitted with grease traps. (Construction Ministry Notice No. 1597)

Certification Acquisition Status

ISO14001 Certificates

Site	Date Registered *1	Organization
Okayama Plant, Information Media Supplies Operations	Nov. 1997	JIA-QA
Mihara Plant, Display Components Operations	Jul. 1998	DNV
Okayama Plant, Lifestyle Materials Operations	Jul. 2000	JIA-QA
DT Fine Electronics *2	Mar. 1997	JACO
Sayama Plant, DNP Technopack	Dec. 2001	DNV
Kobe Plant, Lifestyle Materials Operations	Jan. 2002	JIA-QA
Tokyo Plant, DNP Fine Chemicals	Jan. 2002	JCQA
Ushiku Plant, IPS Operations	Mar. 2002	DNV
DNP Technopack Tokai	Mar. 2002	JCQA
Tien Wah Press (Singapore)	May 2002	PSB
Chikugo Plant, DNP Nishi Nippon	Jun. 2002	DNV
Sayama Plant, Information Media Supplies Operations	Oct. 2002	JIA-QA
Kurosaki Plant No.2, DNP Precision Devices	Jan. 2004	JCQA
Tokyo Plant, Lifestyle Materials Operations	Jan. 2004	JIA-QA
Kamifukuoka Plant, Electronics Devices Operations	Mar. 2004	AJA
Fukuoka Plant, DNP Nishi Nippon	Jun. 2004	DNV
Itabashi Area, Sales Division 1, DNP Logistics	Oct. 2004	AJA
Tokyo Plant, DNP Ellio	Jan. 2005	LRQA
Osaka Plant, DNP Ellio	Jan. 2005	LRQA
Warabi Plant, IPS Operations	Mar. 2005	DNV
Nara Plant, DNP Data Techno Kansai	Jun. 2005	DNV
Tien Wah Press (Johor Bahru)	Nov. 2005	PSB
Otone Plant, Display Components Operations	Mar. 2006	DNV
Kashiwa Plant, DNP Techno Polymer	Mar. 2006	JACO
Kansai Plant, DNP Techno Polymer	Mar. 2006	JACO
DNP Photomask Europe S.p.A.	Apr. 2006	CISQ
DNP Fine Chemical Fukushima	Mar. 1997	JCQA
Akabane Area, DNP Logistics	Dec. 2006	AJA
Izumizaki Plant, DNP Energy Systems	Mar. 2007	DNV
Yokohama Plant, DNP Technopack Yokohama	Dec. 2007	JIA-QA
Izumizaki Plant, DNP Technopack	Aug. 2008	DNV
Kasaoka Plant, DNP Fine Chemicals	Jan. 2009	JCQA
Mihara Plant, Opto-Materials Operations	May 2009	DNV
Okayama Plant, Opto-Materials Operations	May 2009	DNV
DNP Indonesia (Pulogadung/Karawang)	Aug. 2009	AJA
Shiga Plant, Information Media Supplies Operations	Nov. 2009	JICQA
Hokkaido Coca-Cola Bottling	Feb. 2010	SGS
DNP Color Techno Sakai	Mar. 2011	BV
Sayama Plant, DNP Technopack Yokohama	Dec. 2011	JIA-QA

Eco Action 21 Certificates

Site	Date Registered *1	Organization
Tokyo Head Office, Dai Nippon Trading	Jan. 2006	IGES

Green Key Certification Status

Site	Date Registered *1	Organization
Hakone Training Center 2	May 2010	FEE

Status of Eco Stage (Stage 1) Achievement

Site	Date Registered *1	Organization
DNP Chubu	Feb. 2012	Ecostage Institute

*1 Indicates the first registration date.

*2 DT Fine Electronics registered as part of Toshiba Corporation (Semiconductor Company) (Kawasaki City, Kanagawa Pref.)

Organization

JIA-QA
Japan Gas Appliances Inspection Association, QA Center

DNV
Det Norske Veritas AS (Norway)

JACO
Japan Audit and Certification Organization for Environment and Quality

JCQA
Japan Chemical Quality Assurance Ltd.

PSB
PSB Certification Pte Ltd. (Singapore)

AJA
Anglo Japanese American Registrars Ltd.

LRQA
Lloyd's Register Quality Assurance Ltd.

CISQ
Federazione Certificazione Italiana dei Sistemi Qualit Aziendali (Italy)

JQA
Japan Quality Assurance Organization

JICQA
JIC Quality Assurance Ltd.

SGS
SGS Japan

BV
Bureau Veritas Japan

IGES
The Institute for Global Environmental Strategies

FEE
Foundation for Environmental Education

Environmental Education

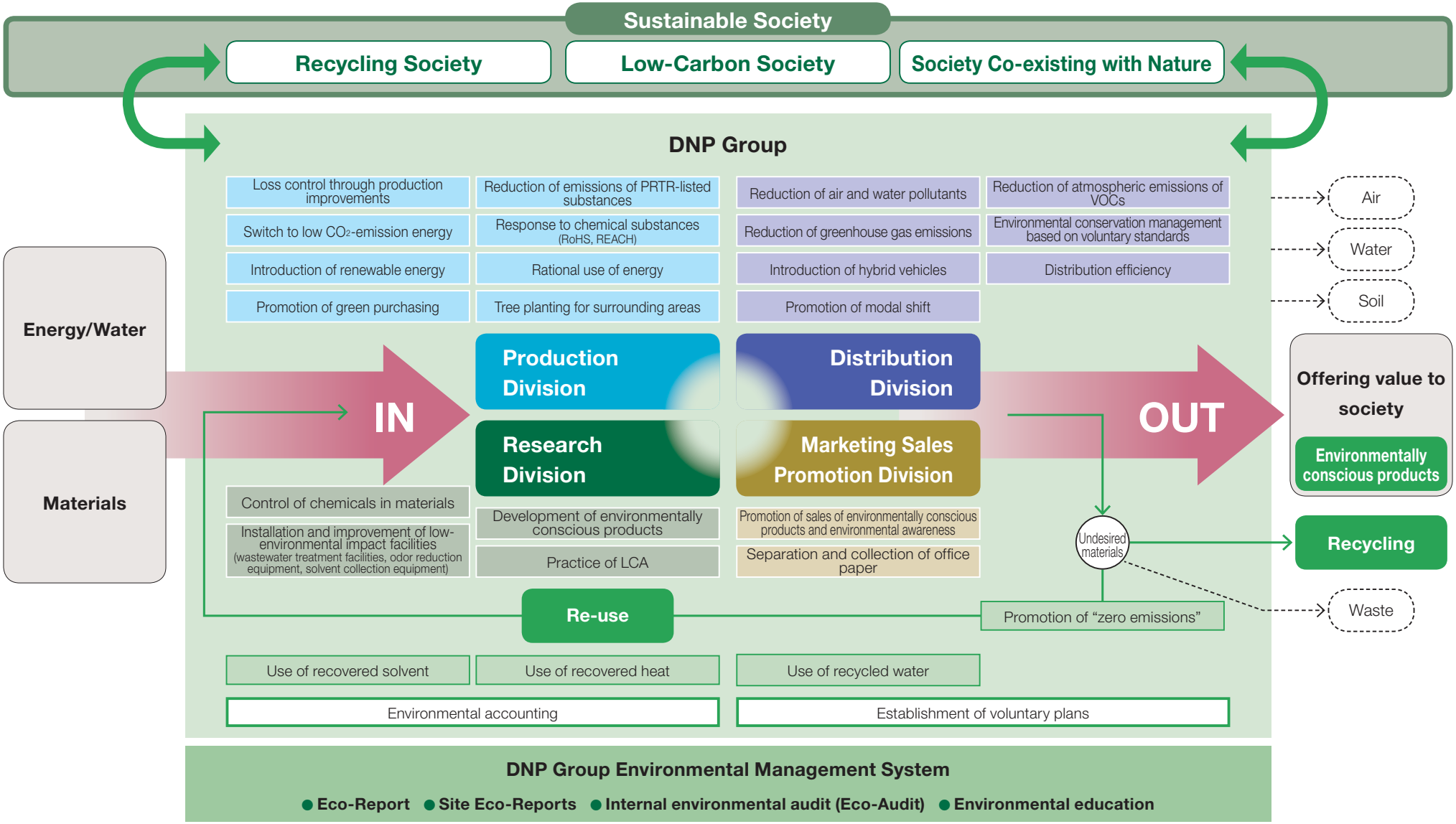
The DNP Group conducts environmental education programs according to level, working group, and function concerning the DNP Group's environmental conservation efforts, environmental knowledge, environmental laws, and domestic and overseas trends concerning environmental issues. Our goal is for employees to gain the knowledge and management know-how necessary to improving employee environmental conservation consciousness and achieving our environmental goals.

A correspondence course is held twice a year for everyone in the DNP Group on ISO 14001, LCA, and other topics.

Type of Training	Course Name/Description	First Held	Eligibility	Time of Year	Total Attendance
Education for New Recruits	**Environmental Activity Overall (required)** Basic environmental knowledge and conservation efforts of the DNP Group	1994	All new recruits	When joining the company	**6,639 people**
Technical Seminar	**Environment/Chemicals (optional)** Environmental laws and regulations	1999	Technicians	At irregular intervals	**740 people**
Network Learning	**Biodiversity (required)** Explanation of biodiversity and understanding of general efforts on its behalf	2010	All employees of the DNP Group	At irregular intervals	**24,222 people**
Eco-Report Training	**Environmental Issues of the Group (required)** Domestic and international trends in environmental issues, revisions in environmental laws, degree of achievement of environmental targets, new targets, issues concerning specific sites	1993	Site members and factory related personnel of the Operations Group Environmental Committees	Twice a year upon issuing the Eco-Report	**Held twice at 69 sites in FY2011**

2 Environmental Impact Big Picture

The DNP Group's Business and Environmental Activities



Characteristics of Business Segments and Transition to Environmental Efficiency

The DNP Group manufactures a variety of different products closely related to the everyday lives of consumers, with main materials such as paper, film, plastic, metal (iron, aluminum, etc.), and ink, as well as electronics.

• Characteristics of business segments (see page 4 for main products)

Information Communications Segment ⓐ Mainly manufactures magazines and other printed material through offset printing, uses a great amount of paper.

Lifestyle and Industrial Supplies Segment ⓑ One of the biggest users of solvents in the DNP Group as it manufactures packaging, construction and other industrial materials and uses solvents for its gravure printing, coating, and lamination.

Electronics Segment ⓒ Uses and discharges a great amount of water in proportion to the rest of the Group in manufacturing LCD color filters and lead frames through its etching and photolithography technologies.

Other ⓓ Group companies manufacturing products not associated with the Information Communications, Lifestyle and Industrial Supplies, or Electronics segments, or those spanning multiple segments.

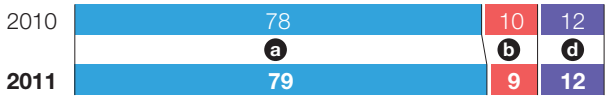
• The DNP Group's transition to environmental efficiency

The DNP Group's environmental efficiency was evaluated using the JEPIX system. Greenhouse gas emissions and landfill waste were reduced. Because of stagnant production output, however, environmental efficiency could not be improved. Starting in FY2011, the total scope of environmental impact will be expanded beyond production sites, so the figure for domestic consolidated sales was used as the production output. The figures for past fiscal years were similarly revised.

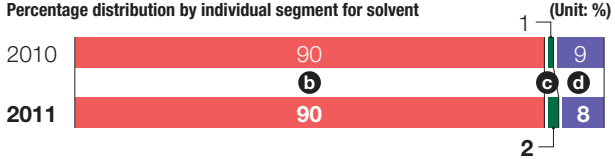
JEPIX (Environmental Policy Priorities Index for Japan)
A single-index environmental evaluation system developed in Japan for measuring general environmental impact levels by calculating environmental impact points (EIP).

INPUT

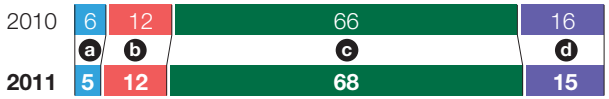
Main materials:
Percentage distribution by individual segment for paper (Unit: %)



Main secondary materials:
Percentage distribution by individual segment for solvent (Unit: %)

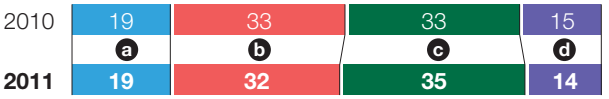


Utilities:
Percentage distribution by individual segment for water (Unit: %)

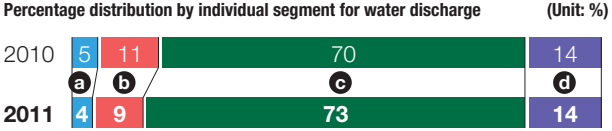


OUTPUT

Emissions into the air:
Percentage distribution by individual segment for GHG emission amounts (Unit: %)



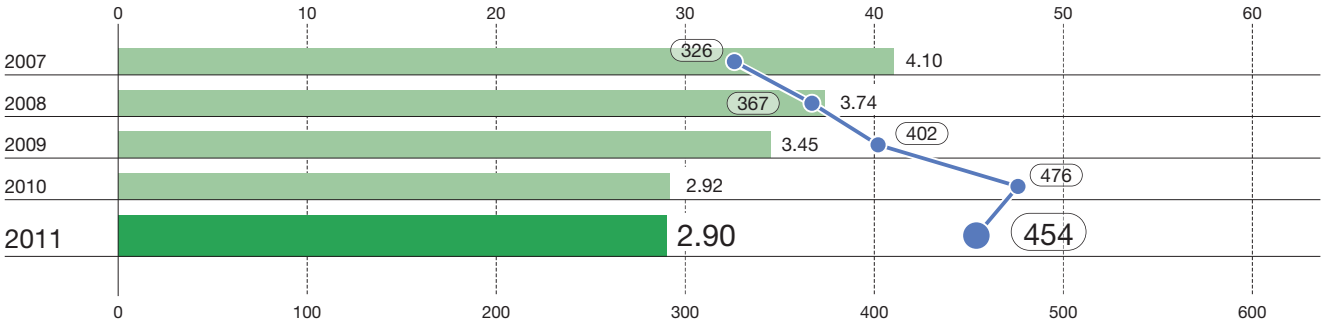
Emissions into bodies of water:
Percentage distribution by individual segment for water discharge (Unit: %)



Undesired materials generated:
Percentage distribution by individual segment for undesired materials (Unit: %)

Environmental impact points (Unit: billion EIP) Bar graph

Environmental efficiency (Production output/EIP) Line graph



Current Status of Environmental Impact

Main materials (Unit: 1,000 tons)

	2010	2011	
Paper	1,816.7	**1,824.8**	(0.4% increase)
Film	121.8	**119.2**	(2.1% decrease)
Plastic	107.0	**113.6**	(6.2% increase)
Metal	47.6	**50.5**	(6.1% increase)
Ink	52.0	**51.1**	(1.7% decrease)
Others	104.1	**98.1**	(5.8% decrease)

Main secondary materials (Unit: 1,000 tons)

	2010	2011	
Solvent	23.4	**25.0**	(6.8% increase)
Acid and alkaline	21.0	**13.9**	(33.8% decrease)

Utilities

	2010	2011	
Electricity (million kWh)	1,635.5	**1,585.7**	(3.0% decrease)
City gas (million Nm^3)	117.1	**115.7**	(1.2% decrease)
LNG (million kg)	15.2	**13.8**	(9.2% decrease)
LPG (million kg)	6.8	**6.5**	(4.4% decrease)
Fuel oil (kl)	1,900	**1,000**	(47% decrease)
Steam (TJ)	520	**500**	(3.8% decrease)
Kerosene (kl)	1,300	**1,300**	(–)
Water (million m^3)	16.7	**15.9**	(4.8% decrease)

INPUT

Product Manufacturing Process

Information Communication
Books and periodicals, commercial printing, business forms

Lifestyle and Industrial Supplies
Packaging, decorative materials, industrial supplies

Electronics
Displays, electronic devices

Other
Ink, beverages, etc.

OUTPUT

Current Status of Recycling in the DNP Group

	2010	2011
Recycled solvent (1,000 tons)	4.6	**4.0**
Usage ratio*1	1.2	**1.2**
Recycled acid and alkaline (1,000 tons)	3.2	**3.2**
Usage ratio	1.2	**1.2**
Recycled water (million m^3)*2	519.4	**509.7**
Usage ratio	32.2	**33.0**
Vapor generated from waste heat recovery (tons)	206,400	**203,200**

*1 **Usage Ratio:** This is a calculation of (input+recovery and recycling)/input. It does not include vapor or solvent in ink.
*2 Calculation methods have been revised and FY2010 data recalculated accordingly.
*3 **GHG:** Greenhouse Gases
*4 Water discharge channels to which the Water Pollution Control Act applies.

Emissions into the air

	2010	2011	
GHG*3 emissions (1,000 tons-CO_2)	1,017	**980**	(3.6% decrease)
NOx emissions (tons)	697	**740**	(6.2% increase)
SOx emissions (tons)	11	**10**	(9.0% decrease)
Atmospheric emissions of VOCs (tons)	6,840	**5,563**	(18.7% decrease)

Emissions into bodies of water

	2010	2011	
Water discharged (million m^3)	14.0	**13.6**	(2.9% decrease)
COD emissions (tons)	48.9	**40.4**	(17.4% decrease)
Nitrogen emissions (tons) *4	13.4	**13.5**	(0.7% increase)
Phosphoric emissions (tons)	0.4	**0.4**	(–)

Undesired materials generated (Unit: 1,000 tons)

	2010	2011	
Total amount of undesired materials	365.6	**357.9**	(2.1% decrease)
Waste emissions	65.1	**59.3**	(8.9% decrease)
Landfill waste amount	3.2	**2.7**	(15.6% decrease)

Table: Environmental Activity Targets and Results

Evaluation criteria: ◎ Target exceeded by a wide margin ○ Target achieved or making steady progress toward target △ Making active efforts but target not achieved × Efforts insufficient

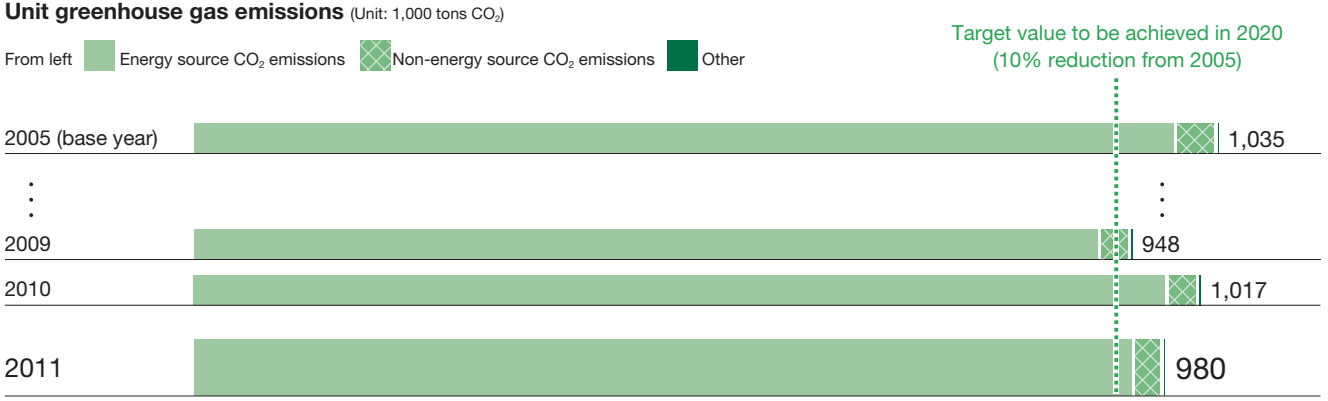
Topic	Reference page	Targets through 2015 *Targets relating to global warming prevention and reducing environmental impact are for FY2020.	2011 results		Evaluation
Global warming prevention	P 19 - 20	To reduce GHG emissions 10% from the 2005 levels by FY2020.	Emissions in 2005: 1.035 million tons Emissions in 2005: 0.980 million tons	5.3% decrease from that in 2005	○
Reduction of environmental impact incurred during transport	P 21	To reduce per-unit fuel use for transport (amount of fuel used/sales) by 1% per annum and 10% by FY2020 compared to FY2010.	Per unit in 2010: 1.61 kl/100 million yen Per unit in 2011: 1.64 kl/100 million yen	1.9% increase from that in 2010	△
VOCs	P 22	To reduce emissions of VOCs (except for methane) by 20% compared to 2010 by FY2015.	Emissions in 2010: 6,840 tons Emissions in 2011: 5,563 tons	18.7% decrease from that in 2010	◎
Reduction of industrial waste	P 25 - 26	To reduce per unit waste emissions (waste emissions/production) by 15% from the 2010 level by FY2015.	Per unit in 2010: 0.468 tons/10 million yen Per unit in 2011: 0.451 tons/10 million yen	3.6% decrease from that in 2010	○
		To achieve zero emissions for the entire DNP Group by FY2015.	Landfill waste rate in 2010: 0.9% Landfill waste rate in 2011: 0.8%	0.1 point decrease from that in 2010	○
Development and sales of environmentally conscious products	P 28 - 29	To increase sales of environmentally conscious products and services to 400 billion yen by FY2015.	Sales of 318.0 billion yen in 2010 Sales of 336.0 billion yen in 2011	5.7% increase from that in 2005	◎
Green purchasing	P 28	To increase the rate of materials purchased according to the DNP green purchasing standards to 50% by FY2015.	39.9% green purchasing rate for materials in 2010 45.8% green purchasing rate for materials in 2011	5.9 point increase from that in 2010	◎
		To increase the purchase rate of environmentally certified products, such as those labeled with the Eco-Mark, of the total supplies (office supplies and equipment) to 85% by FY2015.	60.0% green purchasing rate for materials in 2010 61.2% green purchasing rate for materials in 2011	1.2 point increase from that in 2010	○
Environmental conservation	P 12	To keep the maximum concentration of air emissions subject to emissions regulations at 70% of the required standard or less.	95% achievement rate of targets for 2011 (voluntary target)		○
		To keep the maximum concentration of wastewater discharges subject to wastewater regulations at 70% of the required standard or less.	97% achievement rate of targets for 2011 (voluntary target)		○
		To keep the maximum concentration of odors at our site perimeters at 70% of the required standard or less.	98% achievement rate of targets for 2011 (voluntary target)		○
		To keep the maximum level of noise at our site perimeters at 70% of the required standard or less.	82% achievement rate of targets for 2011 (voluntary target)		○
		To keep the maximum level of vibration at our site perimeters at 70% of the required standard or less.	100% achievement rate of targets for 2011 (voluntary target)		○
Office environment	P 27	To increase the rate of the fractional recovery of waste paper to 70% of that for general waste.	77.7% recovery of waste paper in 2011		◎

Greenhouse Gas Emissions Reduction

The DNP Group's overall greenhouse gas emissions in FY2011 totaled 980,300 tons. This breaks down as follows: energy source CO_2 emissions, 953,300 tons; non-energy source CO_2 emissions 25,900 tons; methane converted to CO_2 emissions equivalent, 50 tons; N2O emissions, 620 tons. There were 10 tons of emissions of perfluorocarbons (PFCs) and 340 tons of sulfur hexafluoride (SF_6), but no emissions of hydrofluorocarbons (HFCs).

Our main efforts to reduce CO_2 emissions included conserving energy used for air conditioning and power, switching to low-emission fuels, improving production line operations, efficient cogeneration, etc. In FY2012, we will continue our aggressive efforts to limit greenhouse gas emissions by continuing with the switch to low CO_2-emission fuels, introducing energy-saving equipment such as inverters, and improving production efficiency.

Unit greenhouse gas emissions (Unit: 1,000 tons CO_2)



Greenhouse gas emissions volume Electricity use, fuel use/combustion, burning of waste at plants, atmospheric emissions of HFCs/PFCs/SF_6 at plants, as well as greenhouse gas emissions due to fuel use and running of DNP Logistics trucks are calculated according to the Greenhouse Gas Emissions Calculation and Reporting Manual Ver. 2.1 (published June 29, 2007; Ministry of the Environment and Ministry of Economy, Trade and Industry). The coefficients used for FY2010 calculations use the values contained in the Act on Promotion Global Warning Countermeasures (March 31, 2010). Coefficients used for conversion of emissions from electricity use for FY2010 and FY2011 are set according to FY2010 values (after adjustment) published by the Ministry of the Environment on January 17, 2012; for other years those published in the environmental reports of the electric companies are used, with all emission volumes converted to CO_2. Also, the Guideline for Greenhouse Gas Emissions Calculation for Businesses (Draft Ver. 1.6) (July 28, 2005, partially revised; Ministry of the Environment) is used for recalculating the base year greenhouse gas emissions due to the change in our aggregate accounting range resulting from M&As.
The 2005 (base year) figure is the sum of 2005 domestic production site emissions and 2009 non-production site emissions.

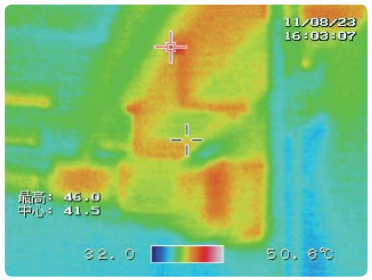
Energy Loss Diagnostic Team

An energy loss diagnostic team was established to carry out periodic checks on energy usage as part of our overall efforts to save energy. The survey team is made up of specialized staff from our head office and the Manufacturing Technology Integration Laboratory. The team targets one plant at a time, going to the production floor where checks are performed using air leakage detectors, thermograph cameras, and other instrumentation to detect air leaks or heat loss, areas that quickly lead to energy savings.

In addition to performing on-site surveys, the team also analyzes data on energy from the huge amount collected at each plant to make energy use visible and to help discover areas for improvement in order to reduce energy loss. The team projects results from carrying out improvement plans and calculates the costs involved. We then quickly implement changes in those areas that indicate a high effect-to-cost ratio, thereby promoting efficient energy use at each plant.
The areas for improvement discovered by the energy loss diagnostic team are shared rapidly group-wide to stimulate awareness of and promote ongoing energy-saving actions to help prevent further global warming.

Outline of Actions

- On-site diagnostics/data collection
- Data analysis (visualization) of utilities, production lines
- Drafting of improvement plan, effect-to-cost ratio calculation
- Follow-up on implemented measures



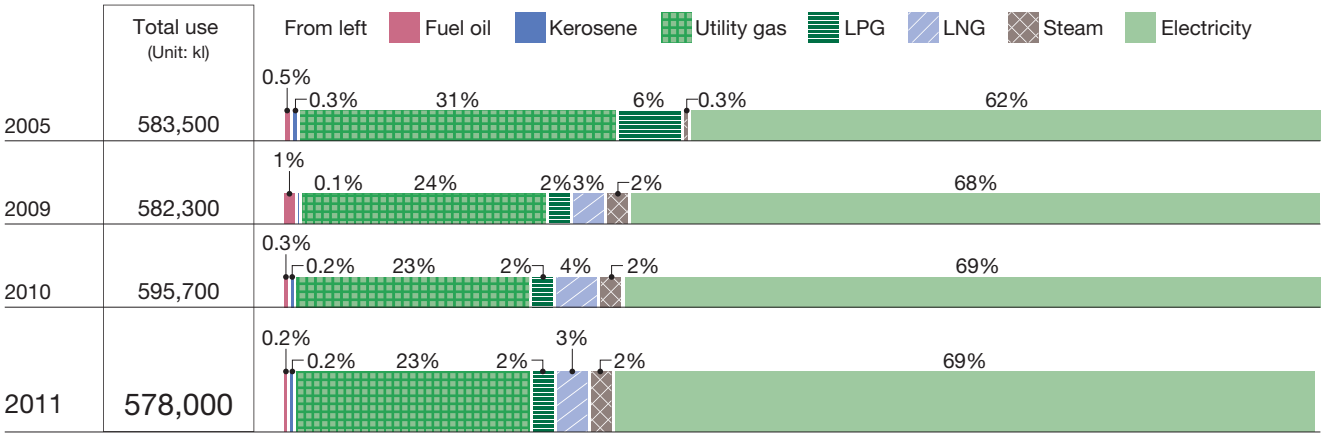
Switching to Low CO_2-Emission Fuels

The DNP Group is making progress in the switch to low CO_2-emission fuels to reduce emissions of greenhouse gases.

We have been making the switch from diesel, kerosene, and similar high CO_2-emission petroleum fuels into low CO_2-emission utility gas and LPG (liquefied petroleum gas) since before 1990, and plan to continue to do so.

We are also moving ahead with renewable energy. DNP Energy Systems' Izumizaki Plant installed a solar power generation system in 2009 that generated 33,100kWh of power in FY2011. DNP Technopack Kansai's Tanabe Plant and Ichigaya Publication Printing Operations' Ichigaya Plant both installed solar systems that have capacities of 30kW and 30.95kW, respectively. We also currently purchase 1.15 million kWh of Renewable Energy Certificates annually to cover part of the power consumption at offices and manufacturing sites within the group (for printing, bookbinding and processing).

Fuel composition



Note: Gasoline and diesel fuel for automobile use are also used (less than 0.2%) in addition to these fuels above.

Employee Comment ● Tatsuya Sato

Engineering Section, Utsunomiya Plant, DNP Graphica

DNP Graphica is located in an industrial park in an area surrounded by nature in southwestern Tochigi Prefecture, known as Nishikata-machi. We produce catalogs, pamphlets, magazines, and other items using offset printers and bookbinding apparatus for saddle-stitched and perfect bindings.

The plant uses electricity and LPG, with most of the LPG being required by the drying and deodorizing apparatus of printers. To save energy in this area, we changed the drying temperature and modified the combustion program. Further measures we took focused on reducing waste heat loss. We added jacket insulation to the deodorizing equipment, and this alone will help us reduce our CO_2 emissions by 360 tons annually.
We will continue to promote energy-saving measures in an effort to help prevent further global warming.

Jacket insulation on deodorizer

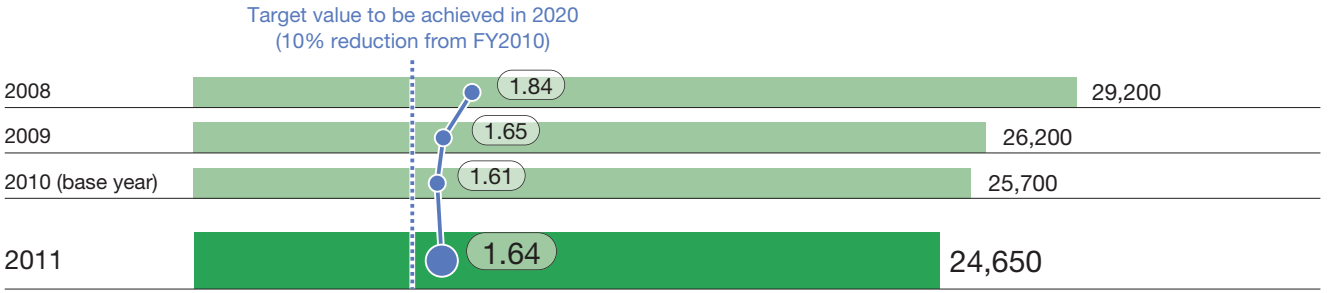
Anti-Global Warming Measures in Transport and at Our Offices

• Efforts in Transport

In FY2011, the group's overall transport volume was 354 million ton-kilometers. 24,700 kiloliters of energy (converted to crude oil) was used in shipping, producing 62,400 tons of CO_2 emissions. The per-unit fuel use for transport (amount of fuel used/sales) was 1.64kl/¥100 million, an increase of 1.9% from 2010.

We will continue to implement distribution-related environmental impact reduction measures such as the optimization of vehicle distribution and transport routes, improved efficiency through the installation of digital tachometers, an idling-stop campaign, a modal shift to rail transport, and the introduction of hybrid vehicles.

Fuel use for transport* (Unit: kl converted to crude oil) Bar graph / **Per-unit fuel use for transport** (Unit: kl/¥100 million) Line graph



* Amount used for domestic cargo transport.

• Global Warming Measures for Offices and Homes

The DNP Group has been engaged in efforts to reduce CO_2 emissions both for offices and homes since 2005. In FY2011, we set a target for a 20% year-on-year reduction in power consumed at our offices throughout Japan. Specific actions that we implemented and will continue implementing, beyond regular energy-saving measures, include completely revising the number of lighting fixtures and level of illumination needed, extending the "cool biz" dress code period, reviewing how air conditioning is run, and expanding the use of LED lighting.

Reducing Air Pollutants

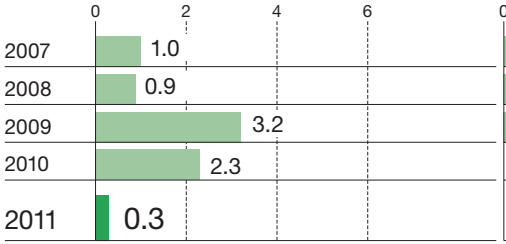
The Air Pollution Control Act regulates substances such as toxic air pollutants and ozone depleting substances, including sulfur oxide (SOx) and nitrous oxide (NOx), as well as volatile organic compounds (VOCs). These substances have an impact on health and the global environment, causing problems such as photochemical smog and ozone layer depletion. We at the DNP Group are working hard to monitor and reduce emissions of such substances.

• Reducing VOC Emissions

Inks, solvents, adhesives, and cleaning solutions used in the printing process contain toluene and other VOCs (volatile organic compounds). The DNP Group's anti-VOC measures not only seek to regulate concentrations as required under the Air Pollution Control Act, but also to reduce emissions overall. We have been switching to substitute products with a lower environmental impact and installing equipment for VOC treatment and collection. These efforts have resulted in FY2011 in an 18.7% reduction in VOC emissions to 5,563 tons, in comparison with 2010 (base year).

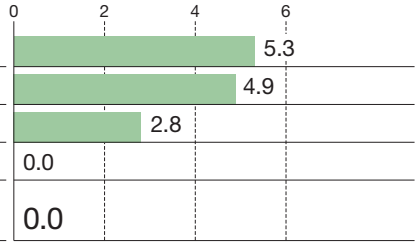
Air pollutant emissions

Dichloromethane (Unit: tons)



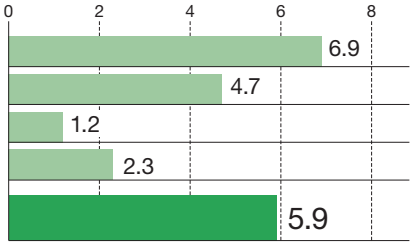
Dichloromethane is mainly used for washing in the printing process. Due to the switch to water-based cleaners, our atmospheric emissions fell from 53 tons in FY2001 to 0.3 tons in FY2011, a difference of 99%.

Chlorofluorocarbons (Unit: tons)



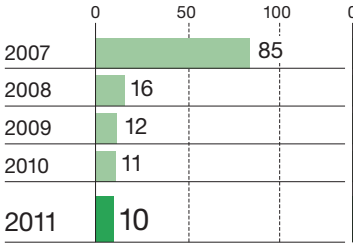
The ozone-depleting chemical HCFC-141b (1,1-dichloro-1-fluoroethane) is used as a cleaner, but our switch to substitutes in FY2010 caused emissions to drop to nearly zero.

Dioxins (Unit: mg-TEQ)

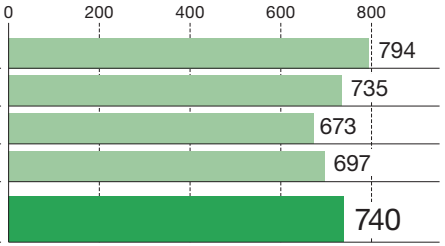


We totally eliminated small furnaces, for which burning control is difficult, and currently have six large-scale furnaces in operation, which are compliant with 2002 regulations. Atmospheric emissions in FY2011 amounted to 5.9mg-TEQ.

SOx (Unit: tons)



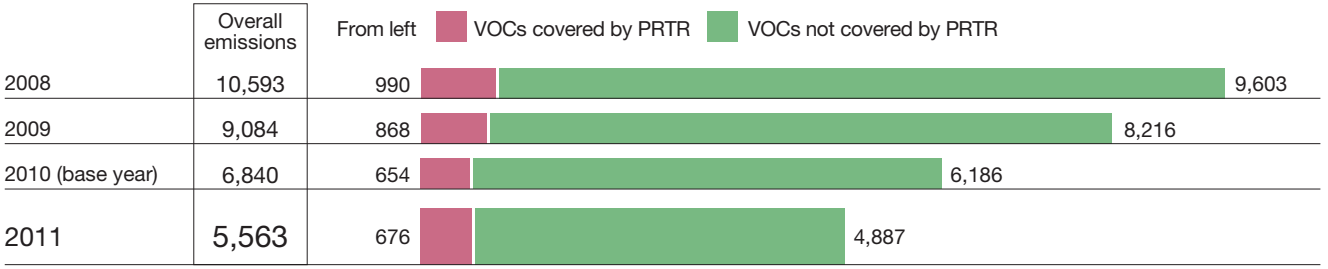
NOx (Unit: tons)



Sulfur oxide is emitted through burning high-sulfur fuel oil and kerosene. We have continued to shut down boilers, and in FY2011 we reduced sulfuric acid emissions 9% over the previous year to 10 tons.

Nitrogen oxide is emitted when fuel is burned in production processes or when electric power is consumed. We have been working to reduce nitrogen oxide emissions by installing low NOx burners. NOx emissions in FY2011 amounted to 740 tons.

Atmospheric emissions of VOCs (Unit: tons)

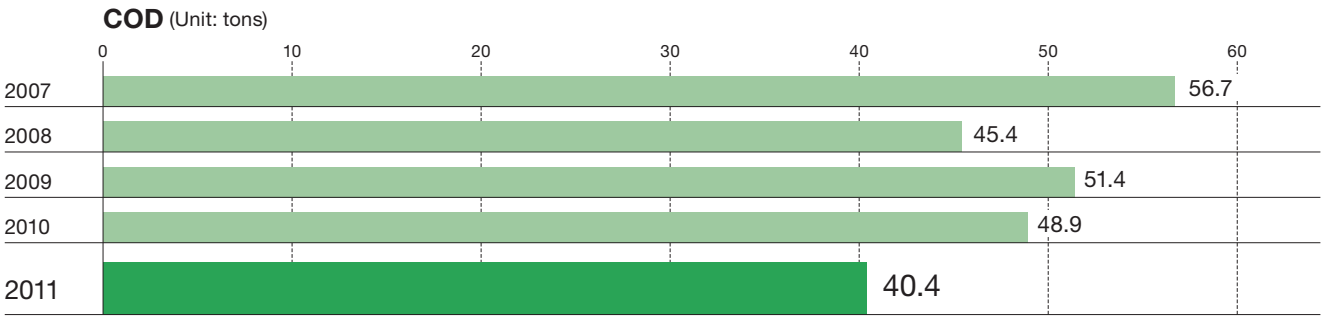


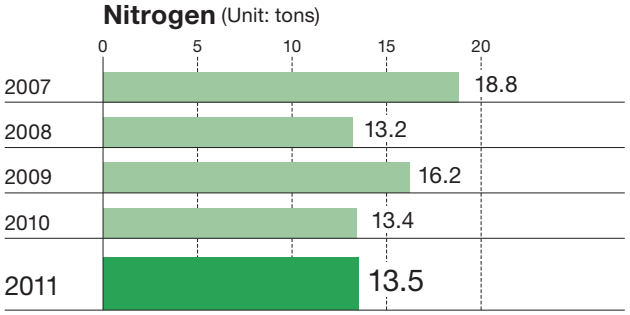
Reducing Water Pollutants

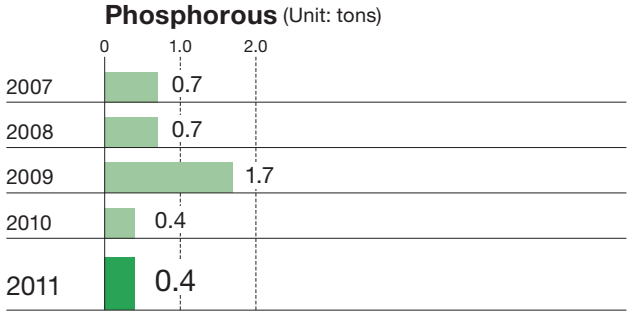
We detoxify and reduce the pollution load of the wastewater from our industrial processes and dining halls by using purification tanks and wastewater treatment equipment.

We continued to conduct measures in FY2011, such as changing out the filtration membranes and absorbent materials in wastewater processing equipment, improving wastewater treatment in our kitchens, and reducing COD (chemical oxygen demand) emissions, but there was no decrease in emissions of nitrogen and phosphorus.

Water pollutant emissions







Chemical Substances Subject to the PRTR Law

This data is compiled for PRTR-listed chemicals in the Law on Confirmation, etc., of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof.

FY2011 results are shown in the table on this page. (Listed to 3 significant figures, or to the nearest 0.1kg for figures under 10kg)

(Unit: kg/mg, dioxin and dioxin-like compounds only-TEQ)

Substance	Handled	Consumed	Removed/ Consumed	Recycled	Emissions Volume			Transfer Volume	
					Atmosphere	Public Waterways	Soil	Sewer	Off-site
2-aminoethanol	43,500	—	—	—	—	—	—	32,700	10,800
Indium and its compounds	46,600	15,900	549	29,600	—	—	—	—	429
Ethylbenzene	140,000	1,410	94,100	42,000	1,750	—	—	—	1,150
Ethylene glycol monoethyl ether	3,450	—	2,520	719	210	—	—	—	—
Ferric chloride	2,000,000	162,000	951,000	759,000	—	—	—	—	131,000
Epsilon-caprolactam	5,820	2,740	2,130	—	122	—	—	—	830
Xylene	158,000	1,640	112,000	40,200	1,960	—	—	—	1,900
Silver and its water soluble compounds	4,830	4,160	—	669	—	—	—	0.4	—
Chromium and chromium(III) compounds	65,500	28,500	16.0	14,000	—	—	—	1.9	23,000
Hexavalent chromium compounds	15,800	7,780	7,520	42.7	—	—	—	0.3	481
Cobalt and its compounds	1,780	1,030	—	176	—	—	—	—	573
Inorganic cyanide compounds (except complex salts and cyanate)	2,340	—	327	—	490	—	—	—	1,520
Dichloromethane	4,640	—	4,320	—	320	—	—	—	—
N,N-dimethylformamide	3,370	1,380	1,900	—	49.2	—	—	—	40.6
Dioxins and dioxin-like compounds	24.5	—	—	—	5.9	—	—	—	257
Water soluble copper salts (except complex salts)	562,000	99,900	106,000	352,000	—	—	—	1.2	4,810
Sodium dodecyl sulfate	1,720	1,620	—	—	—	—	—	—	104
1,2,4-trimethylbenzene	13,000	—	5,800	7,110	84.0	—	—	—	—
1,3,5-trimethylbenzene	6,510	—	3,900	2,450	31.0	—	—	—	130
Toluene	12,200,000	1,650,000	7,100,000	2,130,000	668,000	—	—	—	625,000
Naphthalene	2,930	—	2,820	—	12.0	—	—	—	95.0
Hexamethylene diacrylate	1,840	1,460	—	380	—	—	—	—	—
Nickel	90,000	76,300	1,150	12,500	—	—	—	—	14.0
Nickel compounds	29,600	910	—	268	—	—	—	—	28,400
Bis(2-ethylhexyl)phthalate	8,050	4,940	1,840	—	108	—	—	—	1,150
N-hexane	6,480	—	5,040	859	467	—	—	—	120
1,2,4-benzenetricarboxylic acid 1,2-anhydride	3,790	3,330	—	—	—	—	—	—	465
Poly(oxyethylene) alkyl ether *	1,890	1,850	—	—	—	—	—	—	39.6
Formaldehyde	2,660	—	—	—	2,660	—	—	—	—
Manganese and its compounds	5,710	3,220	—	554	—	—	—	145	1,790
Methacrylic acid	7,190	6,930	22.8	—	15.0	—	—	—	227
Methacrylic acid 2,3-epoxypropyl	7,180	7,010	5.2	—	15.7	—	—	—	151
Methyl methacrylate	1,940	1,760	—	—	30.3	—	—	—	152
Methylenebis(4,1-phenylene) diisocyanate	2,070	2,070	—	—	—	—	—	—	—
Morpholine	6,700	4,380	1,520	—	40.0	—	—	460	304
Tritolyl phosphate	5,600	5,300	—	221	—	—	—	—	84.8
PRTR-listed substances	**15,400,000**	**2,100,000**	**8,400,000**	**3,390,000**	**677,000**	**—**	**—**	**33,300**	**835,000**

* Limited to alkyls of carbon 12 through 15 or their compounds

Reducing Undesired Material in Manufacturing Processes

To help build recycling into society we are engaged in efforts to improve resource productivity and increase the recycling of undesired material. These efforts are premised on the waste-free use of raw materials that go into manufacturing processes. Undesired material is recycled as much as possible to utilize limited resources efficiently.

Employee Comment ● Seiichi Ishizaka

Production 21 Activities Promotion Office
General Manager, Commercial Printing Division, DNP Nishi Nippon

The Fukuoka Plant of DNP Nishi Nippon carries out commercial printing, manufactures business forms, and offers information processing service (IPS)-related products for the Kyushu, Chugoku, and Shikoku regions.

In fiscal 2011, the manufacturing division and office staff worked together on the topic of lowering the emissions discharge rate to reduce industrial waste.

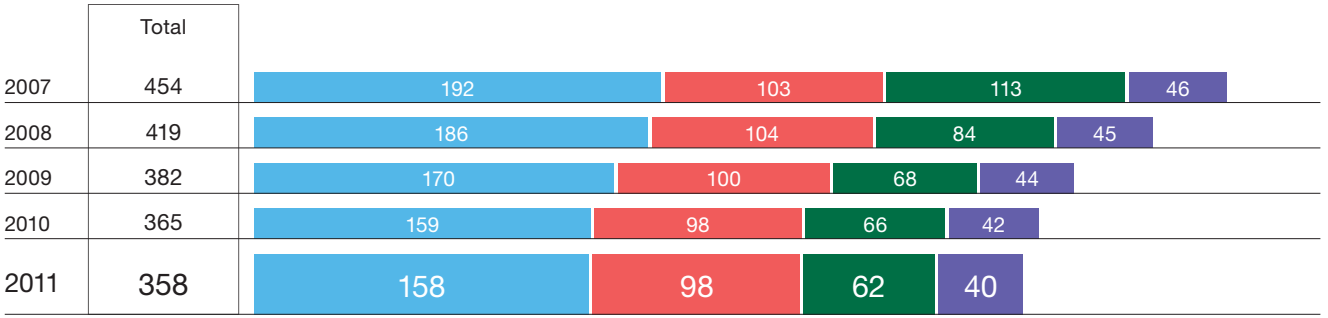
We achieved a 20% decrease from fiscal 2010 in the emissions per unit of production thanks to improved yield resulting from the Production 21 activities, new value for materials due to the revision of standards for classifying waste paper, and as a result of meticulous sorting in each workplace.

We also classify the total amount of undesired material generated—which includes valuable material—as undesired material; promote the reduction of stoppage loss within the same activities; and reduce the amount of wasted raw materials, including paper. These efforts enabled us to achieve a 10% reduction in the total amount of undesired material in comparison to fiscal 2010.

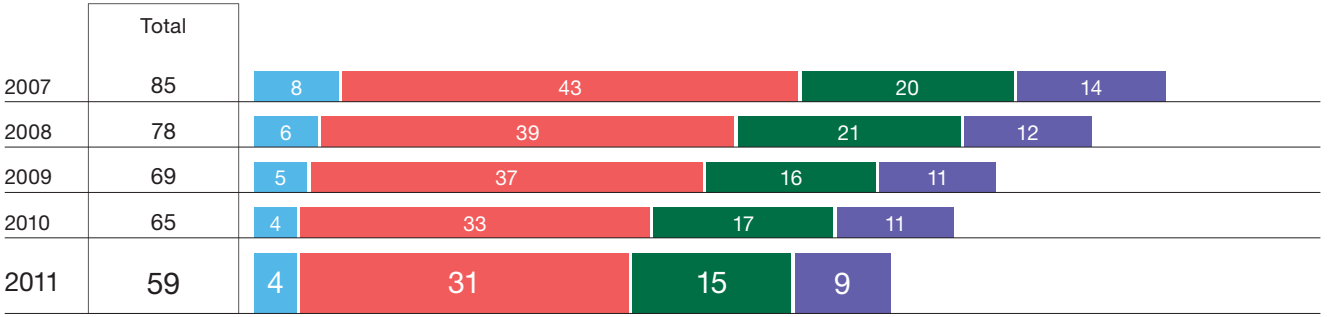
Our plan is to continue expanding activities that reduce this total volume, which includes waste paper, while further reducing liquid waste—with the recent introduction of equipment that reduces liquid waste from cleaning printing plates.

From left: Information Communication / Lifestyle and Industrial Supplies / Electronics / Other

Undesired material generation (Unit: 1,000 tons)



Waste emissions (Unit: 1,000 tons)



Production 21 Activities

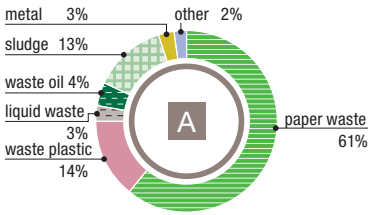
We are working together as a group to strengthen our production capabilities and improve responsiveness to marketplace changes in order to realize the DNP Group Vision for the 21st Century. We are creating a manufacturing structure capable of constant improvement with sustainable strength to improve profitability and asset efficiencies in manufacturing.

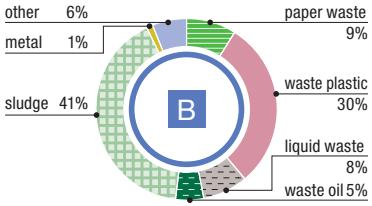
Breakdown of Undesired Materials Volume

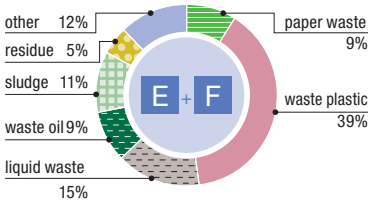
We use waste per unit of production (waste emissions (E+F)/production volume) as a productivity indicator. In FY2011 waste per unit of production was 0.451t/¥10 million, which is an improvement over 0.468t/¥10 million in FY2010. This reduction was achieved in part thanks to productivity gains made by implementing the Production 21 activities, which set out to create a resilient production system in terms of quality, cost, delivery, and other factors. It was also the result of a reduction in waste volume through the extraction of valuable materials such as waste plastic and waste oil.

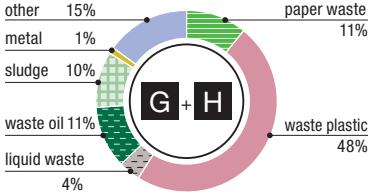
We use "zero emissions" as the indicator for the promotion of recycling undesired materials. Zero emissions represents an effort to reduce the landfill waste amount (J+K)/undesired materials production volume (A) to 0.5% or less; the rate for the group overall in FY2011 was 0.8%, an improvement from 0.9% in the previous year. At present, 62 of our 69 manufacturing sites have achieved zero emissions.

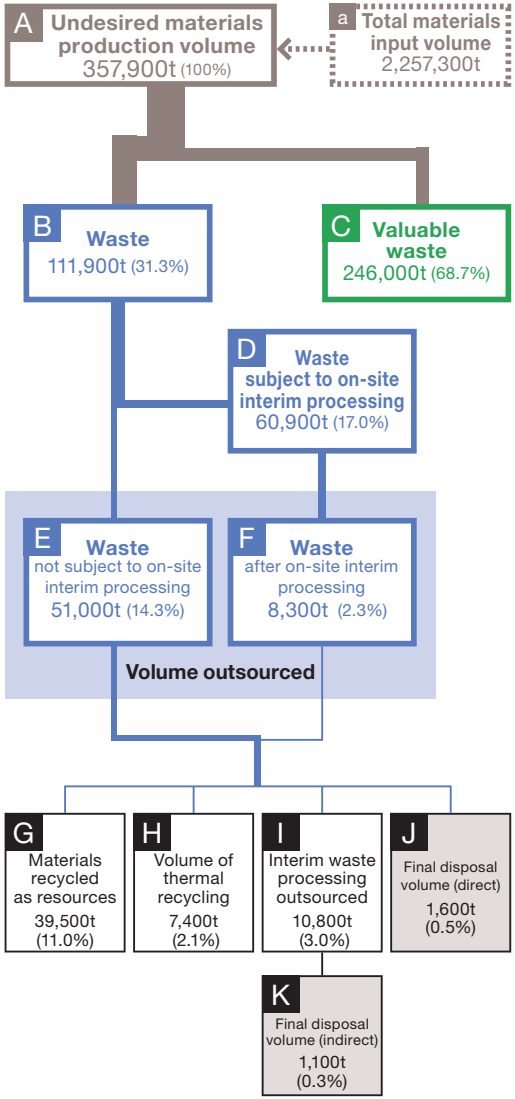
Note: Production volume refers to volume of business activity. Targets were revised in FY2010 and the coverage was changed from total added value to domestic consolidated sales.

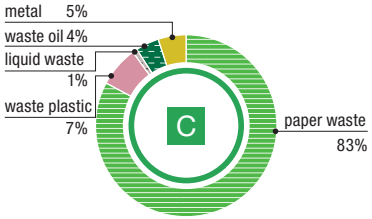


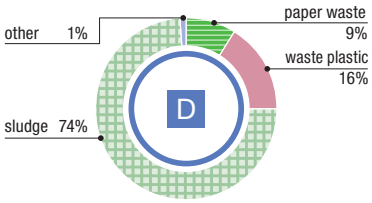


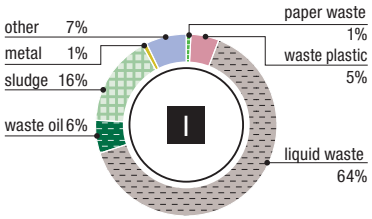


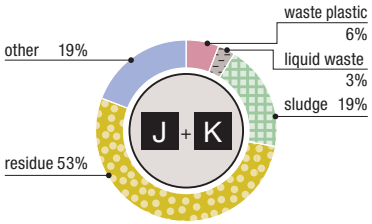












Use of Recycled Resources

• Office Paper Recycling

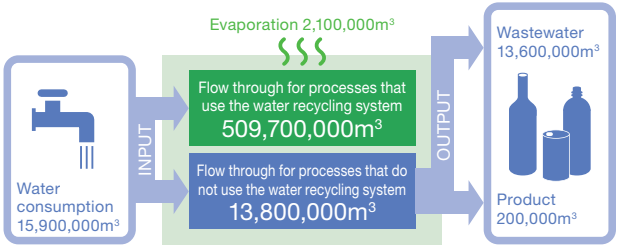
The business of the DNP Group is closely connected to paper, and we have been separating and collecting paper at our offices for some time. In FY2011 waste paper was collected at 49 sites for a recycling rate of 77.7%, exceeding our target of 70%.

• Use of Recycled Water

We are working hard to conserve water resources by promoting a closed-loop system in which water is recycled and reused instead of released. In this way we have been able to cut down on the high volume of water required for cleaning our products, air conditioning, and heating and cooling production machinery. We used 509.7 million cubic meters of recycled water in FY2011, about 33 times the amount of pipe water we used.

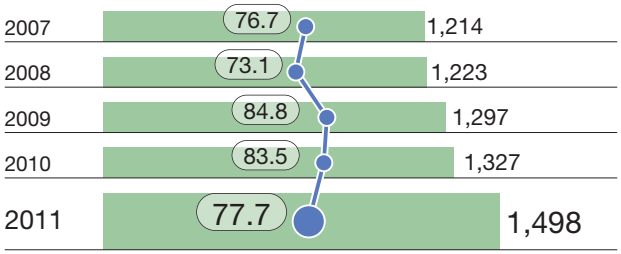
We are also making effective use of rainwater in our office buildings and other sites. In FY2011 we used 8,450 cubic meters of rainwater for toilet flushing and the watering of grounds.

Water Input-Output



Note: Hokkaido Coca-Cola Bottling and DNP Fine Chemicals use water in products.

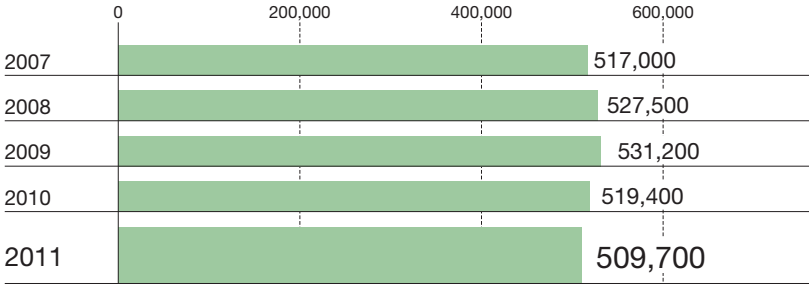
Amount of used paper collected (Unit: tons) Bar graph
Used paper collection rate (Unit: %) Line graph



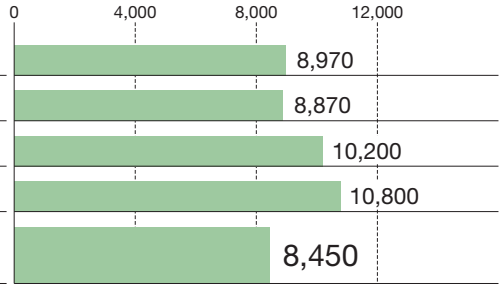
	Waste paper collection				General waste	Waste paper collection + general waste amount	Number of sites
	Cardboard	Magazines	Newspapers	High quality paper			
2007	165	905	43	101	369	1,583	30
2008	162	874	48	139	449	1,672	34
2009	262	913	28	94	233	1,530	32
2010	336	874	29	88	262	1,589	34
2011	**337**	**995**	**38**	**129**	**431**	**1,929**	**49**

Wastepaper collection rate: Wastepaper collection/{wastepaper collection + general waste amount (excluding cans, bottles, and garbage)} × 100

Recycled water use (Unit: 1,000m³)



Use of rainwater in office buildings, etc. (Unit: m³)



Recycled water: The total volume of water that flows through the heat exchange or cleaning equipment in our closed-cycle system in one year.

Environmentally Conscious Materials Procurement and Products

• Promoting Green Purchasing

We carry out “green purchasing” to reduce the environmental impact of DNP’s product manufacturing processes. Green purchasing involves selecting and buying the most environmentally conscious materials, parts, equipment, office supplies, and other items—from the upstream production processes forward.

We also give priority in materials and equipment purchasing to suppliers that take an aggressive approach to environmental conservation.

• Management of Chemical Substances in Product Materials

As part of DNP’s efforts to improve product safety, in response to laws and regulations such the RoHS Directive and REACH Regulations adopted by the EU, as well as client demand, we monitor and manage chemicals contained in the materials we purchase.

In 2004, we conducted a study of the amounts of chemicals contained in materials we purchase from suppliers and used the results in creating a chemical content database. This has allowed us to monitor the chemicals used in each product, thereby strengthening our controls. In addition, it has created a mechanism for the manufacture of products according to established standards.

We require a report from the supplier in the form of an examination slip with every new purchase; in addition, when we start trading with a new supplier we explain the use of the chemical content examination slip when the trading account is opened, and request that one be submitted with each delivery.

RoHS Directive
Directive on the restriction of the use of certain hazardous substances in computers, communications equipment, home electronics, and other electrical and electronic equipment.

REACH Regulations
Regulations requiring the registration of chemical substances made and used in the EU.

• Development and Sales of Environmentally Conscious Products

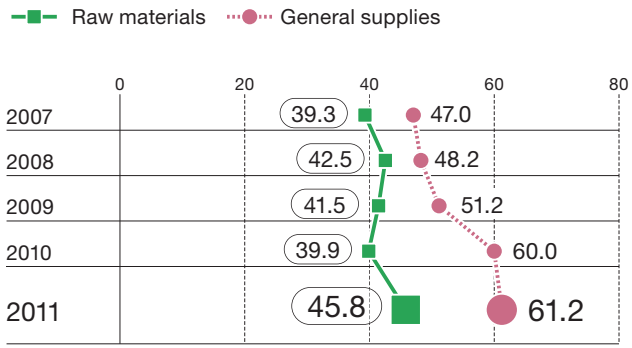
The DNP Group created the Environmentally Conscious Products Development Guidelines to direct from the design stage the creation of environmentally conscious products, so as to reduce the environmental impact of our products throughout their lifecycle.

Our sales of environmentally conscious products reached ¥336.0 billion in FY2011 (¥318.0 billion in FY2010).

Lifecycle
This covers every aspect of the lifetime of a product or service, from the point where the material resources that go into its manufacture are extracted from the Earth through production, distribution, use, and finally to when any waste is returned to the Earth.

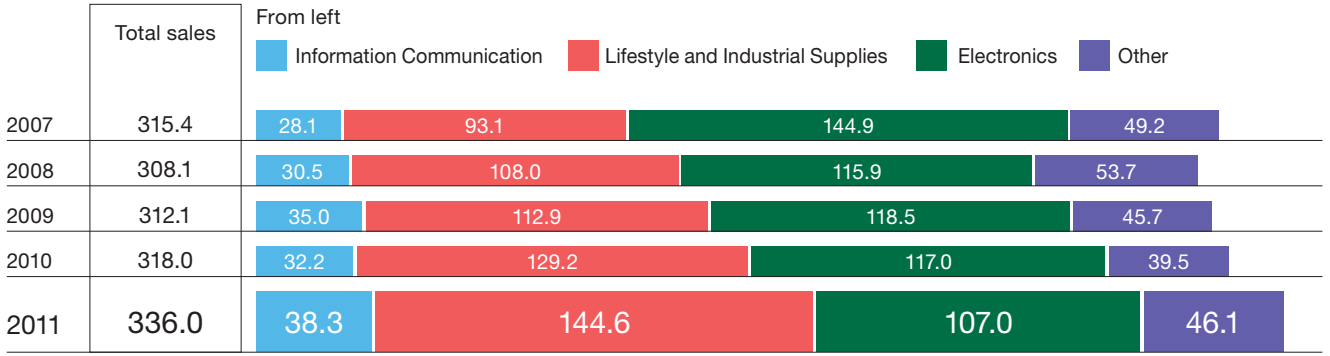
Purchasing rate for environmentally conscious products

(Unit: %)



Note: Aggregate calculation of data for 45 sites under the direction of the DNP Purchasing Division.

Sales of environmentally conscious products (Unit: billion yen)



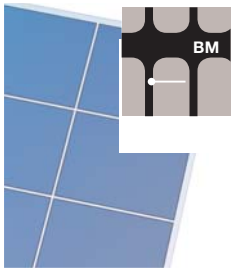
Environmentally Conscious Product Development Policy and Product Lines

1 Reduction of environmental pollutants

Elimination of ozone layer-damaging substances, heavy metals, volatile organic compounds, and prevention of release into the environment of nitrous oxides and other substances.

Example product

• BM Color Filters



These are color filters using a black matrix (BM) made of resin instead of metal. Development of this product has resulted in reduced environmental impact and cost.

2 Resource and energy conservation

Reduce the use of metals and fossil fuels. Promote energy-conserving products and systems.

Example product

• Elbow Pouch

Our Elbow Pouch is a refill-use pouch with improved opening and pouring features. It is useful in saving bottle resources, and post-refilling volume is reduced.

3 Sustainable harvesting of resources

Utilize natural resources in a sustainable way.

Example product

• Biomatech PET and PE

These film products are made partially from plant-based materials. Their production and use will help reduce emissions of CO_2, a greenhouse gas, and the use of petroleum, a depleting natural resource.

4 Long-term usability

Consider the ease of repair and parts replacement, length of maintenance and repair service, and the expandability of functions.

Example product

• Safmalle

Safmalle is our line of olefin-based decorative sheets for construction or decorative use, which meet the need for healthy, hygienic, and safe living space creation.

5 Reusability

In the case of sites and parts, considerations regarding disassembly, cleaning, and refilling; establishment of a collection and reuse system that is easy for the purchaser to use.

Example product

• Peel-off Shipping Labels

These are shipping labels that are easily peeled off of packing paper or cardboard.

The labels are one-ply, saving paper, and they make the recycling of cardboard and other packaging easy because they peel off cleanly.

6 Recyclability

Are the materials used in the product easy to recycle? Does the design allow for easy breakdown, disassembly, and separation of materials? Is there a collection and recycling system that is easy for the purchaser to use?

Example product

• Environmentally Conscious Calendars

These calendars are made with recycled paper and low environmental impact ink. No metal or plastic need be removed post-use, because neither is used in their production.

7 Use of recycled materials, etc.

Use as many collected and recycled materials and parts as possible.

Example product

• Magazines and Pamphlets Using Recycled Paper

These are printed materials that use composites of used paper, such as used magazines and newspapers. Not only do they require fewer paper resources, but the use of low environmental impact soy ink and non-VOC ink is increasing.

8 Ease of treatment and disposal

Attempt to place as little burden as possible on incinerator facilities and landfill sites.

Example product

• IB (Innovative Barrier) Film

This is a packaging-use clear cling film which cuts dioxin use because it is non-PVC. It is widely used in the packaging of food, toiletries, or daily items requiring a barrier.

Lifecycle Assessment (LCA) and Carbon Footprint

• Assessment and Development of Products Using LCA

The DNP group has introduced LCA (Lifecycle Assessment) for evaluating the environmental impact of each product over its entire lifecycle with the objective of making improvements; the LCA system has also been incorporated into new product development.

Recently, we have begun using the second version of the lifecycle impact assessment method based on endpoint modeling (LIME2). This method employs detailed data on environmental loads obtained through LCA methods, through which we are conducting evaluation studies on biodiversity and global warming.

DNP has been a member from inception of the LIME2 research working group created by the Life Cycle Assessment Society of Japan (JLCA) (chaired by Associate Professor Norihiro Itsubo of Tokyo City University). At the most recent meeting of the working group, the environmental impact of the DNP-developed MicVac in-pack microwave cooking and pasteurization system was assessed. We undertook Japan's first product development using this system in collaboration with Fujicco Co., Ltd. In a comparison of the pre-cooked MicVac meal product with a conventional pre-cooked meal, the MicVac product was found to have a 15% lower greenhouse gas emission rating. The report will appear on JLCA website in summer 2012.

The MicVac meal assessed (sold only as a test product, not currently available)

• Water Footprint (WFP)

The concept of the "water footprint" is gaining currency worldwide and a new ISO global standard is being developed. In Japan, a series of practical seminars (*Water Footprint Jissen Juku*) is being given by the JLCA's Norihiro Itsubo (Associate Professor at Tokyo City University) to teach people about the water footprint model. In these seminars participants learn the concept of the water footprint and come to understand its urgency. Other objectives are to teach calculations methods and other practical skills. DNP has participated as an original member and carried out a case study using our aseptic filling system for PET bottles as an example. We made our water footprint case study results public at the Eco-Products 2011 exhibition held in Tokyo in December.

Eco-Products 2011 booth (Dec. 2011)

• Carbon Footprint

DNP began participating in the Japanese government's three-year "carbon footprint of product" (CFP) pilot project in FY2008. We established product category rules (PCRs) for publications and commercially printed matter as well as containers and packaging, for example, and reviewed verification schemes. We are now training individuals to manage the collection and collation of internal data on manufacturing, and are establishing a system to enable us to respond to clients' requests for calculations. The carbon footprint system got a new start in April 2012 under the auspices of the Japan Environmental Management Association for Industry (JEMAI) as the Carbon Footprint Communication Program. DNP will continue to participate in and promote these efforts.

Example of the Carbon Footprint in Container and Packaging

Beaubel Cup Air®
Case of 816 cups (on right)

In our Packaging Operations, we have calculated the carbon footprint for the industry's lightest injected-molded drinking cup, Beaubel Cup Air. Both the improved cup and its heavier predecessor, the original Beaubel Cup, licensed the CFP mark (for intermediate products). The mark enables us to communicate through the new product the CO_2 reduction that has been achieved via the reduction in resin used.

	Weight (g)	Reduction (%)	Carbon footprint		
			Per case (kg-CO2e/case)	Per unit (g-CO2e/unit)	Per-unit reduction (%)
Original Beaubel Cup	17.8	—	62.7* (CV-BC02-12001)	113.6	—
Beaubel Cup Air	9.9	44	60.3 (CV-BC02-029)	73.9	35

For more details, visit: http://www.jemai.or.jp/english/carbonfootprint.cfm
* One case of the original Beaubel Cup contained 552 cups

LIME (Life-cycle Impact Assessment Method based on Endpoint Modeling)
LIME is the Japanese version of lifecycle impact assessment (LCIA) methods that enable assessment of 11 impact categories and 1,000 substances. It can be used in a wide variety of environmental assessments to capture vital data on environmental impact that had heretofore been missed, beyond the obvious benefit of expanding the scope of lifecycle assessments. Currently, LIME2, an updated version, is in use.

Water Footprint
A water footprint is an indicator that provides a numerical value for the total volume of water (drinking water, etc.) used to produce a product throughout its lifecycle, including the growing of agricultural and livestock products. In June 2009 the International Organization for Standardization (ISO) decided to create a global water footprint standard, and is now working on institutionalization.

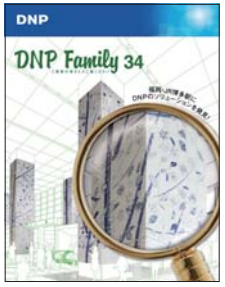
Carbon Footprint
A carbon footprint represents the total emissions of greenhouse gases of a product or service over its entire lifecycle converted to CO_2 by volume. Product labeling is a method by which a business can visually demonstrate to consumers the measures it is taking to fight global warming, who can then make product or service choices which take CO_2 emissions volume into consideration. LCA methodology is used to calculate the carbon footprint.

Use of LCA and Efforts to Reduce Our Carbon Footprint

Actual Example of Printed Publications and Carbon Footprint

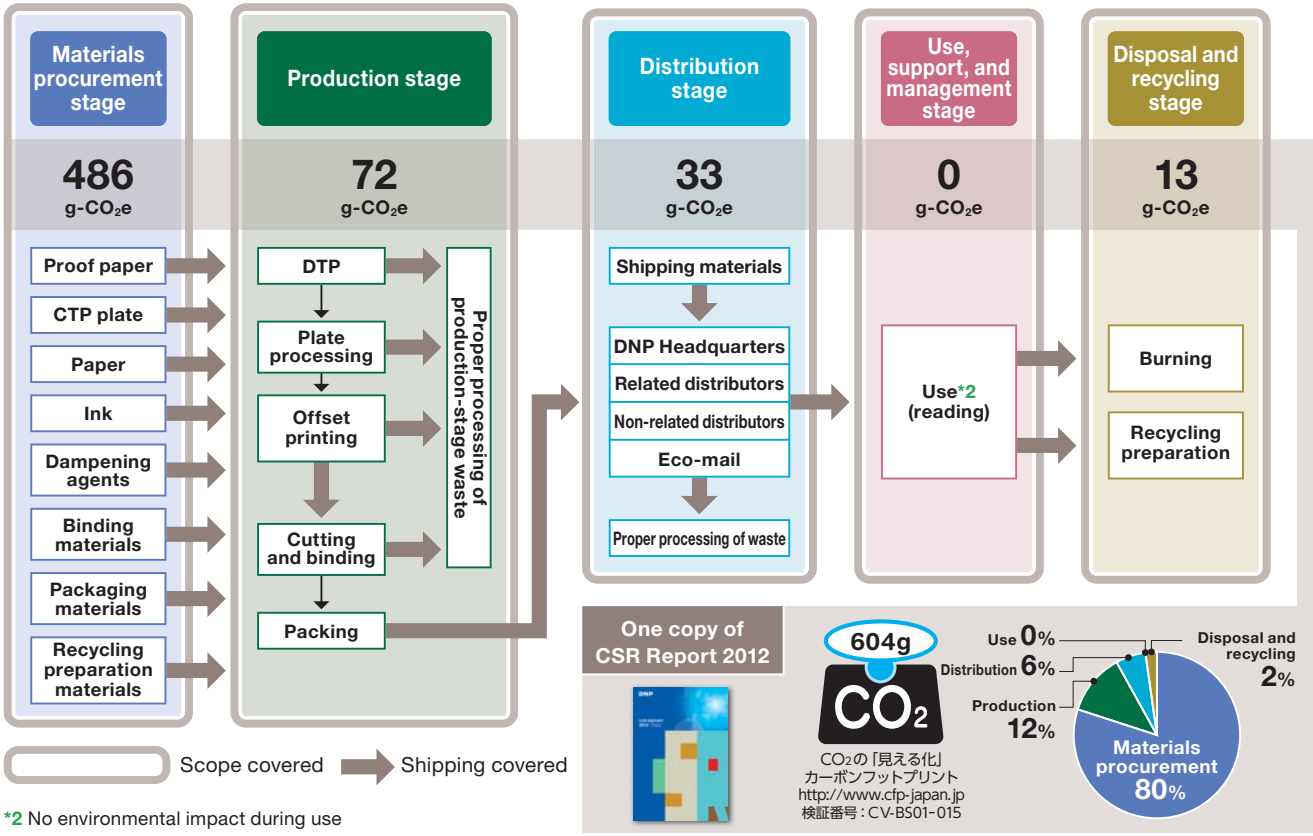
Ichigaya Publication Printing Operations, belonging to our Information Communication Operations, has calculated the carbon footprint of the many types of printed material DNP uses for publicity or promotion. After verification, the carbon footprint mark is displayed on such materials. We are also able to calculate the carbon footprint of our clients' catalogs, trade magazines, and many other types of publications, and are able to respond to requests for verification.

The DNP publications that display the carbon footprint mark are shown below.



Carbon Footprint of the DNP Group CSR Report 2012 by Lifecycle Stage with Calculated Areas

The carbon footprint mark is displayed on the DNP Group CSR Report 2012 in the same way as displayed on the 2011 report. Detailed calculations by lifecycle stage, including the areas that were calculated, are presented in the chart below.



*2 No environmental impact during use

❶ Environmentally Conscious Products Pamphlet (Japanese) "DNP's ECO" (CV-BS 01-001) *1
❷ Children's Pamphlet "What Is a Carbon Footprint?" (Japanese) (CV-BS 01-002) *1
❸ Shareholder Newsletter (Japanese) (CV-BS 01-030) *1
❹ Annual Report (CV-BS 01-017) *1
❺ In-house Japanese Newsletter "DNP Family" (CV-BS 01-019 through 01-021) *1 (3 types with differing number of pages)

*1 The number in parentheses is the verification number; more details are available through a search on the number at: http://www.cfp-japan.jp (Japanese only)

Environmental Label Certification

We have earned environmental labeling certification such as CoC (Chain of Custody) certification and the Japan Environment Association's Eco Mark. We are working to expand the sale of products with this labeling, so that their packaging and advertising can serve as means to educate consumers properly about the environmental aspects of our goods and services.

• Main Certification Acquisition Results

Eco Mark (Type 1 environmental label)	
This environmental label is attached to products recognized as having low environmental impact throughout their lifecycle, from production through disposal, and as being useful to environmental conservation.	Acquired for mugs made of recycled plastic Received for "construction-use album" using used paper
CoC Certification	
CoC (Chain of Custody) This is a certificate of control throughout each stage of processing and distribution, by which wood products and materials (including paper products) taken from FSC-certified forests contain a fixed percentage or greater of certified material, and have no wood products or materials derived from illegally harvested sources mixed in.	Acquired by a total of 21 business units

Environmental Labeling

Environmental Labeling: This is broadly divided into three types: Type 1, such as the Eco Mark (third party certification); Type 2, in which a company itself makes the declaration (self-declaration); and Type 3, in which environmental information is provided on the label, such as the EcoLeaf (environmental information labeling), with each having specifications under ISO or JIS.
Reference information: "Environmental Labeling Database" of the Central Environment Council of the Ministry of the Environment

CoC Certification

Certification Type	Acquired by *1	Acquisition Date*2	Registration Organization
FSC-CoC	DNP Chubu	Oct. 2002	SGS
	DNP Trading	Dec. 2003	SGS
	Packaging Operations	Dec. 2005	SGS
	DNP Tohoku	Mar. 2006	SGS
	Ichigaya Publication Printing Operations	Mar. 2006	SGS
	DNP Multi Print	Apr. 2007	SGS
	DNP Hokkaido	Nov. 2007	SGS
	IPS Operations	May 2008	SGS
	Tien Wah Press (Pte.) Ltd.	May 2008	DNV
	Information Communication Operations	Aug. 2008	SGS
	Lifestyle Materials Operations	Aug. 2009	SGS
	DNP Nishi Nippon	Jun. 2010	SGS
	DNP Shikoku	Mar. 2011	SGS
PEFC-CoC	Packaging Operations	Jan. 2004	JIA
	DNP Chubu	Sep. 2005	SGS
	DNP Hokkaido	Nov. 2007	SGS
	DNP Trading	Jan. 2008	SGS
	IPS Operations	May 2008	SGS
	DNP Nishi Nippon	Jun. 2010	SGS
	Ichigaya Publication Printing Operations	Mar. 2011	SGS
	Lifestyle Materials Operations	Nov. 2011	SGS

FSC
Forest Stewardship Council

PEFC
Programme for the Endorsement of Forest Certification Schemes

SGS
SGS Japan

DNV
Det Norske Veritas (Norway)

JIA
Japan Gas Appliances Association

*1 Organizations and the names used for them as of March 31, 2012.

*2 Date of initial registration. However, Information Communication Operations (received in August 2003) received multisite certification at different times.

Biodiversity Efforts

We unveiled the DNP Group Biodiversity Declaration in March 2010 and commenced our action plan under the declaration as part of our biodiversity protection initiatives.

In FY2011, we reexamined the effects on biodiversity of our product development, material procurement, manufacturing, sales, use of products, and disposal of waste. As a result, we established two key initiatives, both of which have a major influence on ecosystems, and we are already working to achieve them. These initiatives are the creation of green spaces at our business sites and the improvement of material procurement practices.

• Major activities based on key themes

It is important that our employees are aware of the goals and progress of our biodiversity protection initiatives, and that they work to help achieve those goals.

For instance, regarding our goal of creating green spaces at our business sites, beginning in October 2011 we conducted a survey of our business sites worldwide to see how we could contribute to ecosystems in their vicinity with green spaces.

Similarly, as part of our drive to improve material procurement practices, we are working to apply lifecycle assessment (LCA), which we have used since the 1990s, to development and commercialization of packaging made from materials that are considerate of biodiversity.

Elsewhere, we have implemented biodiversity-friendly initiatives for materials in other segments, too, in line with our CSR Procurement Criteria. We are also looking to bolster our efforts in this area, particular as relates to printing and paper for processing, for which we are considering instituting procurement guidelines.

DNP Group Biodiversity Declaration

We, the DNP Group, based on our appreciation for nature's bounty and recognition that out business activities impact the environment, will help build a sustainable society by fulfilling our society responsibility to protect biodiversity.

1. We view protection of biodiversity as an essential issue to be considered in all of our business activities, including business planning, research, project planning, product development, design, production, and sales.
2. We will evaluate, understand, and analyze how we affect biodiversity through such actions as using energy and water resources, procuring raw materials, and disposing of chemical substances.
3. In order to broaden our biodiversity protection activities, we will share our understanding of related issues with customers, supplies, local community members and other stakeholders, and promote cooperative action with them.
4. We will enhance understanding and awareness of biodiversity-related issues among all of our employees, and strive to make them more conscious of the importance of protecting biodiversity.

External Comment ● Dr. Naoki Adachi

CEO, Response Ability, Inc.

Protecting biodiversity is not just a nice way for companies to contribute to the community; it is vital for the future survival of their businesses. The way DNP has gone about its biodiversity protection initiatives after first investigating the impact of its business activities on ecosystems demonstrates that they understand that principle.

This report contains information on how the company is striving to improve the quality of its stewardship of green spaces. DNP conducted on-site surveys of 65 manufacturing facilities in Japan and one overseas, not only to check on the state of affairs at those sites, but also to ascertain their influence on the surrounding ecosystems. I think its assessments and plans, which take these issues into account, are far ahead of the curve. I hope that DNP will strive to continue to benefit ecosystems, not just through the efforts of the company's employees, but by involving local residents as well.

The use of Biomatech PET material and the company's LCA are also intriguing endeavors. The results of these initiatives indicate that biomass will continue to be sought and used as a sustainable resource, but even so, we must use these resources carefully so as to minimize impact on ecosystems and water resources. I sincerely hope that DNP will come up with concrete ideas that will point us in the right direction.

Creation of Green Spaces at Business Sites

• Surveys conducted at 65 sites in Japan, one overseas

We conducted surveys at 65 production facilities in Japan and one overseas to see how we could use green spaces to contribute to the ecosystems in their vicinity.

First, we gauged the level of biodiversity in and around our sites based on factors such as the areas of the premises, green spaces, and other green areas (e.g., woods, grassed areas, and forested slopes) or wetlands (e.g. ponds, swamps, rivers, and springs) within 2km of the premises. The sites were divided into groups in accordance with the results of these studies.

Ten of the sites that stood out were targeted for further studies into whether or not there was a link between the on-site green areas and those nearby in terms of their role as a habitat for wildlife. These relationships were made into diagrams and used for further ecological network analysis.

Meanwhile, we also conducted on-site surveys based on the Eco-friendly Business Site Promotion Guidelines developed by the Japan Business Initiative for Biodiversity (JBIB) as a first step to boosting interest among employees and motivating them toward creating green areas that contribute to biodiversity.

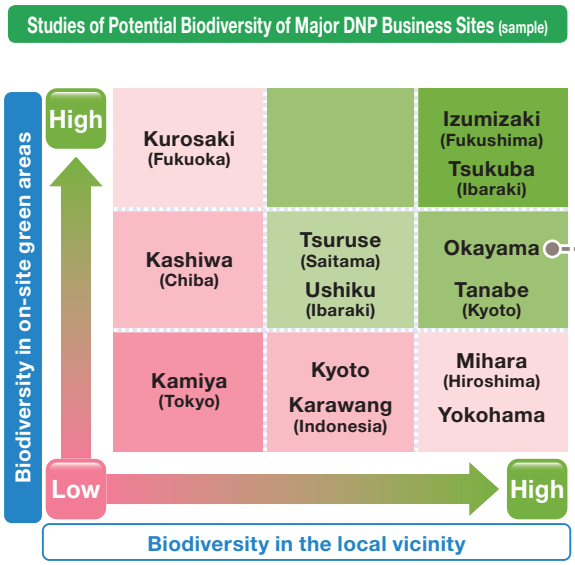
Furthermore, the current redevelopment of our site at Ichigaya includes plans for an Ichigaya Forest, which will link with surrounding green areas. Our aim is to create an environment for birds and insects that is not divided by land boundaries. We have already begun studies of flora and fauna on our premises and its surrounds in order to gauge the degree of any contribution to biodiversity that the Ichigaya Forest may make, in order to reflect that contribution into subsequent plans.

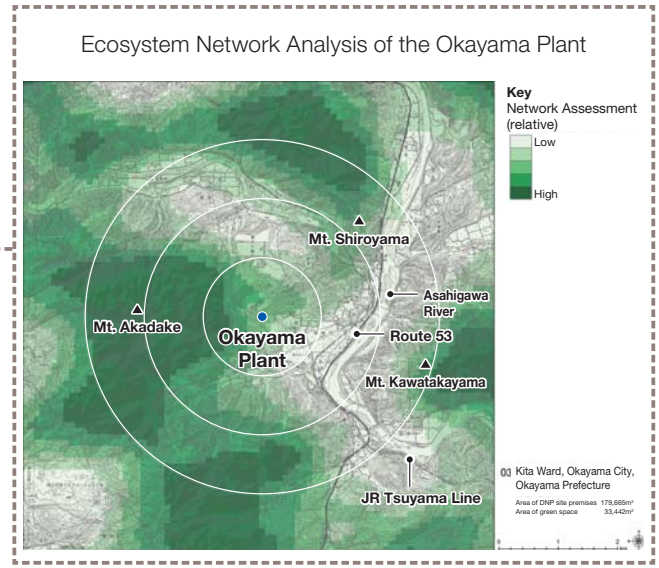
Evaluation of Biodiversity Levels at Business Sites and Surroundings

Biodiversity network evaluations made it possible to gauge quantitatively the level of biodiversity at the DNP business sites and the surrounding areas. This information provides useful insights for use when deciding on the direction of future initiatives.

In addition, quantitative information on the link between the green areas on DNP land and those in the local vicinity was studied as part of an ecosystem network analysis in order to determine how DNP may further contribute to the building of a local ecosystem network.

In the case of the Okayama Plant, because the Mitsu Industrial Park, in which the plant is located, is situated on developed land in a valley between mountains, the continuity of forest land has been compromised. However, 34% of the land within 1km of the plant is green land, and is in proximity to the Asahigawa River, which is home to a broad array of wildlife. It was discovered that, therefore, the area has high potential for biodiversity. Accordingly, we look forward to using the Okayama Plant's green areas to provide habitats for wildlife, and we aim to turn the area into a pathway from the forest mountains to the lowland, thus creating a local ecosystem network.





Procuring Raw Materials: LCA Assessment of "Biomatech PET"

• Lifecycle assessments of Biomatech PET made from sugarcane-derived material

When we at DNP develop products, we research materials thoroughly based on lifecycle assessment (LCA), which offers a quantitative evaluation of the impact the subject material has on ecosystems and environments. Through this, we are aggressively commercializing sustainable, biodiversity-considerate packaging.

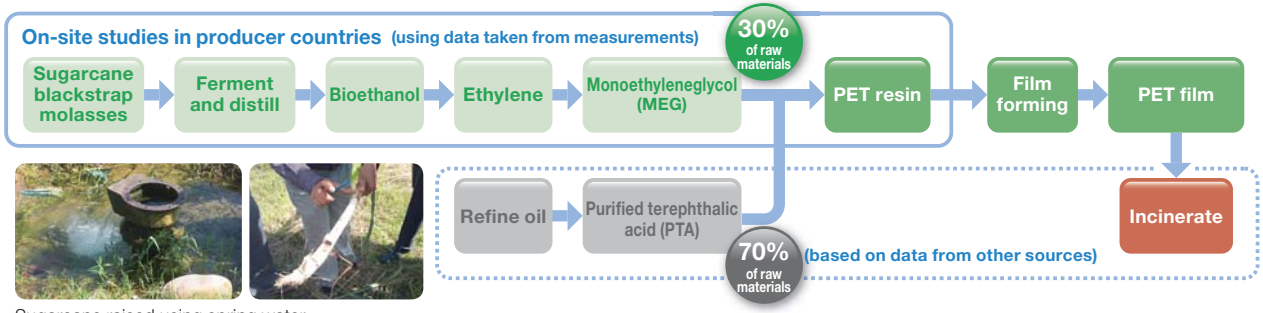
In 2011, we were the first in the world to develop Biomatech PET, a PET film made from plant-derived ingredients, in a joint research project focusing on LCA. Our research partners were Norihiro Itsubo, an associate professor at Tokyo City University, and Iwatani Corporation.

LCA begins with painstaking data research to ensure the studies are based on accurate information. We visited India, where the sugarcane that forms the basis of Biomatech PET material is produced, in order to study the various relevant manufacturing processes and get a tangible idea of the volume of greenhouse gas emissions. Also, because Biomatech PET is made from plant-derived material, it was also vital that we looked into use of water resources and the effects of production on biodiversity, and we made these issues more readily visible.

Sugarcane field in northern India

Monoethylene glycol plant

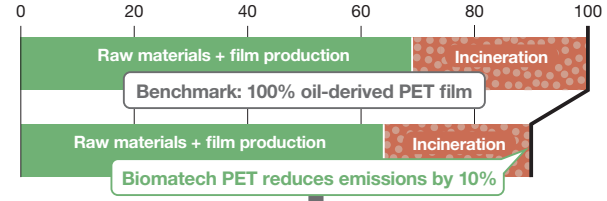
Biomatech PET Manufacturing Process and LCA Assessment Results



Sugarcane raised using spring water

Reduction of Greenhouse Gases Emitted in the Production of Biomatech PET Film

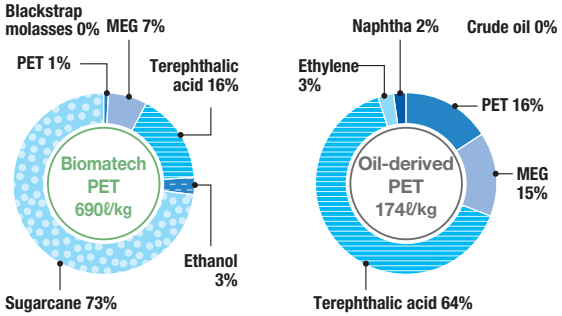
Note: Assuming PET film (20% biomass)



Content	MEG	PET resin	PET film
Percentage of biomass	100%	30%	20%
Reduction of greenhouse gas emissions	79%	18%	10%

- Biomass MEG enables greenhouse gas emissions to be reduced by 79% compared to oil-derived MEG
- PET resin (30% biomass) enables greenhouse gas emissions to be reduced by 18%

Use of water resources per kg of PET resin



- Because biomass is made from plant-derived ingredients, it registers a higher environmental burden in terms of water resource use. (Sugarcane cultivation accounts for 70% of water use in production.)
- Because rainfall, soil quality, and irrigation methods differ from region to region, it became clear that it was important to obtain data on these factors when studying sugarcane production.

Our studies showed that Biomatech PET film can reduce greenhouse gas emissions by 10% over the PET film lifecycle.

Conversely, we also found that it uses around four times the water resources of oil-derived PET and has around five times the impact on biodiversity. Therefore, if we are to continue to use sugarcane as a raw material, we will need to consider ways of eliminating risks regarding water consumption and biodiversity.

We at DNP are determined to address pressing issues like these through appropriate supply chain management and big-picture decisions.

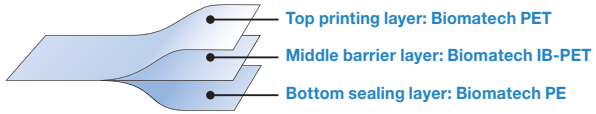
Procuring Raw Materials: Spreading the Use of Plant-Derived Films

• DNP's "Biomatech" plant-derived film series

Our Biomatech series of films are packaging materials made from plant-derived ingredients. For instance, Biomatech PET is made using approximately 30% ethylene glycol, which is produced from sugarcane-derived bioethanol, instead of oil-derived material.

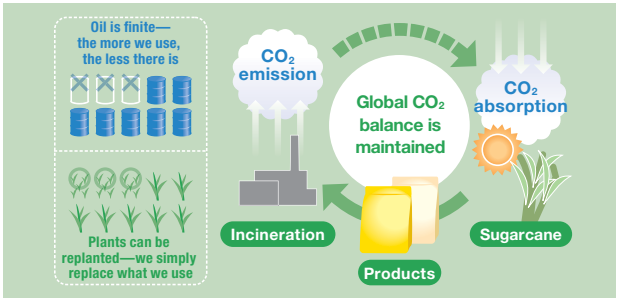
Packaging material needs three layers: a printing layer, an internal layer, and a barrier layer in between. To this end, we developed a printable three-layer film that can be used in a broad range of fields including food, daily sundries, pharmaceuticals, and industrial products.

Packaging Material Configuration



• Why is plant-derived material environmentally friendly?

The main reason is that it reduces the use of fossil fuels, which are finite resources. The plants that form the basis of the Biomatech series can be grown and harvested again and again. In addition, although CO_2 emissions are generated when the products are incinerated after their useful life is over, plants absorb CO_2 as they grow so there is no net increase in emissions.



Morinaga Milk Uses Biomatech PET in Creamer Packets

Hopes are high that DNP's Biomatech series can play a major role as a packaging material with a low environmental impact for a broad range of goods, particularly for goods used on a daily basis such as foods, beverages, and daily sundries. Here at DNP, we are gradually replacing the packaging materials we supply to manufacturers with Biomatech series materials. Starting in March 2012, Biomatech PET is being used in Morinaga Milk Industry's Creap and Creap Light coffee creamer packets.

Plant-derived film is generally much more expensive than oil-derived material, but we have succeeded in capping the increase in manufacturing costs of our Biomatech series of films to between 20% and 30% compared with oil-derived film. We will continue to pursue expanded sales of the Biomatech series by further reducing costs and broadening its use to a greater range of products.

220g packet of Morinaga Milk Industry's Creap coffee creamer advertising the use of environmentally friendly sugarcane-derived material

Employee Comment ● Ayumi Shibata

Development Division, Packaging Operations, DNP

By dedicating ourselves to finding the right raw materials and conducting in-depth studies in production regions, we were able to get a clear picture of the effects of PET film on the environment. We reaffirmed our view that Biomatech PET is a material we can recommend to clients with confidence; it is recyclable, a replacement for conventional, oil-derived PET, and contributes to efforts to prevent global warming. I was reminded of the importance of LCA for businesses like ours because it provides a visible picture of environmental impact.

The results of these latest studies were not uniformly favorable from a DNP perspective; there were some negative results among the positives. But I believe it is vital for companies to publish the bad along with the good, to be as considerate of the environment as possible, and to minimize environmental risks.

External Comment ● Norihiro Itsubo

Ph.D. (Engineering)
Associate Professor, Faculty of Environmental and Information Studies, Tokyo City University

The rise in interest in bioplastics has sparked innumerable environmental assessment projects worldwide. The environmental impact of a crop varies greatly depending on a variety of factors, including the type of plant, cultivation methods, location, and yield. As such, it is imperative that any analysis be conducted based on data relating to local conditions. The ethylene glycol used in Biomatech PET is derived from sugarcane—specifically, the blackstrap molasses which is usually disposed of as waste.

This radical innovation means that we can use sugarcane in a way that does not put us in competition for the same resources with food producers who want the sugar, and we can reduce the amount of waste the sugarcane generates. DNP did well to identify sugarcane as a potential ingredient for bioplastic, and to verify its efficacy through LCA. I strongly support DNP's efforts to pursue the potential of eco-materials while maintaining the traceability of environment-related information.

Basic Target and Calculation Items

The DNP Group positions and implements environmental accounting as follows.

1. As an environmental management tool for the DNP Group

(1) To evaluate and confirm the effectiveness of environmental conservation activities

(2) To determine the cost of and investment in individual conservation measures and the Group's overall environmental activities

(3) To monitor and evaluate the effects and achievements of activities performed throughout the year to ensure continuous improvement in our environmental performance

2. As a tool for communicating with society

(1) To publicly announce the cost-benefit relationship of environmental conservation efforts

(2) To reflect the opinions of shareholders, business partners, local residents, and others in environmental conservation activities

Environmental Accounting Calculation Bases

(1) Period covered: April 1, 2011 through March 31, 2012 (Environmental facilities are those considered as of March 31, 2012)

(2) Scope of coverage: Up to FY2010, the manufacturing sites of 37 domestic manufacturers and one distribution company; from FY2011 on, the above plus non-manufacturing sites of DNP and all domestic group companies subject to consolidated financial accounting (two development centers, office buildings, sales offices, etc.).

(3) Monetary unit: All monetary figures are expressed in millions of yen, rounded off to the nearest million.

(4) Announcement format: We used the format designated in the Ministry of the Environment "Environmental Accounting Guideline" 2005 edition.

(5) Basis for calculation of environmental conservation costs

1) Environmental conservation costs include depreciation expenses for investments.
2) Personnel costs for full-time workers were calculated at the average labor cost per person, while personnel costs for workers holding two or more posts were calculated at 1/10 or 1/5 the average personnel cost per person, depending on the worker's assigned duty.
3) R&D costs are the total costs incurred by our four R&D centers and seven R&D laboratories in the development of environmentally conscious products and manufacturing equipment.

(6) Basis for calculation of environmental conservation benefits

1) In FY2011 DNP began using energy consumption per unit of sales as an efficiency indicator for the volume of resources (energy and water) spent on business activities, as well as for the volume of waste materials and CO_2 emissions.
2) Benefits apply to all volatile organic compounds (VOCs), including chemical substances subject to the PRTR Law among the atmospheric environmental pollutant emissions volume corresponding to business area costs.
3) The benefit related to goods produced by business activities is that corresponding to the reduction of CO_2 emissions when disposing of or recycling containers or packaging products and dye-sublimation transfer materials. However, dye-sublimation transfer materials are calculated as non-export, domestically consumed items.
4) The benefit corresponding to the transportation environmental impact is converted to the energy usage reduction benefit to the shipper at the time the goods, etc., are transported.

(7) Basis for calculation of economic benefit of environmental conservation activities

1) The benefit corresponding to resource circulation costs is calculated as the benefit from savings on waste disposal costs.
   The amount of reduction is calculated as follows: (Benchmark period unit consumption – unit consumption for current period) × amount of business activity for current period.
2) Amount of business activity is based on domestic consolidated sales.
3) Unit consumption is calculated as: waste disposal cost / domestic consolidated sales.
4) The benchmark period unit consumption is the gross average value for the three-year period up to and including the previous term.

Table (1) Environmental Conservation Costs (categories corresponding to business activities)

Category	Investment		Expense		Details of Major Efforts	Page(s) on which data is listed
	FY2010	**FY2011**	FY2010	**FY2011**		
(1) Business area costs						
1) Pollution prevention costs	1,274	**1,144**	2,623	**2,419**	VOC collection and disposal equipment, renovation of wastewater treatment facility	17, 22
2) Global environmental conservation costs	65	**318**	410	**431**	Solar power generation systems, inverter conversion, energy use monitoring system	17, 19
3) Resource circulation costs	48	**161**	1,892	**1,964**	Furnace improvements, separation recycling, zero emissions (conversion to RPF/ cement ingredients), resource recycling	17, 25-26
(Total business area costs)	1,387	**1,623**	4,925	**4,814**		
(2) Up/downstream costs	0	**0**	166	**139**	Container and packaging recycling expense burden, recycling system development	28-29
(3) Administration costs	0	**0**	1,968	**2,130**	ISO14001 inspection and registration costs, environmental measurement costs, environmental report composition costs	13, 32, 46
(4) R&D costs	0	**0**	3,989	**4,019**	Research and development into environmentally conscious products and production methods	19, 28-29, 35-36
(5) Social activities costs	0	**0**	16	**19**	Cleanup of areas outside plant compounds, support for activities of environmental conservation groups	33-34
(6) Environmental remediation	0	**0**	6	**262**	Soil improvement	9-12
Total	1,387	**1,623**	11,070	**11,383**		

● Environmental conservation costs to total costs ratio

Category	Consolidated Total Costs	Costs	Ratio	Details of Major Environmental Conservation Costs	Page(s) on which data is listed
Investment of current period	98,100	1,623	1.65%	Expansion of VOC collection and disposal equipment, renovation of wastewater treatment facility, installation of solar power generation systems, making energy use visible, etc.	18
R&D cost of current period	31,690	4,019	12.68%	Photovoltaic and fuel cell parts, product weight reduction, process loss reduction, energy use monitoring system, etc.	19, 25-26, 28-29

FY2011 Assessments

(1) Investment in environmental facilities increased over the previous year due to the introduction of solar power generation systems and the expansion and renovation of our waste treatment facility.

(2) Business area costs increased over the previous year due to an expansion of the scope of coverage. Environmental damage costs were comprised of costs for soil improvement accompanying the purchase and sale of land.

Table (2) Environmental Conservation Benefits (1)

(1) Environmental conservation benefit related to resources input into business activities

Category	Indicator showing benefit	FY2010	**FY2011**	Difference	Remarks	Page(s) on which data is listed
1) Benefit arising from supplied resources						
Total energy input volume	Energy consumption (TJ)	23,100	**22,400**	–700	All consumed energy was converted into average value in calories	17, 19-20
	Unit consumption per domestic sales for the above (TJ/100 million yen)	1.66	**1.70**	0.04	Increased by 0.04 TJ per 100 million yen of domestic sales	17, 19-20
Input volume of water	Water usage (1,000m^3)	16,700	**15,900**	–800	Water supply, industrial water, and well water	17, 27
	Unit consumption per domestic sales for the above (1,000m^3/100 million yen)	1.20	**1.21**	0.01	Water usage increased by 10m^3 per 100 million yen of domestic sales	17, 27
Input volume of main raw materials	Supplied amount (1,000 tons)	2,249	**2,257**	8	Total weight of paper, plastic, ink, and metals	17, 26
	Amount of undesired materials generated/supplied (%)	16.3	**15.9**	–0.4	Ratio of unwanted materials to main raw materials	17, 26
2) Environmental conservation benefit related to waste or environmental impact originating from business activities						
Emissions to the air	SOx emissions (tons)	11	**10**	–1	Calculated based on emissions volume per unit time and time of operation	17, 22
	NOx emissions (tons)	697	**740**	43	Calculated from supplied energy	17, 22
	Environmental pollutant emissions volume (tons)	6,840	**5,563**	–1,277	VOC emissions volume	17, 24
Water quality	COD discharge (tons)	48.9	**40.4**	–8.5	Calculated from the amount of discharged water and average concentration	17, 23
	Emissions of environmental pollutants (PRTR-listed substances) (tons)	0.0	**0.0**	0.0	There have been no emissions into public waters since FY2010	24
Waste emission volume	Generated undesired materials (1,000 tons)	366	**358**	–8	Including undesired materials other than main raw materials	17, 25-26
	Discharged waste (1,000 tons)	65.1	**59.3**	–5.8	Total waste subcontracted to waste disposal companies	17, 25-26
	Unit consumption per domestic sales for the above (ton/10 million yen)	0.468	**0.451**	–0.017	Reduction of 17kg per 10 million yen of domestic sales	17, 25-26
	Recycle rate (%)	99.3	**99.2**	–0.1	By category: paper (99.9%), waste plastics (97.2%), and metals (99.0%)	17, 25-26
	Emissions of environmental pollutants (PRTR-listed substances) (tons)	1,425	**835**	–590	Total for 29 substances reported	24
Volume of greenhouse gas emission	Emissions of greenhouse gasses (1,000t-CO_2)	1,017	**980**	–37	Total greenhouse gases including emissions by incinerators and drying furnaces	17, 19-20
	Unit consumption per domestic sales for the above (tons/100 million yen)	73	**75**	2	Increase of 2 tons of emissions per 100 million yen of domestic sales	17, 19-20

Table (2) Environmental Conservation Benefits (2) (3)

(2) Environmental conservation benefit related to goods and services produced by business activities

Category	Indicator showing benefit	FY2010	FY2011	Difference	Remarks	Page(s) on which data is listed
1) Benefit related to goods produced by business activities						
CO_2 emissions after product shipment	CO_2 emissions (1,000t-CO_2)	246	**262**	16	Volume produced during incineration and recycling of used containers/ packaging and dye-sublimation transfer materials	30-31
	CO_2 emissions / volume of products	1.03	**1.00**	–0.03	Decrease of CO_2 emissions of 0.03t per 1t of product	30-31

(3) Other environmental conservation benefit

Category	Indicator showing benefit	FY2010	FY2011	Difference	Remarks	Page(s) on which data is listed
1) Benefit related to the environmental impact of transportation						
	Energy usage amount during shipment of goods (kl)	25,700	**24,650**	–1,050	Energy usage (converted to fuel oil) during transport as freight	21
	Energy usage amount during transport / gross sales (kl/100 million yen)	1.61	**1.64**	0.03	0.03kl increase per 100 million yen of sales	21

FY2011 Assessments

(1) Energy consumption and water use decreased from the previous year due to energy saving measures and decreased production in the Electronics Division. Unit consumption worsened, however, due to stagnant sales resulting from a drop in the unit price of orders.

(2) In FY2011, a ¥1.04 billion investment in VOC collection and disposal equipment (¥3.94 billion over the past five years) resulted in reduced atmospheric emissions. Waste per unit of production improved over the previous year as a result of reducing waste emissions by eliminating waste from all production processes and converting undesired materials to valuable resources through "Production 21" activities, resulting in improved performance year-on-year.

(3) In the area of distribution, many ongoing energy-saving measures were taken, such as the optimization of vehicle assignments and transport routes, the installation of digital tachometers to improve efficiency, an idling stop campaign, a modal shift to rail transport, and the introduction of hybrid vehicles into our fleet. These measures reduced the amount of energy used during transport, but sales were stagnant, causing the unit consumption of fuel for distribution to worsen.

Table (3) Economic Benefits of Environmental Conservation Activities

Category		FY2010	FY2011	Difference	Remarks	Page(s) on which data is listed
(1) Increased sales	**1) Economic benefit of R&D costs**					
Sales of environmentally conscious products		318,000	**336,000**	18,000	Sales increased 5.7% over FY2010	28-29
(2) Increased income	**2) Benefit of resource recycling costs**					
Income from recycling undesired materials		2,781	**2,892**	111	Increased ¥111 million through valuable material conversion	26
(3) Cost saving	**3) Benefit of resource recycling costs**					
Saving disposal costs by resource conservation		442	**132**	–310	Increased costs with worsened unit price due to stagnant sales	26

FY2010 Assessments

(1) Sales of environmentally conscious products are up, with increased sales of packaging, non-PVC floor sheet, and other products; sales are on target for reaching 400 billion yen in FY2015.

(2) Income from the recycling of undesired materials broadly increased year-on-year, through the conversion of waste to valuable material.

(3) The economic benefit calculated according to item (7) of the "Environmental Accounting Calculation Bases" on page 37 shows that even though efforts were made to reduce emissions, unit consumption worsened, and the benefit was lower than in the previous year.

Ongoing Efforts

(1) Make further improvements in eco-efficiency through "Production 21" activities.

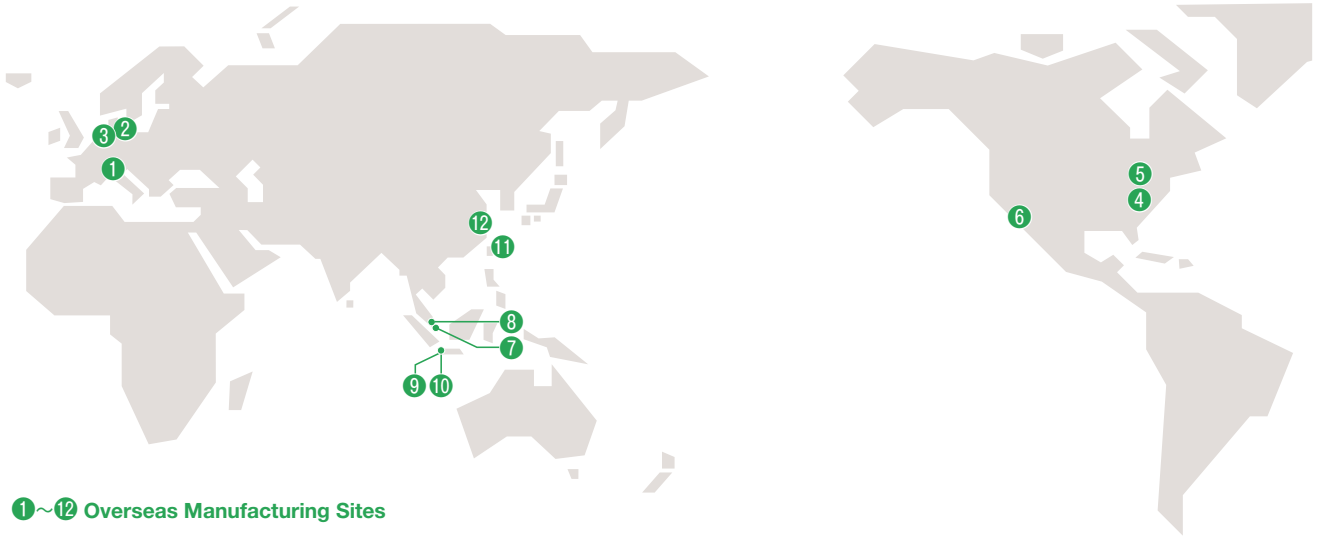
(2) Proceed with newly installing VOC collection and disposal equipment to reduce emissions of VOCs into the atmosphere.

(3) Proceed with energy use monitoring and systematically upgrade to the latest energy-saving equipment to cut down on emissions of greenhouse gases.

Environmental Impact Status at Overseas Sites

We implemented the Eco-Report System (see page 9) at our overseas sites as well beginning in 2005.

We promote compliance with all local laws and regulations at our overseas manufacturing sites, as well as environmental conservation measures such as setting targets for energy conservation, waste reduction, and recycling. We also promote the setting and achievement of targets for items such as energy conservation, reduced use of copier paper, and recycling at our overseas offices.



1～12 Overseas Manufacturing Sites

1～8 11 12 : tabulated between April 2011 and March 2012 9 10 : tabulated between January 2011 and December 2011

Site	Work content	CO_2 emissions (Unit: CO_2 tons)	Final amount of waste disposal (Unit: tons)	VOC emissions (Unit: tons)
1 **DNP Photomask Europe S.p.A. (Agrate Brianza)**	Manufacturing photomasks	5,970	10	less than 1 ton
2 **DNP Denmark A/S (Karlslunde)**	Manufacturing projection television screens	760	0	less than 1 ton
3 **DNP IMS Netherlands B.V. (Amsterdam)**	Manufacturing information media supplies	400	34	less than 1 ton
4 **DNP IMS America Corporation (Concord)**	Manufacturing information media supplies	7,060	434	5
5 **DNP IMS America Corporation (Pittsburgh)**	Manufacturing information media supplies	8,250	451	10
6 **DNP Electronics America, LLC (Chula Vista)**	Manufacturing projection television screens	590	7	less than 1 ton
7 **Tien Wah Press (Pte.) Ltd. (Singapore)**	Offset printing and binding	9,120	266	72
8 **Tien Wah Press (Pte.) Ltd. (Johor Bahru)**	Offset printing and binding	5,890	57	32
9 **DNP Indonesia (Pulo Gadung)**	Gravure printing and offset printing	18,430	1,045	2,741
10 **DNP Indonesia (Karawang)**	Gravure printing and offset printing	27,970	549	5,349
11 **DNP Photomask Technology Taiwan (Hsinchu)**	Manufacturing photomasks	3,700	12	less than 1 ton
12 **DNP Plastic Molding (Shanghai) Co., Ltd. (Shanghai)**	Manufacturing plastic containers, etc.	1,350	0	less than 1 ton

Note: CO_2 emissions volume is calculated using coefficients from the GHG Protocol and the US Department of Energy.

Results of Efforts

FY1972	Establishes the Environment Department within the head office to promote pollution prevention measures and communication with local residents
FY1990	Makes new efforts to deal with global environmental issues by establishing the Eco-Plan Promotion Office within the Environment Division
FY1992	Establishes the DNP Group Corporate Pledge and Code of Conduct for DNP Group Employees
	Establishes the Eco-Plan Promotion Targets, the elaborated voluntary plan based on the Environmental Declaration of the Code of Conduct, and starts activities by 4 sub-committees
FY1993	Starts the Eco-Report System, which is part of the DNP Group's environmental management system
FY1994	Remodels and expands the Environment Department into the Environment & Product Liability Department to strengthen our efforts toward environmental issues, including taking responsibility for the disposal of products we produce
FY1995	DNP wins the International Trade and Industry Minister's Prize in the "Fourth Global Environmental Awards," which commend companies and groups that contribute to the conservation of the global environment (The Awards were established in 1991 by the Japan Industrial Journal and the Fuji Sankei Communications Group, with special support by WWF Japan and sponsorship by the Ministry of the Environment, the Ministry of the Economy, Trade and Industry, and the Japan Federation of Economic Organizations)
FY1996	Begins performing Eco-Audits, the internal environmental audit performed by the Eco-Plan Promotion Office to upgrade the Eco-Report System
FY1997	Okayama Plant, Information Media Supplies Operations becomes the first in the printing industry to acquire ISO14001 certification
FY1998	Mihara Plant, Display Components Operations acquires ISO14001 certification
	Publishes the DNP Group Environmental Activity Report
FY2000	The Eco-Plan Promotion Office is dismantled and replaced with the DNP Environmental Committee to strengthen the system for promoting environmental activities
	DNP Facility Services becomes the first in the world to be certified for its comprehensive system with quality, environment, office safety, and HACCP
	Okayama Plant, Decorative Interiors Operations acquires ISO14001 certification
FY2001	DNP Tokai, and Sayama Plant, DNP Technopack acquire ISO14001 certification
FY2002	DNP Tokai acquires FSC-CoC certification
	Acquisition of ISO14001 certification by: Kobe Plant, Decorative Interiors Operations; The Inctec (Tokyo, Kansai, and Utsunomiya Plants); Ushiku Plant, BF Operations; DNP Technopack Tokai; Singapore Plant, Tien Wah Press; Chikugo Plant, DNP Nishi Nippon; Kyoto Plant, Electronics Devices Operations; Sayama Plant, Information Media Supplies Operations; Ono Plant, DNP Media Create Kansai
FY2003	Environmental Report Division receives the "6th Environmental Report Grand Prize" for superior reporting
	Acquisition of ISO14001 certification by: Advanced Colortech; Tokyo Plant, Decorative Interiors Operations; Kamifukuoka Plant, Electronics Devices Operations
	Commercial Printing Operations, DNP Media Create Kansai, and DNP Trading acquire FSC-CoC certification, Packaging Operations acquires PEFC-CoC certification
	Two types of fused thermal transfer materials of the Information Media Supplies Operations receive EPD "Type III" environmental labeling certification and registration
FY2004	The "14th Global Environment Grand Prize" awarded by the Minister for the Environment
	The "7th Environmental Report Prize" awarded for excellence
	Fukuoka Plant, DNP Nishi Nippon; DNP Logistics; DNP Ellio (Tokyo and Osaka Plants); and Warabi Plant, BF Operations acquire ISO14001 certification
	Eco-Report System implemented at overseas sites
FY2005	"8th Environmental Report Prize / Sustainability Report Prize" awarded for excellence
	DNP Data Techno Kansai; Johor Bahru Plant, Tien Wah Press; Otone Plant, Display Products Operations; and DNP Techno Polymer (Kashiwa and Kansai Plants) acquire ISO14001 certification
	Ichigaya Publication Printing Operations; DNP Tohoku; and Yokohama Plant, Packaging Operations acquire FSC-CoC certification, DNP Tokai acquires PEFC-CoC certification
FY2006	DNP Photomask Europe; Akabane Office, DNP Logistics; DNP Techno Film (Kashiwa Plant and Izumizaki Plant); and DNP IMS Odawara acquire ISO14001 certification
FY2007	"PRTR 2007 Awards" PRTR Honorable Mention (Tsuruse Plant)
	DNP Gotanda Building wins the "Green Grand Prize" in the Shinagawa-ku "Green Award System"
	DNP Technopack Yokohama (Yokohama Plant) and DNP Fine Chemicals acquire ISO14001 certification
	DNP Hokkaido and DNP Data Techno Kansai acquire FSC-CoC certification, DNP Hokkaido and DNP Trading acquire PEFC-CoC certification
FY2008	Izumizaki Plant, DNP Technopack; Kasaoka Plant, DNP Fine Chemicals; Okayama Plant, Opto-Materials Operations acquire ISO14001 certification
	IPS Operations and DNP Media Create Kansai acquire PEFC-CoC certification
FY2009	Mihara Plant, Opto-Materials Operations; DNP Indonesia (Pulo Gadung / Karawang); Kyoto Plant, Electronic Devices Operations; and Shiga Plant, Information Media Supplies Operations acquire ISO14001 certification
	Kanto Bureau of Economy, Trade and Industry "Energy Management In Business Superiority Award" (received by Akabane Plant, Commercial Printing Operations)
	Lifestyle Materials Operations acquires FSC-CoC certification
FY2010	DNP IMS Odawara receives the Kanagawa Prefecture Environmental Conservation (Air, Water, Soil) Award
	DNP Color Techno Sakai acquires ISO 14001 certification
	Revision of DNP Group Environmental Targets
	The DNP Emergent Evolution Forest Hakone Training Center 2 acquires Green Key certification
FY2011	DNP's independently developed Energy-Saving Total Management System is implemented at 36 Tokyo Electric Power locations
	New, leading-edge environmentally conscious plant for manufacturing flexible packaging is built in Kyotanabe
	DNP Chubu becomes Ecostage-certified (Stage 1)
	Sayama Plant, DNP Technopack Yokohama acquires ISO 14001 certification
	DNP Shikoku acquires FSC-CoC certification and Lifestyle Materials Operations acquires PEFC-CoC certification
	Reductions in power consumption in the processes of manufacturing photomasks earns DNP the Energy Conservation Grand Prize for excellent energy conservation equipment, Jury's Special Prize awarded by the Energy Conservation Center, Japan (ECCJ)

Note: Organizations and the names used for them as of that time.

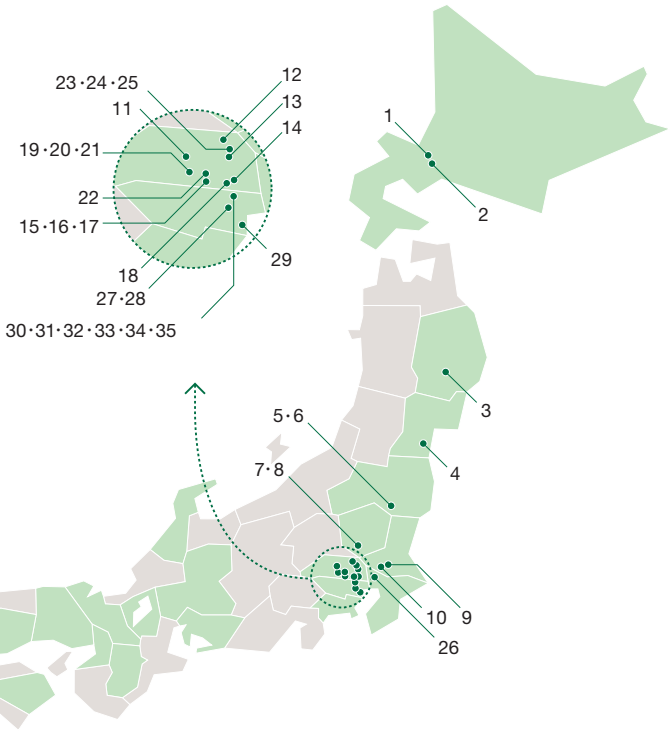
Domestic manufacturing sites with required business performance data disclosure (1)

Applies to DNP and non-manufacturing sites of all domestic companies in the group that are subject to consolidated financial accounting.

Organizations and the names used for them are current as of March 31, 2012.

Business segment:
- ● **Information Communication**
- ▲ **Lifestyle and Industrial Supplies**
- ■ **Electronics**
- □ **Other**

"Other" refers to Group companies manufacturing products not associated with the Information Communications, Lifestyle and Industrial Supplies, or Electronics segments or those spanning multiple segments.



Location		Business segment	No.	Site	Work content
Hokkaido	Higashi-ku, Sapporo	□	1	DNP Hokkaido	Plate-making/printing/bookbinding/ manufacturing of packaging
	Kiyota-ku, Sapporo	□	2	Sapporo Plant, Hokkaido Coca-Cola Products	Beverage manufacturing
Iwate	Kitakami	■	3	Kitakami Plant, DT Fine Electronics	Manufacturing electronic precision parts
Miyagi	Miyagino-ku, Sendai	□	4	DNP Tohoku	Plate-making/printing/bookbinding/ manufacturing of packaging
Fukushima	Izumizaki, Nishi Shirakawa	▲	5	Izumizaki Plant, DNP Technopack	Plate-making/printing plate/printing
		▲	6	Izumizaki Plant, DNP Energy Systems	Processing of synthetic resin films
Tochigi	Nishikata, Kamitsuga	●	7	DNP Graphica	Printing/bookbinding
		▲	8	Utsunomiya Plant, DNP Techno Polymer	Plastic container molding
Ibaraki	Ushiku	●	9	DNP Data Techno	Manufacturing of various types of smart cards
	Tsukuba	□	10	Tsukuba Techno Center, D.N.K.	Printing and manufacturing machine tools
Saitama	Higashimatsuyama	●	11	Higashimatsuyama Plant, Oguchi Book Binding & Printing	Bookbinding
	Kazo	■	12	Otone Plant, DNP Precision Devices	Manufacturing of electronic parts for displays
	Shiraoka, Minami Saitama	●	13	Shiraoka Plant, DNP Book Factory	Printing/bookbinding
	Kawaguchi	●	14	Kawaguchi Plant, DNP Book Factory	Printing
	Miyoshi, Iruma	●	15	Tsuruse Plant, Ichigaya Publication Printing Operations	Plate-making/printing plate/printing/bookbinding
		▲	16	Tokyo Plant, DNP Lifestyle Materials	Plate-making/printing plate/printing/processing
		●	17	Miyoshi Plant, Oguchi Book Binding & Printing	Bookbinding
	Warabi	●	18	Warabi Plant, IPS Operations	Plate-making/printing/processing
	Sayama	▲	19	Sayama Plant, DNP Technopack	Plate-making/printing plate/printing
		▲	20	Sayama Plant, DNP Technopack Yokohama	Molding and processing various types of paper containers
		▲	21	Sayama Plant, DNP IMS	Manufacturing thermal transfer carbon ribbons and dye-sublimation transfer materials
	Fujimino	■	22	Kamifukuoka Plant, DNP Fine Electronics	Manufacturing electronic precision parts
	Kuki	●	23	Kuki Plant, Ichigaya Publication Printing Operations	Printing plate/printing/bookbinding
		■	24	Kuki Plant, DNP Fine Electronics	Manufacturing electronic precision parts
		▲	25	Saitama Plant, DNP Opto-Materials	Manufacturing electronic parts
Chiba	Kashiwa	▲	26	Kashiwa Plant, DNP Techno Polymer	Molding, processing, and printing plastic containers
Tokyo	Shinjuku-ku	●	27	Ichigaya Plant, Ichigaya Publication Printing Operations	Plate-making/printing plate/printing/ bookbinding
		●	28	Enoki-cho Plant, Information Communication Operations	Plate-making/printing/bookbinding
	Shinagawa-ku	□	29	Honmachi Plant, DNP SP Tech	Manufacture of all types of advertising items
	Kita-ku	●	30	Akabane Plant, DNP Book Factory	Printing
		●	31	Akabane Plant, Information Communication Operations	Plate-making/printing/bookbinding
		●	32	Kamiya Plant, DNP Book Factory	Bookbinding
		□	33	DNP Logistics	Packaging/shipping
		□	34	DNP Hoso	Processing filling and packaging
		●	35	Kamiya Plant, IPS Operations	Printing/bookbinding/processing

Domestic manufacturing sites with required business performance data disclosure (2)

Applies to DNP and non-manufacturing sites of all domestic companies in the group that are subject to consolidated financial accounting.

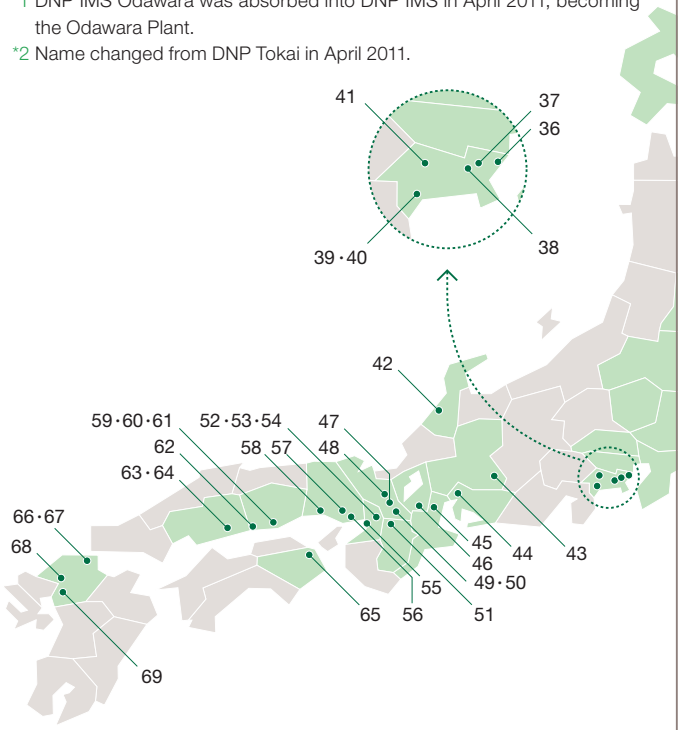
Organizations and the names used for them are current as of March 31, 2012.

Business segment:
- ● **Information Communication**
- ▲ **Lifestyle and Industrial Supplies**
- ■ **Electronics**
- □ **Other**

"Other" refers to Group companies manufacturing products not associated with the Information Communications, Lifestyle and Industrial Supplies, or Electronics segments or those spanning multiple segments.

*1 DNP IMS Odawara was absorbed into DNP IMS in April 2011, becoming the Odawara Plant.

*2 Name changed from DNP Tokai in April 2011.



Location		Business segment	No.	Site	Work content
Kanagawa	Kawasaki	■	36	Kawasaki Plant, DT Fine Electronics	Manufacturing electronic precision parts
	Tsuzuki-ku, Yokohama	▲	37	Yokohama Plant, DNP Technopack Yokohama	Plate-making/printing plate/printing
	Midori-ku, Yokohama	□	38	Tokyo Plant, DNP Fine Chemicals	Manufacturing ink, varnish, pigments and dyes
	Odawara	▲	39	Sagami Yoki	Manufacturing laminated tubes
		▲	40	Odawara Plant, DNP IMS*1	Photographic materials manufacturing
	Aikawa, Aiko	▲	41	Tokyo Plant, DNP Ellio	Printing and processing metal sheets
Ishikawa	Hakusan	□	42	Hokuriku Techno Center, D.N.K.	Printing and manufacturing machine tools
Gifu	Nakatsugawa	▲	43	DNP Technopack Tokai	Manufacturing/printing/processing packaging
Aichi	Moriyama-ku, Nagoya	□	44	DNP Chubu*2	Plate-making/printing/bookbinding/manufacturing of packaging
Mie	Kameyama	■	45	DNP Color Techno Kameyama	Manufacturing electronic precision parts
Shiga	Koka	▲	46	Shiga Plant, DNP IMS	Thermal transfer recording materials production
Kyoto	Ukyo-ku, Kyoto	■	47	Kyoto Plant, DNP Energy Systems	Processing of synthetic resin films
		▲	48	Kyoto Plant, DNP Technopack Kansai	Plate-making/printing plate/printing
	Kyotanabe	▲	49	Tanabe Plant, DNP Technopack Kansai	Printing plate/printing
		▲	50	Tanabe Plant, DNP Techno Polymer	Molding and processing plastic containers
Nara	Kawanishi, Shiki	●	51	DNP Data Techno Kansai	Manufacturing of various types of smart cards
Osaka	Neyagawa	▲	52	Kansai Plant, DNP Techno Polymer	Molding, processing and printing plastic containers
		▲	53	Osaka Plant, DNP Ellio	Printing and processing metal sheets
		□	54	Neyagawa Plant, DNP SP Tech	Manufacture of all types of advertising items
	Sakai	■	55	DNP Color Techno Sakai	Manufacturing electronic precision parts
Hyogo	Kita-ku, Kobe	▲	56	Kobe Plant, DNP Lifestyle Materials	Printing/processing
	Ono	●	57	Ono Plant, DNP Media Techno Kansai	Printing plate/printing/bookbinding
	Himeji	■	58	DNP Precision Devices Himeji	Manufacturing electronic precision parts
Okayama	Okayama	▲	59	Okayama Plant, DNP IMS	Manufacturing dye-sublimation transfer materials
		▲	60	Okayama Plant, DNP Lifestyle Materials	Plate-making/printing plate/printing/processing
		▲	61	Okayama Plant, DNP Opto-Materials	Manufacturing electronic parts
	Kasaoka	□	62	Kasaoka Plant, DNP Fine Chemicals	Manufacturing ink, varnish, pigments and dyes
Hiroshima	Mihara	■	63	Mihara Plant, DNP Precision Devices	Manufacturing electronic precision parts
		▲	64	Mihara Plant, DNP Opto-Materials	Manufacturing electronic parts
Tokushima	Tokushima	□	65	DNP Shikoku	Plate-making/printing/manufacturing of packaging
Fukuoka	Yahatanishi-ku, Kitakyushu	■	66	Kurosaki Plant No.1, DNP Precision Devices	Manufacturing electronic precision parts
		■	67	Kurosaki Plant No.2, DNP Precision Devices	Manufacturing electronic precision parts
	Minami-ku, Fukuoka	□	68	Fukuoka Plant, DNP Nishi Nippon	Plate-making/printing/bookbinding
	Chikugo	□	69	Chikugo Plant, DNP Nishi Nippon	Plate-making/printing/manufacturing of packaging

- DNP Media Art calculated under the Ichigaya Plant, Ichigaya Publication Printing Operations.
- DNP Media Create calculated under the Enoki-cho Plant, Information Communication Operations.
- DNP Total Process Warabi calculated under the Warabi Plant, IPS Operations.
- DNP Micro Technica calculated under the Kamifukuoka Plant, DNP Fine Electronics.
- The plant belonging to DNP Fine Chemicals Fukushima became situated in the restricted zone following the accident at the Fukushima Daiichi Nuclear Power Plant, and was forced to stop operations, so it was not included from March 2011 on.
- DNP Media Support took over its current business operations in February and is therefore not included in calculations.

Independent Review Report Comments by an Independent Institution

On-site audit

Akabane Plant, Information Communication Operations

Sayama Plant, DNP Technopack

Okayama Plant, DNP Lifestyle Materials

DNP Chubu

ERNST & YOUNG

Translation

The following is an English translation of an independent assurance report prepared in Japanese and is for information and reference purposes only. In the event of a discrepancy between the Japanese and English versions, the Japanese version will prevail.

Independent assurance report

3 August 2012

Mr. Yoshitoshi Kitajima

President and Director
Dai Nippon Printing Co., Ltd.

1. Purpose and scope of our assurance engagement

We have performed certain assurance procedures, based on the engagement with Dai Nippon Printing Co., Ltd. (the "Company"), on the Company's key environmental performance indicators. These comprise the environmental accounting data and the material environmental information[1] of the Company and its major subsidiaries for the year ended 31 March 2012, that were reported in the DNP Group Environmental Report 2012 (the "Report"). The assurance procedures are with respect to whether the key environmental performance indicators have been measured and calculated accurately and whether material information has been fully disclosed in accordance with the reporting standards for the Report[2].

The preparation of the Report is the responsibility of the Company's management. Our responsibility is to express an independent opinion on the Key Environmental Performance Indicators.

2. Outline of the assurance procedures performed

We have performed limited assurance procedures[3] in accordance with the 2003 International Standard on Assurance Engagements (ISAE) 3000: Assurance Engagements other than Audits or Reviews of Historical Financial Information of the International Federation of Accountants (IFAC) and the 2012 Practical Guidelines for the Assurance of Sustainability Information of the J-SUS. Therefore, our assurance engagement provides relatively limited assurance compared to a reasonable assurance engagement.

3. Conclusion

Based on the assurance procedures performed, nothing has come to our attention that causes us to believe that the Key Environmental Performance Indicators have not been measured and calculated accurately in accordance with the reporting standards of the Report, or material information has not been disclosed in accordance with the 2011 Environmental Reporting Assurance and Registration Criteria, in all material respects.

4. Independence

Our assurance is compliant with the Ethics Regulations of J-SUS and there is no financial interest between the Company and us.

Akihiro Nakagome
Representative Director
Ernst & Young Sustainability Co., Ltd.

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[1] The scope of material environmental information is stipulated in the 2011 Environmental Reporting Assurance and Registration Criteria of the Japanese Association of Assurance Organizations for Sustainability Information (J-SUS).

[2] The reporting standards refer to the 2012 Environmental Reporting Guidelines of Japan's Ministry of the Environment and the 2011 Environmental Reporting Assurance and Registration Criteria of J-SUS in the context of specifying the material subject to disclosure.

[3] We have mainly reviewed and assessed the Company's procedures for the collection and aggregation of data, performed analytical procedures, as well as recalculated and reconciled them with the corroborating evidence on the quantitative sustainability information on a test basis. In addition, we have mainly made inquiries and reviewed related records to verify the qualitative information.

Dai Nippon Printing Co., Ltd.

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