

DNP



DNP Group Environmental Report 2024

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Editorial Policy

- The *DNP Group Environmental Report 2024* was created to announce all of the environmental activities of the DNP Group, and is based on the Environmental Reporting Guidelines (2018 Edition) issued by Japan's Ministry of the Environment.
- The *DNP Group Environmental Report 2024* is published in a page format designed to be easy to read on the Web.
- Some of the data contained in this report has been assured by LRQA Limited to ensure its reliability. A tick mark ☒ has been attached to each one of the indicators that have been assured by LRQA Limited.

Period covered by this report

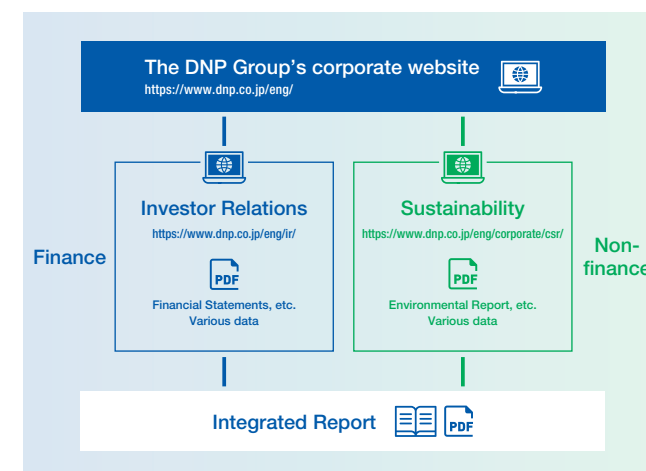
This report focuses on activities carried out in the period of April 1, 2023 to March 31, 2024. It may also include reporting on important items not occurring within this period. The report also covers activities carried out at some overseas business locations in the period of January 1, 2023 to December 31, 2023.

Scope of environmental data

Environmental data was applied to Dai Nippon Printing Co., Ltd. and to all domestic companies in the Group that are subject to consolidated financial accounting. The 22 domestic manufacturing companies plus one distribution company (see pages 36–37), the non-manufacturing sites (three development centers, office buildings, sales offices, etc.) of all domestic Group companies and our overseas manufacturing companies (see page 38) were included in the scope. However, the scope of tabulation for the reduction of environmental pollutants, reduction of environmental impact incurred during transport and activities at offices covers operations in Japan.

The data from CMIC CMO Co., Ltd., which was acquired as a subsidiary in FY2023, will be included in the consolidated results starting in FY2024.

DNP Group's Information Disclosure



About the cover design

DNP is currently conducting the redevelopment of the Ichigaya district in Shinjuku-ku, Tokyo where its head office is located. As part of this effort, we are creating a green belt, "Ichigaya-no-Mori (The Ichigaya forest)", as a new form of urban "forest." The cover photo features a viburnum blooming in this green space.

In this report "DNP" indicates the DNP Group and is differentiated from Dai Nippon Printing Co., Ltd.

Issued

October 2024 (Next scheduled issue: October 2025)

Corporate Profile (As of March 31, 2024)

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

Website: <https://www.dnp.co.jp/eng/>

Established: October 1876

Incorporated: January 1894

Paid-in Capital: ¥114,464 million

Number of Employees: 36,911 (Consolidated); 9,589 (Non-consolidated)

Financial Data: (FY ended March 2024)
Consolidated Net Sales ¥1,424.8 billion (up 3.8% year-on-year)
Consolidated Operating Income ¥75.4 billion (up 23.2% year-on-year)
Consolidated Ordinary Income ¥98.7 billion (up 18.0% year-on-year)
Net income attributable to shareholders of the parent ¥110.9 billion

Business segments:

Percentage of total sales

<p>Smart Communication Books and magazines, commercial printing, smart cards, network businesses, imaging communication, etc.</p>	50.3 %	<div data-bbox="918 845 1122 971"></div> <div data-bbox="1131 858 1229 959">Hybrid bookstore network "honto"</div> <div data-bbox="1332 845 1536 971"></div> <div data-bbox="1545 898 1659 919">Smart cards</div> <div data-bbox="1747 845 1951 971"></div> <div data-bbox="1964 874 2085 943">Photo-related services and solutions</div>
<p>Life & Healthcare Packaging, housing and non-housing interior/exterior materials, industrial high-performance materials, beverages, etc.</p>	33.2 %	<div data-bbox="918 1013 1122 1139"></div> <div data-bbox="1131 1038 1274 1114">Environmentally conscious packaging</div> <div data-bbox="1332 1013 1536 1139"></div> <div data-bbox="1545 1050 1664 1101">Curved resin glazing</div> <div data-bbox="1747 1013 1951 1139"></div> <div data-bbox="1964 1050 2107 1101">Interior materials for buildings</div> <div data-bbox="918 1179 1122 1305"></div> <div data-bbox="1131 1217 1308 1267">Battery pouches for lithium-ion batteries</div> <div data-bbox="1332 1179 1536 1305"></div> <div data-bbox="1545 1230 1677 1251">Medical health</div> <div data-bbox="1747 1179 1951 1305"></div> <div data-bbox="1964 1230 2060 1251">Beverages</div>
<p>Electronics Display components, electronic devices, optical films, etc.</p>	16.5 %	<div data-bbox="918 1348 1122 1474"></div> <div data-bbox="1131 1385 1274 1434">Semiconductor photomask</div> <div data-bbox="1332 1348 1536 1474"></div> <div data-bbox="1545 1372 1682 1447">Master template for nanoimprinting</div> <div data-bbox="1747 1348 1951 1474"> <div data-bbox="1765 1453 1827 1474">Before</div> <div data-bbox="1877 1453 1939 1474">After</div> </div> <div data-bbox="1964 1372 2114 1447">System materials for LCD backlights</div>

Message from the President about Environmental Initiatives

DNP Group is constantly thinking about coexistence between its business activities and the global environment, and has included “Environmental conservation and realization of a sustainable society” in its Code of Conduct. We prioritize addressing environmental issues, including climate change, as a key management challenge.

In 1972, the Group established a department dedicated to environmental issues. Since then, we have consistently demonstrated our commitment to environmental initiatives, ensuring that we continue to lead the way in sustainability efforts. In recent years, the urgency of reducing environmental impact has grown significantly, driving us to further promote eco-conscious activities across our entire supply chain. In March 2020, we formulated DNP Group Environmental Vision 2050, aiming to accelerate our efforts to achieve a decarbonized, recycling-oriented society in harmony with nature. This vision is key to the enhancement of the environment, society, and economic sustainability, which will drive the Group’s long-term growth. Moreover, we have reenforced the efforts of the Sustainability Committee, which I chair. Our focus is on identifying and assessing potential risks while transforming them into strategic business opportunities.

As a result of these active efforts, progress toward our FY2030 GHG emissions reduction target exceeded our plan. In April 2024, we raised our targets, aligning them with the international 1.5°C target. The DNP Group will continue to push forward with even more proactive initiatives.

To achieve a decarbonized society, we have committed to reaching net zero GHG emissions from our business activities by 2050. As part of these efforts, we have established medium-term targets for FY2030, which include the transformation of our business

portfolio, the intensification of energy-saving measures, and the proactive use of renewable energy. In addition, we aim to reduce the carbon footprint of our products and services by developing and expanding the use of low-carbon raw materials and by calculating and reducing CO₂ emissions per unit of production.

To establish a recycling-oriented society, we are focusing on plastics, the largest source of waste with the lowest recycling rate in our operations. We are intensifying our material recycling and chemical recycling efforts, aiming to achieve a 70% resource recycling rate for all waste by FY2030. We are also developing products that support the more sustainable use of plastics by incorporating alternative materials, such as biomass and recycled resources.

In working towards a society in harmony with nature, we are aiming for 100% compliance with DNP Group Guidelines for Procurement of Paper for Printing and Converting. These guidelines outline our requirements for the sustainable use of forest resources, recognizing that paper procurement is significantly dependent on ecosystems and that it significantly impacts these ecosystems. We are also striving to minimize our impact on biodiversity by creating green spaces that are thoughtfully integrated with local ecosystems.

FY2023 activities and future initiatives

We successfully met all of the FY2023 targets for our seven key priorities (see page 17). Notably, we made significant progress in the reduction of GHG emissions and the improvement of our resource recycling rate, surpassing our initial goals.

We are aggressively promoting the use of renewable energy, focusing on our manufacturing facilities across the country. Starting this fiscal year, we have begun phasing in renewable energy through an off-site power purchase agreement (PPA) in the Ichigaya district in Tokyo, where our headquarters are located.

As of August 2024, we have already achieved an effective 100% renewable energy ratio at both the Ichigaya Takajocho and Ichigaya Sanaicho buildings. Looking ahead, we will continue to leverage internal carbon pricing to accelerate the adoption of energy-efficient equipment. Additionally, we are working to strengthen partnerships to develop recycling technologies and create resource circulation systems that encompass our entire supply chain. Through these efforts, we are committed to realizing DNP Group Environmental Vision 2050.



President

Yoshinari Kitajima

DNP Group Environmental Policy

The DNP Group's Corporate Philosophy states that it will connect individuals and society and provide new value. All activities to this end must comply with the DNP Group Code of Conduct whose tenets include "environmental conservation and the realization of a sustainable society." In March 2000, we established the DNP Group Environmental Policy, aiming to help realize a sustainable society by reducing the environmental impact based on an understanding of the relationship between our business activities and the environment.

We revised this policy in March 2022 because, in recent years in particular, society's concerns about environmental problems have been growing, and we must carry out activities in view of the environmental impact of the supply chain as a whole. The activities will be accelerated.

The DNP Group positions initiatives to environmental issues among our important management challenges. We will boost the environmental awareness of each and every employee, promote environmental conservation efforts throughout the entire supply chain from procurement to disposal and recycling, and contribute to the realization of a sustainable society.

1. We will remain aware of the environmental impact of our business activities, comply with environmental laws and regulations and endeavour to prevent environmental pollution.
2. We will make efforts to achieve carbon neutrality, in order to mitigate climate change, by minimizing energy use in our business activities, and introducing renewable energy.
3. We will minimize our use of resources, and focus on reducing and recycling waste, targeting the use of sustainable resources.
4. We seek to achieve harmony with local ecosystems to conserve biodiversity.
5. We will pursue the development and popularization of eco-friendly products and services aiming to reduce environmental impact throughout the entire supply chain.

In order to achieve these initiatives, we will build an environmental management system, which we will operate by setting objectives and targets, and work hard to make continuous improvements.

We will make timely disclosures regarding these activities and engage in proactive communication with our stakeholders.

Policy instituted March 2000
First amendment March 2010
Second amendment March 2022

DNP Group Representative Yoshinari Kitajima

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.

Towards the realization of the DNP Group Environmental Vision 2050

DNP set medium-term targets for the achievement of a decarbonized, recycling-oriented society in harmony with nature as set forth in the DNP Group Environmental Vision 2050.

By the end of FY2022 (March 31, 2023), the DNP Group had already achieved 90% of its FY2030 GHG emissions reduction target. To accelerate our progress, we raised our environmental targets*1 in April 2024. We also updated our FY2030 resource recycling rate and water usage reduction targets to set more ambitious goals.

*1 DNP aims to reduce its GHG emissions by 4.2% annually, compared to the base year, in line with the Paris Agreement's goal of limiting the global temperature rise to within 1.5°C above the pre-industrial level.

Measures		Medium-term targets	Our aspiration	
			Backcasting	
Item		2030 Target	2050	<div><h3>DNP Group Environmental Vision 2050</h3><p>DNP targets the realization of a decarbonized society, a recycling-oriented society and a society in harmony with nature by creating new value through Printing and Information (P&I) innovation designed to achieve the emergence of a sustainable society.</p><p>[A Decarbonized Society through Climate Change Mitigation and Adaptation]</p><ul style="list-style-type: none">• We aim to achieve effective net-zero greenhouse gas (GHG) emissions from business activities at our own sites.• We will contribute to create a decarbonized society through our products and services.<p>[A Recycling-Oriented Society through the Efficient use of Resources]</p><ul style="list-style-type: none">• We will provide maximum value through the efficient use and recycling of resources throughout the value chain.<p>[A Society in Harmony with Nature via the Conservation of Biodiversity]</p><ul style="list-style-type: none">• We aim to minimize the impact on biodiversity throughout the entire value chain and achieve harmony with regional ecosystems.</div>
Reduction of GHG emissions	<ul style="list-style-type: none">• Energy-saving activities and shift to high-efficiency equipment• Conversion of the business portfolio• Introduction of renewable energy	Reduce GHG emissions by 46.2% compared to FY2019 level.	Decarbonized society	
Increase of sales of eco-friendly products and services	<ul style="list-style-type: none">• Accelerate the development of products that contribute to the environment.• Promotion of the development of easy-to-recycle products	Increase sales of super eco-products to account for 30% of gross sales	Recycling-oriented society	
Increasing the resource recycling rate*2	<ul style="list-style-type: none">• Minimization of undesired materials• Promotion of recycling• Minimization of the landfill waste rate	Achieve the resource recycling ratio of 70% for all waste.		
Reduction of water usage	<ul style="list-style-type: none">• Efficient water use	Reduce water usage per unit of production by 30% compared to FY2019.		
Guidelines for Procurement of Paper for Printing and Covering certification rate	<ul style="list-style-type: none">• Procurement of biodiversity-conscious paper	Achieve 100% certification ratio.		
Environmental conservation*3	<ul style="list-style-type: none">• Thorough adherence to baselines through trend management	Maintain the level at 70% of the required standard or less.	Society in symbiosis with nature	

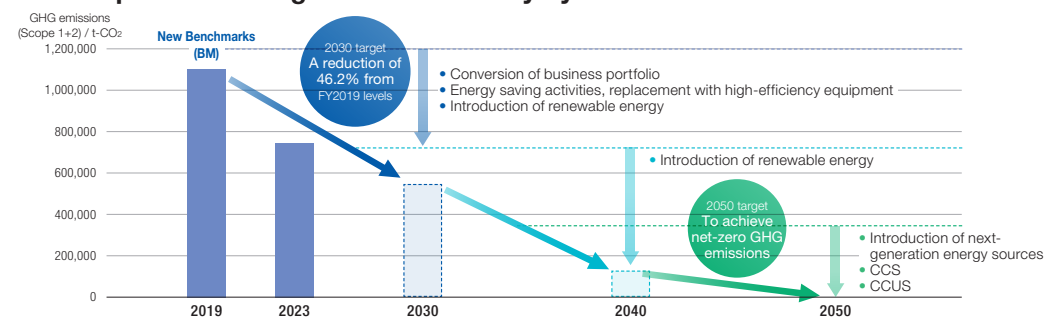
*2 Resource recycling rate: The ratio of material/chemical recycling to amount of undesired materials (waste + valuable waste) excluding paper as valuable waste, which is 100%-recycled. Recovery of heat from combustion, recycling of waste plastics into solid fuels, and the recycling of waste oil into fuels, etc. are treated as thermal recovery and excluded from recycling.

*3 Environmental conservation items: Air emissions, wastewater, odor, noise, and vibration

• Updating the roadmap for achieving carbon neutrality by 2050

We included a roadmap for achieving net zero GHG emissions in connection with our business activities at our sites by 2050 for the realization of decarbonized society in the DNP Group Environmental Vision 2050. Following the revision of our GHG emissions reduction targets, we revised this roadmap to be in line with the 1.5°C target, an international standard. To achieve this challenging targets, we will continue to promote the introduction of renewable energy and energy-saving equipment.

Roadmap for achieving carbon neutrality by 2050

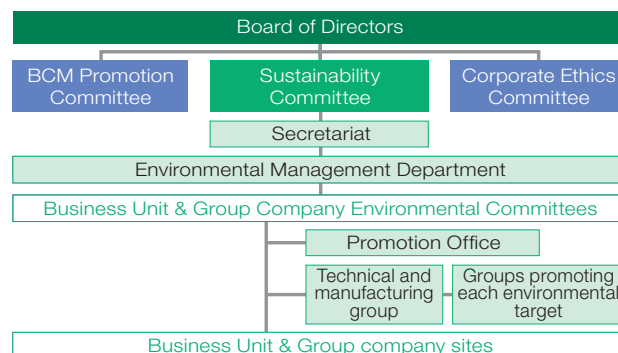


Towards the realization of the DNP Group Environmental Vision 2050

• Governance Structure → Related pages: 10–11

DNP regards addressing environmental issues—including climate change—as one of its key management challenges. In April 2022, DNP reorganized the Sustainability Committee headed by the president in order to enhance environmental, social and economic sustainability and further drive DNP's sustainable growth and enhanced functionality. By coordinating with the BCM Promotion Committee, which ensures the safety of employees and maintains production activities in the event of a natural disaster or other emergency, and the Corporate Ethics Committee, which aims to raise employees' compliance awareness and reduce risks, the Sustainability Committee has established a flexible and robust governance system that covers company-wide risks.

The Sustainability Committee meets regularly, four times a year, and at other times as necessary for the purposes of managing medium to long-term management risks relating to sustainability, identifying business opportunities and reflecting them in management strategies; and delivers reports and makes recommendations to the Board of Directors. The Board of Directors receives reports and recommendations on matters discussed and resolved by the Sustainability Committee, and deliberates and supervises policies and action plans, etc., for responding to risks and opportunities relating to sustainability. Strategies and policies on environmental issues determined by the Committee are addressed by the DNP Group as a whole, in coordination with the Business Unit & Group Company Environmental Committees.



*For details of analysis using the TCFD framework:
DNP Group Integrated Report 2024 (pages 66–70)

• Risk management

DNP engages in integrated risk management based on a flexible and resilient governance system to minimize the negative impact (risks) of variable factors while maximizing their positive impact (opportunities). Environmental, social and economic risks and opportunities are identified, evaluated and managed by the Sustainability Committee at least once a year. We prioritize activities and set targets based on factors such as business plans, financial impact, stakeholder concerns, impact on the environment and society and likelihood of occurrence, and reflect them in our management strategies. For risks with a particularly high level of importance or priority, we select a risk management department and reflect the risks in business strategies and plans after discussions by the Management Committee, with each organizational unit playing a central role in responding to them. For opportunities, we manage priority themes throughout DNP and link them to strategic business development.

• Strategy

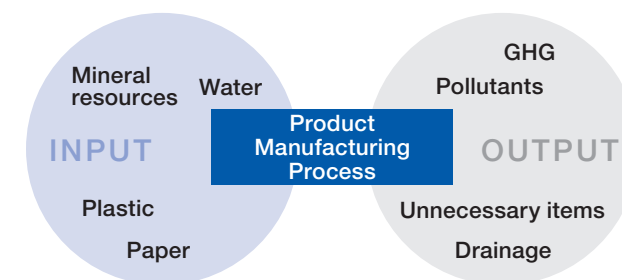
To identify environmental risks and develop strategies to address them, we have conducted evaluations using multiple scenarios published by international organizations.*1 Additionally, we are analyzing the input and output of the manufacturing processes at our sites that heavily rely on and significantly impact natural capital across our value chain.

Using scenarios developed from this information, we have identified environmental risks and opportunities, and qualitatively and quantitatively assessed their potential financial impact and the timeframes in which they may impact the Group. Moving forward, we will further enhance our scenario analysis by utilizing publicly available analytical tools and guidance from the Taskforce on Nature-related Financial Disclosures (TNFD) to strengthen the resilience of our business activities in the face of anticipated environmental risks over the medium and long term.

*1 See DNP Group Integrated Report 2024 (page 68)

Dependency and Impact

We recognize that the manufacturing processes we use for key products depend heavily on natural capital, particularly on paper (forest resources), water, mineral resources, and plastic (petroleum resources). For example, the paper used in magazines, books, and brochures depends on forest resources, while water is essential both directly in the manufacturing of pharmaceutical and semiconductor-related materials and indirectly in the papermaking process. Mineral resources and plastics are used as raw materials for battery pouches for lithium-ion batteries and packaging materials. In the course of manufacturing, we also emit gasses into the atmosphere (GHGs, VOCs, SOx, NOx), discharge waste into bodies of water (wastewater, nitrogen, phosphorus), and produce plastic and other waste materials, all of which we recognize as having a negative environmental impact.



Key Natural Capital	DNP's Main Products and Services
Paper	Magazines, books, brochures, packaging materials
Water	Pharmaceuticals, semiconductor-related materials
Mineral resources	Packaging materials, battery pouches for lithium-ion batteries
Plastic	IC cards, packaging materials, decorative sheets for building materials

Towards the realization of the DNP Group Environmental Vision 2050

Addressing Environmental Risks

• Transition Risks

There is a high likelihood that stricter regulations on GHG emissions will encourage the broader adoption of renewable energy and the introduction of emissions trading schemes and carbon taxes, which DNP expects will result in increased operating costs. In response, DNP is transforming its business portfolio based on environmental impact and added value. Under the DNP Group Environmental Vision 2050, we are striving to achieve net-zero GHG emissions from business activities at our establishments by 2050. We have set medium-term targets for 2030 and are improving our energy conservation activities, replacing existing equipment with higher-efficiency equipment using internal carbon pricing, and aggressively introducing renewable energy.

We also anticipate that stricter plastic regulations and new international agreements will accelerate the shift toward a circular economy. Our efforts are focused on improving resource recycling, particularly for plastic, which currently has the lowest recycling rate. To address this, we are simplifying product compositions, enhancing material recycling through more precise waste sorting, and developing chemical recycling technologies in collaboration with industry partners.

With the concerns about water scarcity and pollution increasing, we also foresee the potential for stricter regulations in this area. We are optimizing our manufacturing processes to reduce water usage, increase water recycling, and effectively utilize rainwater. In addition, we have implemented our own environmental management standards that exceed the legal requirements regarding environmental protection items (air emissions, wastewater,

odor, noise, and vibration). These efforts are helping us reduce environmental pollutants and ensure responsible chemical management.

Given the increasing emphasis on sustainability across the supply chain, we expect that environmental and human rights due diligence (DD) will become mandatory. In response, we are strengthening supplier engagement based on our procurement guidelines.*2

To achieve zero deforestation, we are also working to ensure the traceability and legality of raw materials in our paper procurement—where there is significant dependence on ecosystems and they are not impacted—based on our Guidelines for Procurement of Paper for Printing and Covering, whose goal is the maintenance of sustainable forest resources.

*2 See DNP Group Integrated Report 2024 (pages 72–73)

• Physical Risks

In the short term, we expect to face acute risks, such as the increasing frequency and severity of heavy rains and wildfires, which could lead to operational shutdowns and supply chain disruptions. Over the medium and long term, we anticipate chronic risks, including rising average temperatures, shifts in water supply and demand, and biodiversity loss, all of which may increase operating costs or disrupt operations. To address these risks, we have established a management framework to ensure business continuity. Given that water risks vary by country and region, we have evaluated our manufacturing sites, both domestic and overseas, on a regional basis using the Water Footprint Network’s assessment tool, the World Resources Institute (WRI)’s Aqueduct, and the Intergovernmental Panel on Climate Change (IPCC)’s climate change plans. As a result, we have identified four

high-risk sites in Southeast Asia. To mitigate these risks, we invest in disaster control measures, including the installation of backup power systems, elevation of warehouse floors, installation of water gate barriers, and relocation of facilities. We also strengthen our supply chain management by diversifying suppliers and establishing production systems in multiple locations.

• Targets and Indicators

DNP has set medium-term targets for 2030 as part of its goal of achieving carbon neutrality by 2050. Thanks to active efforts to reduce GHG emissions, our progress in FY2023 exceeded our plan, and in April 2024, we updated our targets to be even more ambitious. In line with the international 1.5°C target, we aim to reduce our GHG emissions by 46.2% compared to the FY2019 level by 2030, and we will accelerate our reduction initiatives. Specifically, we plan to introduce higher-efficiency equipment using internal carbon pricing (20,000 yen/t-CO₂) and expand the use of renewable energy. For Scope 3 emissions, which are over 80% of our total supply chain GHG emissions, we will assess suppliers’ GHG management practices and reduction targets, while increasing collaboration for the adoption of alternative materials and the reduction of emissions on a product-by-product basis.

To build a recycling society, we are working to use resources more efficiently, aiming to achieve a 70% resource recycling rate for all waste generated by our business activities by FY2030. We are particularly focused on increasing the material and chemical recycling of plastic, which has the lowest recycling rate. We have also set a new target, reducing water usage per unit of production by 30% compared to the FY2019 level by FY2030. In water-intensive segments like Electronics, we will optimize manufacturing processes, review water usage, and minimize loss to promote efficient water use.

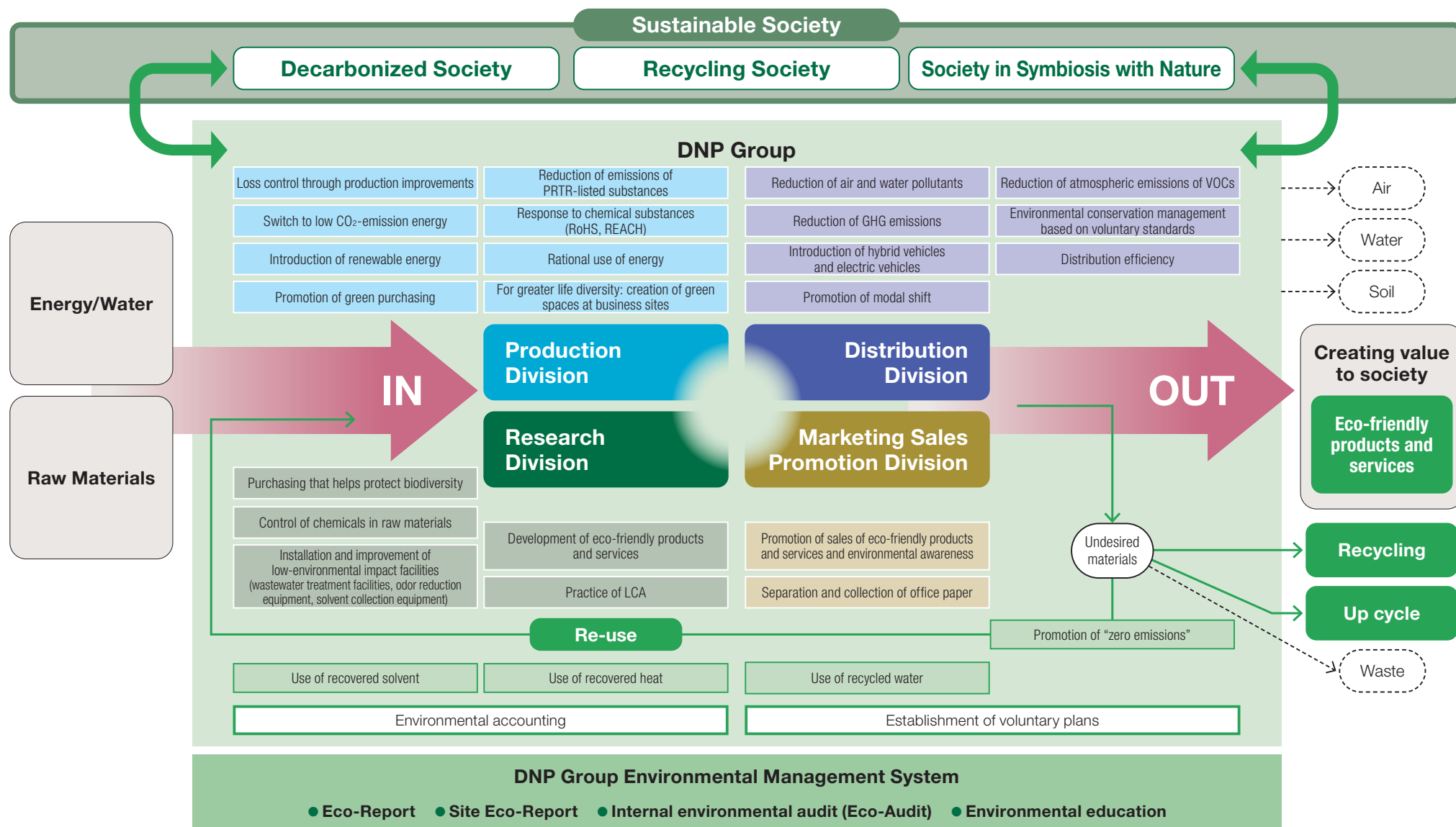
To reduce the environmental impact of our products and services while creating new business opportunities, we have steadily increased the percentage our sales that is sales of super-eco products—those identified as environmentally friendly based on our internal standards. We aim to raise this target for the percentage of sales that is from sales of these products from 10% to 30% by 2030 and will continue to broaden our offerings that contribute to a nature-positive future.

Published Scenarios Referenced in the Scenario Analysis

Type	Example of Referenced Scenarios
1.5°C Scenario	Net Zero Emissions by 2050 Scenario (NZE) One of the climate change scenarios by the International Energy Agency (IEA). This scenario envisions a decarbonized society and ensures energy security through ambitious and coordinated policy enhancements, the introduction of low-carbon technologies, and the creation of markets, which lead to carbon neutrality by 2050 and limit the average temperature increase to 1.5°C.
4°C Scenario	SSP5-8.5 Scenario One of the climate change scenarios presented in the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report. In this scenario, heavy reliance on fossil fuels leads to a significant increase in GHG emissions, causing average global temperatures to rise by more than 4°C by 2100, which severely impacts ecosystems and human activities.

Environment Management Structure

Business and Environmental Activities



Environmental Management Structure

Environmental Management Structure

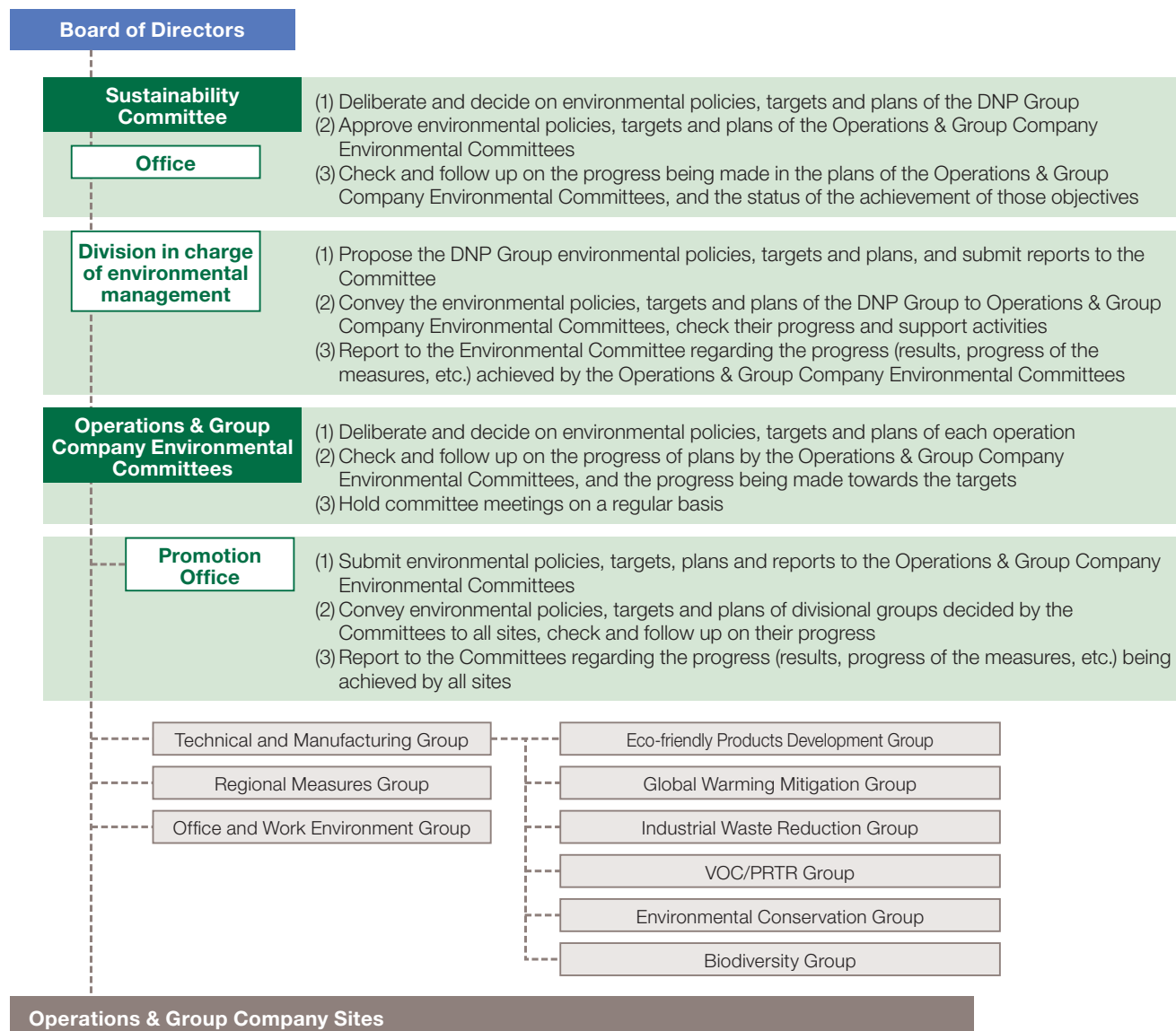
The DNP Group has established a division in charge of environmental management subordinate to the Sustainability Committee to coordinate Group-wide environmental activities. Operations & Group Company Environmental Committees have also been set up to promote activities within each business segment. Each committee has its own office or promotion office.

• Sustainability Committee

Chaired by the president and consisting of the directors and corporate officers in charge of divisions at the company's headquarters, this committee manages medium- and long-term risks related to sustainability, identifies business opportunities and ensures they are reflected in its management strategies. In this process, the committee deliberates and makes decisions regarding the environmental policies, targets, and plans of the entire Group, and it monitors the progress of the plans and the status of the achievement of targets.

• Operations & Group Company Environmental Committees

We carry out such activities based on decisions made by the Sustainability Committee and the characteristics of different business areas, including activities at our locations outside of Japan.



Environmental Management Structure

Environmental Management System

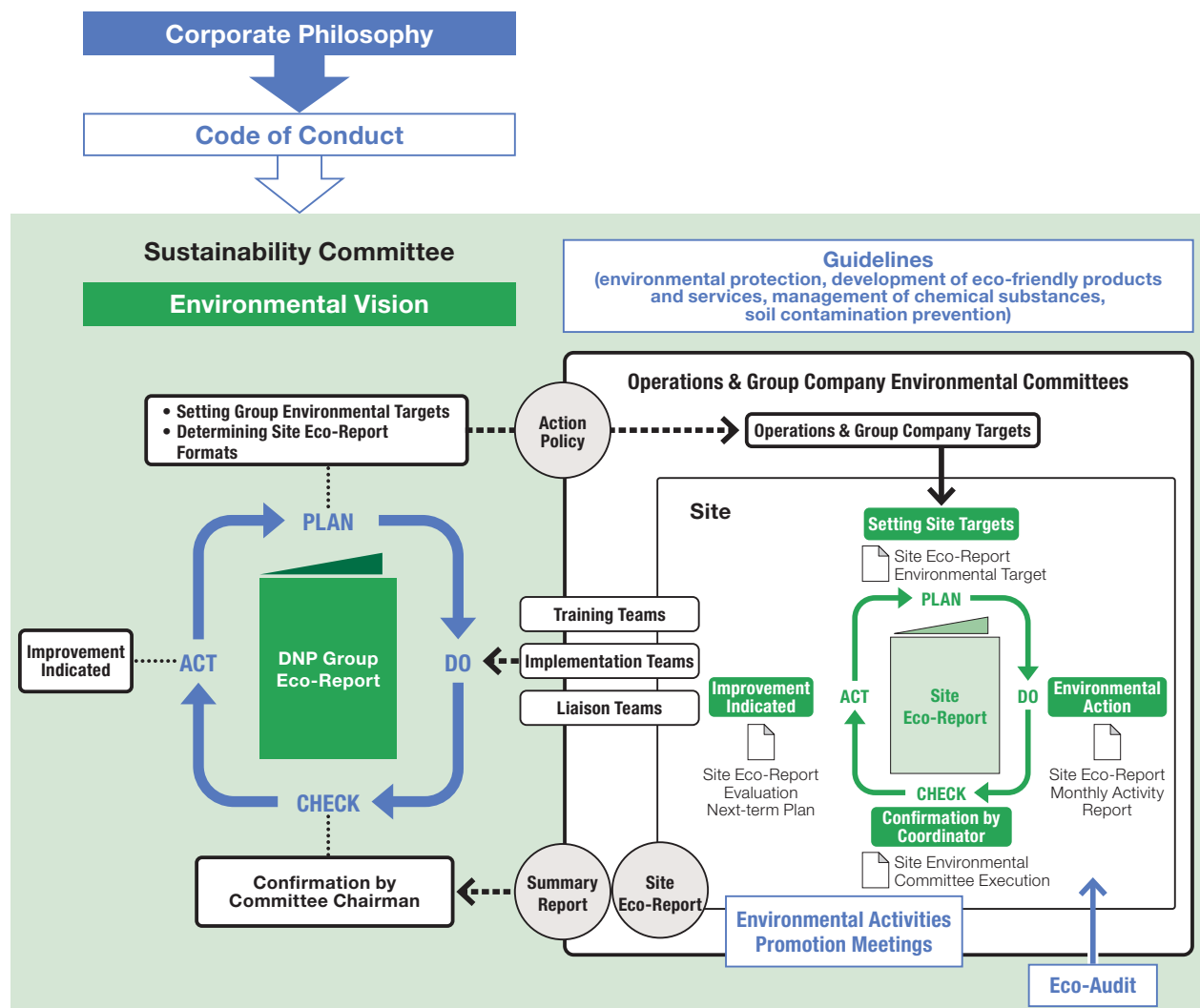
At DNP, we created our own environmental management system (EMS) in 1993, prior to the publication of the ISO 14001 standard. This system is built around two core tools: the DNP Group Eco-Reports and Site Eco-Reports set up by the Sustainability Committee Office as a framework. We also execute the Plan-Do-Check-Act cycle every six months.

The DNP Group Eco-Reports cover changes in applicable laws, our courses of action and how well the DNP Group overall has achieved its targets. The Eco-Reports are shared between the Operations & Group Company Environmental Committees and with every business site. The Site Eco-Reports document each site's targets, plans, and status of activities. The Operations & Group Company Environmental Committees use the Site Eco-Reports to gain understanding of the situation at each site and submit a summary report to the officer in charge of the environment.

Subordinate to the Sustainability Committee, the division in charge of environmental management regularly holds meetings to promote environmental activities and receive reports from the Operations & Group Company Environmental Committees on progress and other issues.

The committees are also reinforcing management by instantly sharing important information via the company's website.

Outline of the DNP Group Environmental Management System



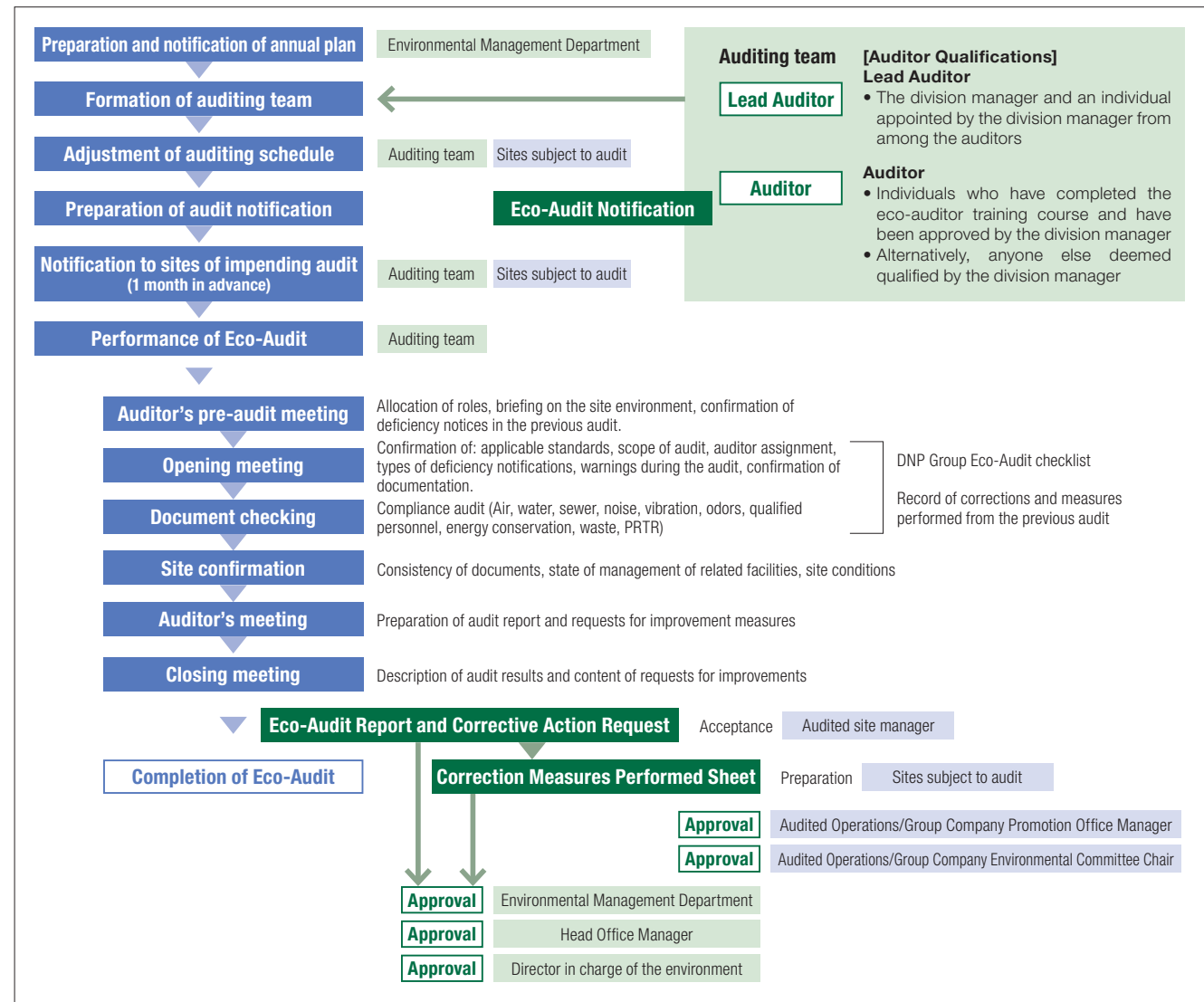
Environmental Management Structure

Eco-Audit Content and Flow

We began implementing “Eco-Audits” in 1996, so as to make our Environmental Management System (EMS) more effective. Eco-Audits are conducted by our internal auditor and cover our internal manufacturing sites. The audits have the following features.

- (1) Auditors are DNP employees with no conflict of interest with the sites being audited and who possess specialized knowledge about products and processes, which produces meaningful and objective results maintaining an independent perspective.
- (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.

Under this system, 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 Sustainability Committee.



Environmental Management Structure

Eco-Audit Performance

Number of sites audited	60 sites
Number of attendees at sites	447 persons
Cumulative auditor numbers	110 persons
Cumulative auditing hours	186 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

Findings determined to be “improvement required” in FY2023 included the omission of the inspection of equipment and facilities. We have confirmed that improvement measures have been taken in all of those cases.

We will analyze the content of the findings, determine the actions to take, and do a follow-up check in the Eco-Audits to be carried out in FY2024.

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

Reviewed in the site eco-reports and the Environmental Activities Promotion Meetings.**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**

- Implementation status of plan
- Achievement of targets

CHECK**Status of progress management of plan**

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

ACT**Status of reviews by term**

- Review of previous term results and reflection in plan

Environmental Management Structure

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 emissions, wastewater, odor, noise, and vibration) and voluntary guidelines (chemical substance management, soil contamination measures), which are even stricter than 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 shutoff 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, such as oil absorbing sheets, 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 FY2023, we also inspected tanks, waste storage sites and areas for storing equipment that handles waste PCBs to prevent soil contamination.

• Storage of harmful substances (PCBs)

As of the end of March 2024, eight sites use or keep low-concentration PCB devices and they have a total of 36 devices including transformers, capacitors, and low-concentration PCB waste. These devices are carefully kept in specified spaces using dedicated containers in compliance with related laws so that the devices will not be lost and or leak. We will continue to research how the devices are kept and completely dispose of all low-concentration PCB devices by the deadline, the end of March 2027. Research into the high-concentration PCBs that we had possessed and their disposal has already been completed.

• Management of Chemical Substances in Products and Raw Materials

Companies like DNP are being called on to properly ascertain and control the chemical substances contained in raw materials and products in use throughout the supply chain.

DNP has put into operation a management system in accordance with standards issued by JIS and the JAMP Guidelines for the Management of Chemical Substances in Products.

JAMP (Joint Article Management Promotion-consortium)

This organization promotes cross-industry action aimed at creating and spreading the use of a framework for properly managing information on chemicals contained in products and for easily disclosing and transmitting that information through supply chains.

• Status of Legal Compliance

During the most recent three-year period, we had two incident with a value exceeding the standard. Regarding the incident, we were told by the government to submit an improvement report. This has already been completed. 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 by working to make improvements and prevent recurrence.

Details of Incident (Cause, Improvement Measures, and Measures to Prevent Recurrence)

January 31, 2024 at Research and Business Development Center in Kashiwa

A water quality inspection by the authorities revealed that the biochemical oxygen demand (BOD) levels exceeded the discharge standards specified in the Water Pollution Control Act. As a result, we received a recommendation that we improve the quality of our discharged water.

Fallen leaves and sediment from a neighboring development project flowed into our premises during a rainstorm. Because we did not promptly remove these materials, the water eutrophied, causing BOD levels to exceed regulatory limits. We have since cleaned the stormwater drainage system, and subsequent water quality inspections have confirmed that the discharge is now within the regulatory standards.

December 16, 2021 at Tanabe Plant of DNP Technopack Co., Ltd.

Water quality inspection by the government →

We submitted an improvement report because the biological oxygen demand (BOD) exceeded the standard value specified in the ordinance.

A mixture of a reagent used in the manufacturing process is believed to be the cause. We have revised the work procedure to prevent recurrence. In the water quality inspection that was conducted later, it was confirmed that the BOD level is within the standard set by the ordinance.

Environmental Management Structure

Certification Acquisition Status

The DNP Group has established an independent environmental management system and is pursuing the acquisition of ISO 14001 certification at specific sites, depending on the type of work performed at those sites. (DNP organization names are as of June 30, 2024)

ISO 14001 Certification

Site	Date Registered*1	Registration Organization
D.T. Fine Electronics*2	Feb. 1966	JACO
Okayama Plant, Imaging Communications Operations	Nov. 1997	JIA-QA
Sayama Plant, Imaging Communications Operations	Nov. 1997	JIA-QA
Mihara East Plant, Fine Optronics Operations	Jul. 1998	DNV
Toyama Plant, CMIC CMO Co., Ltd.	Aug. 1998	JSA
Hagiwara Plant, DNP Tamura Plastic	Aug. 2000	JARI-RB
Iwata Plant, DNP Tamura Plastic	Aug. 2000	JARI-RB
Ashikaga Plant, CMIC CMO Co., Ltd.	Jul. 2001	KHK
Shizuoka Plant, CMIC CMO Co., Ltd.	Oct. 2001	KHK
DNP Fine Chemicals Utsunomiya	Jan. 2002	JCQA
Okayama Plant, Living Space Operations	Jan. 2002	JIA-QA
Tokyo Plant, Living Space Operations	Jan. 2002	JIA-QA
Tokyo Office, Mobility Division	Jan. 2002	JIA-QA
Tokyo Plant, DNP Fine Chemicals	Jan. 2002	JCQA
Kasaoka Plant, DNP Fine Chemicals	Jan. 2002	JCQA
Ushiku Plant, DNP Data Techno	Mar. 2002	JIA-QA
Warabi Plant, DNP Data Techno	Mar. 2002	JIA-QA
Nara Plant, DNP Data Techno	Mar. 2002	JIA-QA
Kyoto-Minami Plant, DNP Data Techno	Mar. 2002	JIA-QA
Tokai Plant, DNP Technopack	Mar. 2002	SGS
Chikugo Plant, DNP Technopack	Jun. 2002	SGS
Kamifukuoka Plant, Fine Device Operations	Mar. 2004	AJA
Itabashi Area, Sales Division 1, DNP Logistics	Oct. 2004	AJA
Tokyo Plant, DNP Ellio	Jan. 2005	LRQA
Osaka Plant, DNP Ellio	Jan. 2005	LRQA

*1 Indicates the first registration date.
 *2 Kitakami Plant of D.T. Fine Electronics are registered as a part of Toshiba Electronic Devices & Storage Corporation.

Site	Date Registered*1	Registration Organization
DNP Photomask Europe S.p.A.	Apr. 2006	CISQ
Sayama Plant, DNP Technopack	Aug. 2008	SGS
Izumizaki Plant, DNP Technopack	Aug. 2008	SGS
DNP Imagingcomm Europe B.V.	Mar. 2009	BV
Mihara West Plant, Fine Optronics Operations	May. 2009	DNV
Okayama Plant, Fine Optronics Operations	May. 2009	DNV
Hokkaido Coca-Cola Bottling	Feb. 2010	LRQA
PT DNP Indonesia (Pulogadung/Karawang)	Nov. 2014	AJA
DNP VIETNAM	Apr. 2015	Intertek
Nishine Plant, CMIC CMO Co., Ltd.	Apr. 2020	KHK
DNP HOSO	Sep. 2021	JICQA
DNP Imagingcomm America Corporation (Pittsburgh)	May. 2022	NSF ISR
DNP Imagingcomm Asia Sdn.Bhd.	Jul. 2022	SGS
DNP Imagingcomm America Corporation (Concord)	Jan. 2023	NSF ISR

Eco Action 21 Certification

Site	Date Registered*1	Registration Organization
Tokyo Head Office, DNP Trading	Jan. 2006	IP SuS

Registration Organization

- AJA**
 Anglo Japanese American Registrars Ltd.
- BV**
 Bureau Veritas
- CISQ**
 Federazione Certificazione Italiana dei Sistemi Qualità Aziendali (Italy)
- DNV**
 Det Norske Veritas AS (Norway)
- IP SuS**
 Institute for Promoting Sustainable Societies
- Intertek**
 Intertek Certification Ltd.
- JACO**
 Japan Audit and Certification Organization for Environment and Quality
- JARI-RB**
 Japan Automobile Research Institute
- JCQA**
 Japan Chemical Quality Assurance Ltd.
- JIA-QA**
 Japan Gas Appliances Inspection Association, QA Center
- JICQA**
 JIC QUALITY ASSURANCE LTD.
- LRQA**
 LRQA Limited
- NSF-ISR**
 NSF International Strategic Registrations
- SGS**
 SGS Japan
- KHK**
 KHK-ISO Center
- JAS**
 Japanese Standards Association

Environmental Management Structure

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.

Type of Training	Course Name/Description	First Held	Eligibility	Number of participants			Time of Year
				FY2021 (persons)	FY2022 (persons)	FY2023 (persons)	
Education for New Recruits	Environmental Activity Overall (required) Basic environmental knowledge and conservation efforts of the DNP Group	1994	All new recruits	317*	249*	273*	When joining the company
Technical Seminar	Environment/Chemicals (optional) Environmental Laws and Regulations Waste Treatment	1999	Employees related to operation	135	95	112	Once yearly
Manufacturing Skill Seminar	Environmental Environmental initiatives of the DNP Group	2023	All employees involved in production activities up to the managerial team leader	—	—	5,354	As needed

*Previously published data regarding the Education for New Recruits program has been corrected due to discrepancies in the data in the fiscal year in which the data was compiled.

Environmental Management Activities

Environmental Activity Targets and Results

DNP has prescribed targets with the following categories as priority issues and is undertaking activities in these areas.

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	Medium- and long-term target <div>(The GHG emissions reduction targets are to be achieved by 2030 or 2050. The target year of the other targets is 2025.)</div>	FY2023 results		Evaluation
Reduction of GHG emissions	P 6-8, P 22	To reduce GHG emissions by 40% from the FY2015 levels by FY2030 (SBT) Aiming to achieve effective net-zero greenhouse gas (GHG) emissions by 2050	Emissions in FY2015: 1.201 million tons Emissions in FY2023: 0.745 million tons ✔	38.0% decrease from that in FY2015	🟢
Reduction of environmental impact incurred during transport	P 23	To reduce fuel use for transport per amount of sales by 1% per annum and 15% compared to FY2015	Per unit in FY2015: 14.2 kl/billion yen Per unit in FY2023: 10.4 kl/billion yen ✔	26.9% decrease from that in FY2015	🟢
Development and sales of environmentally conscious products and services	P 20	Increase the percentage of super-eco products sales from total sales to 10%	Total sales ratio in FY2023: 12.0% ✔		🟢
Increasing the resource recycling rate	P 25-26	Improve the resource recycling ratio* by 5 points compared to FY2015 level *The ratio of material/chemical recycling to waste excluding paper as valuable waste which is 100% recycled	Resource recycling ratio in FY2015: 51.7% Resource recycling ratio in FY2023: 62.4% ✔	10.7 points improvement compared to FY2015	🟢
		Maintain zero emissions (Japan)	Landfill waste ratio in FY2015: 0.06% Landfill waste ratio in FY2023: 0.04% ✔	Maintain zero emissions (Japan)	🟢
Reduction of water usage	P 27	Reduce water use per amount of sales by 35% compared to FY2015	Per unit in FY2015: 8.55 m³/million yen Per unit in FY2023: 5.12 m³/million yen ✔	40.1% decrease from that in FY2015	🟢
Reduction of VOC emissions	P 29	To keep the FY2015 level of atmospheric emissions of VOCs (except for methane) (Japan)	Emissions in FY2015: 4,581 tons Emissions in FY2023: 4,056 tons ✔	11.5% decrease from that in FY2015	🟢
		We plan to reduce atmospheric emissions of VOCs to the greatest extent possible through the introduction of technologies and other measures, and of course by complying with local laws and regulations. (Overseas)	Continue operation of VOC recovery equipment at DNP Indonesia's Karawang Plant		🟡
Acquisition of certifications to meet the Guidelines for Procurement of Paper for Printing and Covering	P 21	Achieve a 100% certification ratio	Certification ratio in FY2023: 98%		🟡
Environmental conservation	P 14	To keep the maximum concentration of air emissions subject to emissions regulations at 70% of the required standard or less	98% achievement ratio of targets for FY2023 (voluntary target)		🟡
		To keep the maximum concentration of water emissions subject to wastewater regulations at 70% of the required standard or less	99% achievement ratio of targets for FY2023 (voluntary target)		🟡
		To keep the maximum concentration of odors at our site perimeters at 70% of the required standard or less	100% achievement ratio of targets for FY2023 (voluntary target)		🟡
		To keep the maximum level of noise at our site perimeters at 70% of the required standard or less	100% achievement ratio of targets for FY2023 (voluntary target)		🟡
		To keep the maximum level of vibration at our site perimeters at 70% of the required standard or less	100% achievement ratio of targets for FY2023 (voluntary target)		🟡

GHG Emissions Reduction Target of the DNP Group Recognized by the Science Based Targets (SBT) Initiative

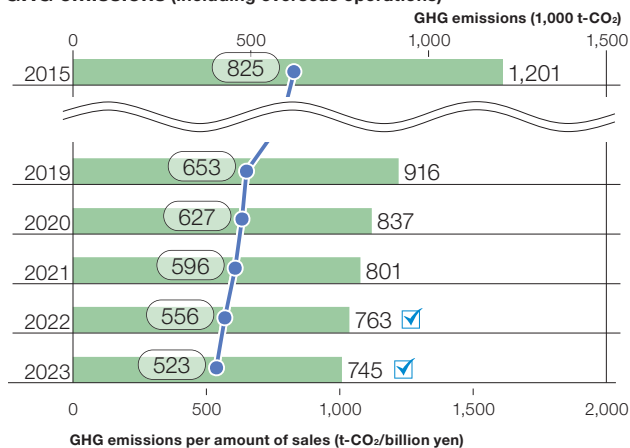
DNP obtained the approval of the international organization Science Based Targets (SBT) Initiative in July 2018. In April 2021, our target was revised upward. This was shown to get into alignment with well below the 2°C scenario (WB2°C) of the Paris Agreement. DNP will continue to reduce GHG emissions through the conservation of energy, including the introduction of energy-saving equipment.



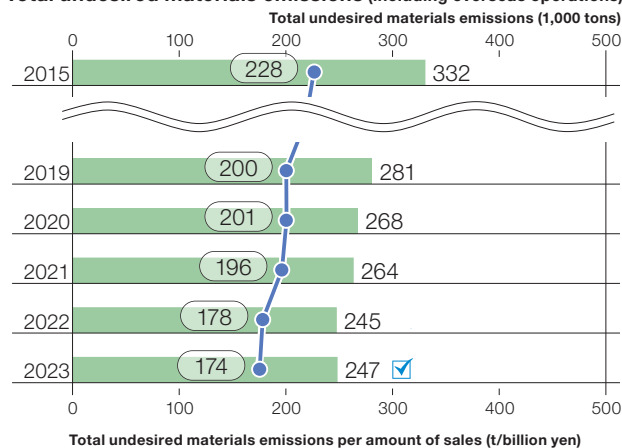
Environmental Management Activities

Environmental Impact and Environmental Efficiency

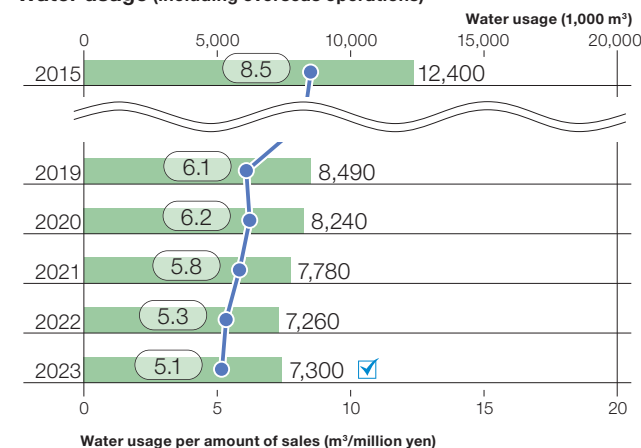
GHG emissions (including overseas operations)



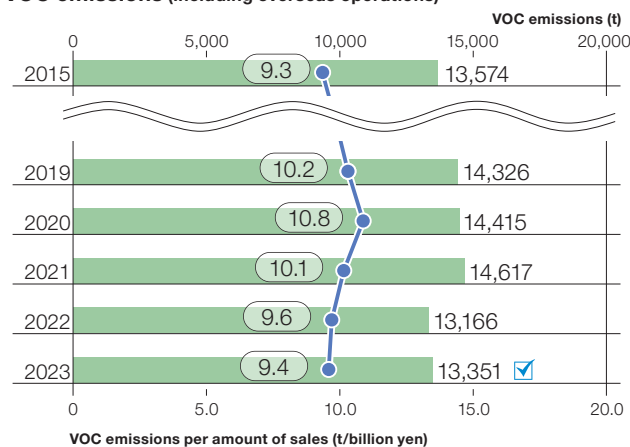
Total undesired materials emissions (including overseas operations)



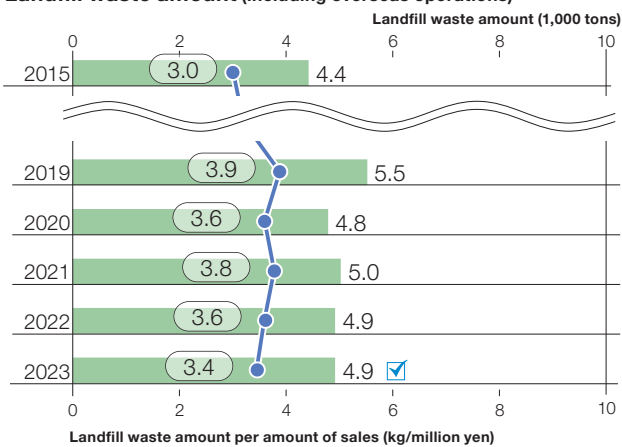
Water usage (including overseas operations)



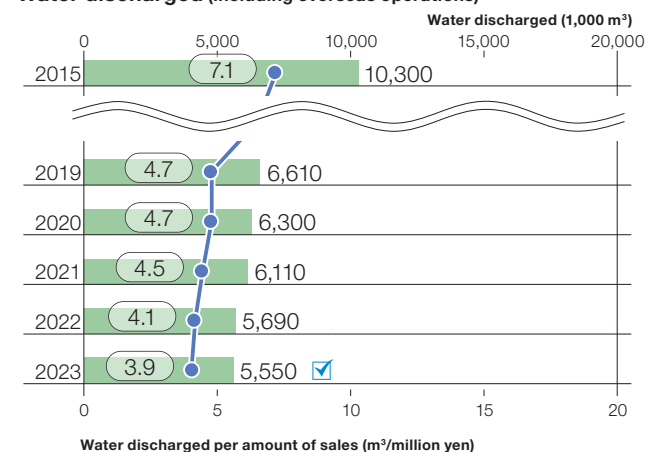
VOC emissions (including overseas operations)



Landfill waste amount (including overseas operations)



Water discharged (including overseas operations)



Environmental Management Activities

Expansion of Eco-friendly Products and Services

At DNP, we have created the Eco-friendly Products and Services Development Guidelines in order to create eco-friendly products and services from the design stage, so as to reduce the environmental impact of our products and services throughout their lifecycle.

We also use our own evaluation criteria to identify environmentally superior products and services as super-eco products.

• Sales of super-eco products

FY2023 results: ¥170.6 billion

The ratio of super-eco products sales to total sales is 12.0%

Example super-eco product



DNP Dye-Sublimation Photo Printer DP-DS820DX

By redesigning the reversing mechanism for double-sided printing, a more compact design has been achieved for the DP-DS820DX, reducing its volume approximately 40% and its weight about 27% compared to DNP's previous 8-inch double-sided model. This contributes significantly to resource conservation and a reduction in transportation energy.

Sales of super-eco products (Unit: billion yen) Bar graph

Percentage of sales that are sales of super-eco products (Unit: %) Line graph



Guidelines for developing eco-friendly products and services

1 Reduction of environmental pollutants

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

2 Resource and energy conservation, reduction of GHG emissions

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

3 Sustainable use of resources

Utilize natural resources in a sustainable way.

4 Long-term usability

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

5 Reusability

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

6 Recyclability

Consideration is given to recyclability through the use of easily recyclable materials, designs that facilitate separation, disassembly, and sorting of individual materials, and the creation of collection and recycling systems that are easy for purchasers to use.

7 Use of recycled materials, etc.

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

8 Ease of treatment and disposal

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

9 Making environmental impact visible and taking into consideration biodiversity

Making visible any impact that should be reduced, and aiming to protect biodiversity.

10 Supporting and promoting environmental education and awareness

Helping to create a sustainable society.

Topics

Third-Party Verified Carbon Footprint Calculation System: New Product Categories Added

In April 2022, our carbon footprint calculation system was certified under the Carbon Footprint Comprehensive Calculation Scheme. It covers three packaging product categories: paper containers, soft packaging, and molded products. We have now also been certified for six additional categories: books and magazines, commercial printed materials, securities printed materials, thermal transfer printer media, decorative sheets for building materials, and decorative films for automotive interiors and exteriors. Our certified calculation system now allows us to provide highly reliable data on the carbon footprint of these nine product categories starting in April 2024.

Environmental Management Activities

Environmental Label Certification

We have earned environmental labeling certifications such as CoC (Chain of Custody) certification and the Japan Environment Association's Eco Mark. We are working to expand the sale of products and services with these certifications, so that their packaging and advertising can serve as a 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 DNP's biomass plastic packaging material, Biomatech®, a blend with plant-based materials
CoC Certification	
CoC (Chain of Custody) This is a certificate of control throughout each stage of processing and distribution	Acquired for FSC® and PEFC

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*	Licensing Number	Registration Organization	Acquisition Date
CoC: FSC®	Information Innovations Operations	FSC®-C022784	SGSHK-COC-001466	August, 2003
	DNP Trading Co.,Ltd.	FSC®-C020374	SGSHK-COC-001584	December, 2003
	Life Design Operations	FSC®-C009084	SGSHK-COC-002411	December, 2005
	Publishing Innovation Operations	FSC®-C006469	SGSHK-COC-002546	March, 2006
	Living Space Operations	FSC®-C011519	SGSHK-COC-006636	August, 2009
	DNP America, LLC	FSC®-C017302	SCS-COC-002804	October, 2009
	DNP Europa GmbH	FSC®-C101577	SGSCH-COC-007979	August, 2010
	PT. DNP Indonesia	FSC®-C111983	NC-COC-006063	September, 2012
	DNP SP Innovation Co., Ltd.	FSC®-C121224	JIA-COC-200006	May, 2014
	DNP imagingcomm Europe B.V.	FSC®-C175372	SKH-COC-000661	March, 2022
CoC: PEFC	Imaging Communications Operations	FSC®-C182001	SGSHK-COC-350726	September, 2022
	Life Design Operations	PEFC/01-31-01	SGSJP-PEFC-COC-2000	January, 2004
	DNP Trading Co.,Ltd.	PEFC/31-31-77	SGSJP-PEFC-COC-0313	January, 2008

- [FSC®] Forest Stewardship Council®
- [PEFC] Programme for the Endorsement of Forest Certification Schemes

*The company and divisions names are as of June 2024.

Environmental Management Activities—Achieving a Low-Carbon Society

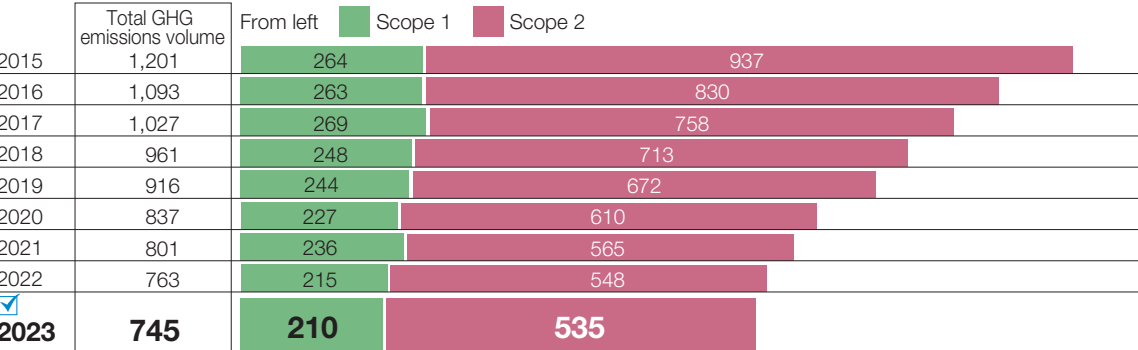
Reduction of GHG emissions

Important steps that the DNP Group has taken leading to a Decarbonized society include reducing the consumption of forms of energy that generate CO₂ (energy conservation), switching to low CO₂- emission fuels and introducing renewable energy sources. The Group also aims to transform its business portfolio to have high added value and low environmental impact.

To prioritize investments in energy-efficient equipment, we use internal carbon pricing (ICP) when selecting equipment. We have recently updated our ICP, raising the cost per ton of CO₂ emissions from the previous 3,000 yen to 20,000 yen, allowing us to accelerate our adoption of equipment with a smaller environmental footprint.

• GHG emissions

Scope 1 and Scope 2 GHG emissions FY2023 results: 745 [thousand tons-CO₂]



GHG emissions volume (unit: thousand tons-CO₂) GHG emissions in Japan due to electricity use, fuel use/combustion, burning of waste and atmospheric emissions of HFCs/PFCs/SF₆/NF₃ are calculated based on the Manual for Calculating and Reporting Greenhouse Gas Emissions, Ver.4.8 (April 1, 2022). (Excludes some emission sources with extremely low GHG emissions.) For FY2023, the emission factor for domestic electricity was calculated using the emission factors for each electric utility as published in the Electric Utility Emission Factors (FY2022 Results). Similarly, for overseas operations, the emission factors of the respective electric utilities were used. (In cases where electric utility data was unavailable, country-specific emission factors were used.)

*In addition to Scope 1 and 2 emissions, we emitted 98,000 tons of VOC combustion-derived GHG emissions in FY2023. (From the FY2024 report onwards, VOC combustion-derived GHG emissions will be retroactively included in the benchmark fiscal year and considered within our reduction targets.)

*Scope 1 emissions attributable to transportation and distribution carried out by group companies are tabulated as Scope 3 emissions.

• Introduction of renewable energy

Installation of solar power generation systems

Year of installation	Place of installation	System capacity
2009	Izumizaki Plant, DNP High-performance Materials	30kW
2011	DNP Ichigaya-Kagacho Building No. 2	30kW
	DNP Ichigaya-Tamachi Building	10kW
2012	Technology Development Center	11kW
2015	DNP Ichigaya-Kagacho Building	36kW
	DNP Ichigaya-Takajocho Building	24kW
	Sayama Plant	6kW
2020	Kashiwa Research Institutes	600kW
2023	Kyotanabe Plant, DNP Technopack	1,316kW
	Karawang Factory, DNP Indonesia	1,658kW
	Mihara Higashi Plant, DNP Fine Optonics	4,617kW
	Osaka Plant, DNP Elzio	10kW

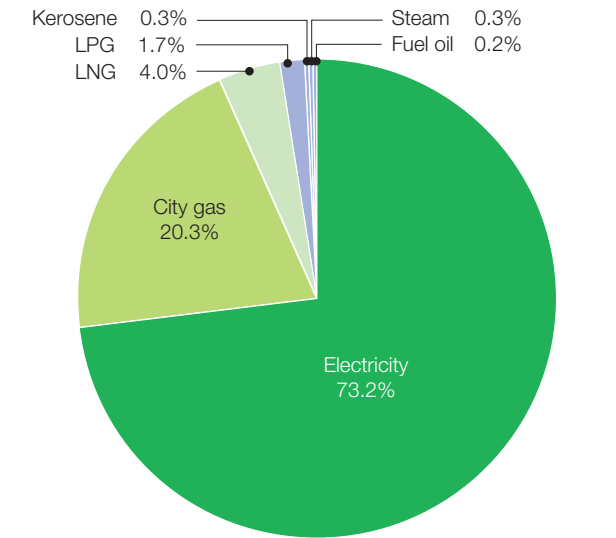
In FY2023, we used a total of 10,745 thousand kWh of renewable energy through generation, purchase, and the use of certificates.

During this period, large solar panels were installed at the DNP Technopack Kyotanabe Plant, DNP Fine Optonics Mihara Higashi Plant, and DNP Indonesia Karawang Factory. Additionally, the Hokkaido Coca-Cola Products Sapporo Factory began using renewable energy through an off-site power purchase agreement (PPA).

• Domestic GHG emissions volume by category

Unit: tons-CO ₂	
Total GHG emissions volume	646,600
Energy source	625,400
Non-energy source	19,100
Methane	380
N ₂ O	180
HFC	1,530
PFC	10
SF ₆	0
NF ₃	0

• Domestic fuel composition ☒



*Gasoline and diesel fuel for automobile use are also used (less than 0.1%) in addition to these fuels above.

Environmental Management Activities—Achieving a Low-Carbon Society

Reduction of GHG emissions

• **Transport volume**

We are implementing distribution-related environmental impact reduction measures such as the improvement of the loading ratio, 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.

Domestic manufacturing sites FY2023 results

Cargo transport volume: 275 million ton-kilometers

Amount of fuel used for transport: 14,850 kl

(converted to crude oil)

CO₂ emissions: 38,960 tons

Per-unit fuel use for transport

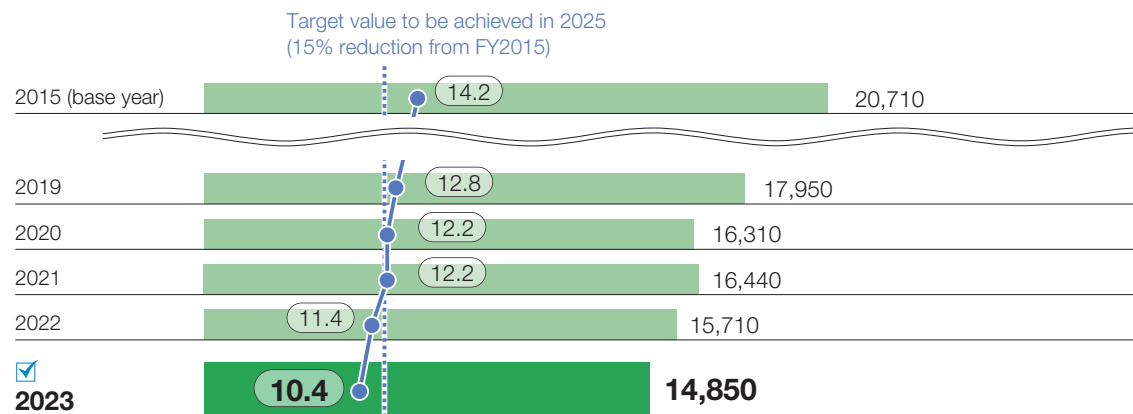
(amount of fuel used/sales): 10.4 kl/billion yen

26.9% reduction compared with FY2015

• **Global warming measures for offices**

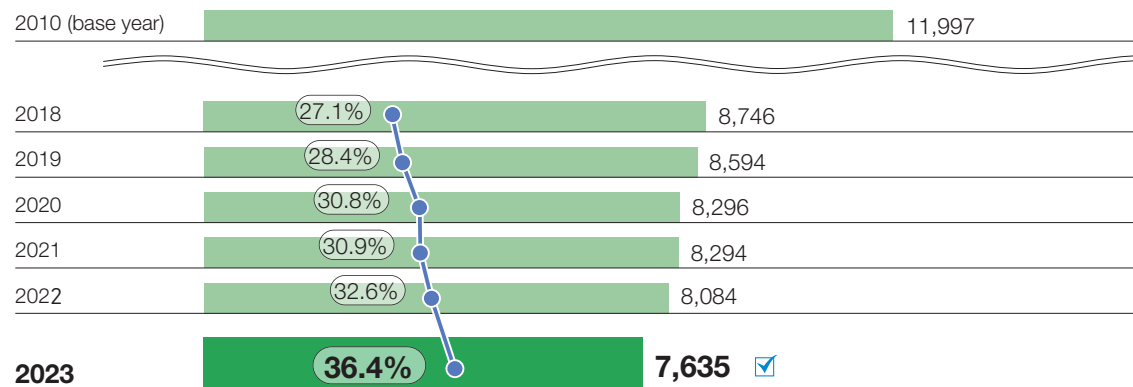
The DNP Group has been engaged in efforts to reduce CO₂ emissions for offices since FY2005. We established a target of a 20% reduction in power consumed at our offices throughout Japan compared with FY2010. Specific actions that we are implementing include completely revising the number of lighting fixtures and the level of illumination needed, changing the way air conditioners are operated, and increasing the use of LED lighting.

Fuel use for transport* (Unit: kl converted to crude oil) Bar graph
Fuel use for transport per amount of sales (Unit: kl/billion yen) Line graph



*Fuel use during domestic cargo transport

Power consumption at major offices* (Unit: 1,000 kWh) Bar graph
Reduction ratio compared with FY2010 Line graph



*25 major offices in Japan under continuous operation during the period FY2010–FY2023

Environmental Management Activities—Achieving a Low-Carbon Society

GHG emissions Across the Entire Supply Chain

At DNP, emissions in the raw material procurement phase (Scope 3, Category 1) are approx. 50% of the emissions from the entire supply chain.

We share and discuss initiatives to reduce GHG emissions and other agenda items with suppliers, including holding explanatory seminars and face-to-face meetings and conducting questionnaires. Thus, we work together with suppliers to move ahead with initiatives to reduce emissions from the supply chain.

Unit: 1,000 tons-CO₂

	FY2021	FY2022	FY2023
Scope 1 GHG emissions	236	215	210
Scope 2 GHG emissions	565	548	535
Scope 3 GHG emissions	4,240	4,370	4,210
Emissions from the supply chain	5,040	5,130	4,960

Breakdown of Scope 3 GHG emissions

Category 1	Purchased products and services	2,700	2,750	2,650
Category 2	Capital goods	92	160	130
Category 3	Fuel and energy-related activities that do not fall under Scopes 1 and 2	140	130	120
Category 4	Transportation and distribution (upstream)	180	170	170
Category 5	Waste generated by operations	29	27	26
Category 6	Business travel	4	8	12
Category 7	Employee commute	17	24	23
Category 8	Leased assets (upstream)	—	—	—
Category 9	Transportation and distribution (downstream)	620	620	610
Category 10	Fabrication of sold products	—	—	—
Category 11	Use of sold products	11	12	13
Category 12	End-of-life treatment of sold products	450	460	460
Category 13	Leased assets (downstream)	—	—	—
Category 14	Franchises	—	—	—
Category 15	Investment	6	4	1

Calculation method

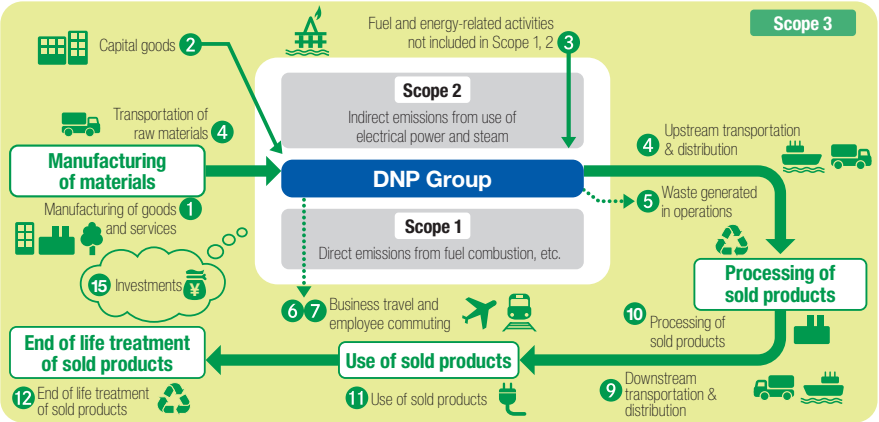
The Ministry of Economy, Trade and Industry (METI) and the Ministry of the Environment (MOE) formulated and released the “General Guidelines on Supply Chain GHG Emission Accounting, Ver 3.4” the standards of which our calculations are based upon.

- Scope 1 emissions attributable to transportation and distribution carried out by group companies were included under Category 4.
- Category 8 is included in Scope 1 and 2. Category 10 was excluded from the calculation because the component ratio of end products is extremely small.
- For Category 11, only emissions from plastic bottle beverages in Japan were calculated.
- Category 13 and Category 14 are not applicable.

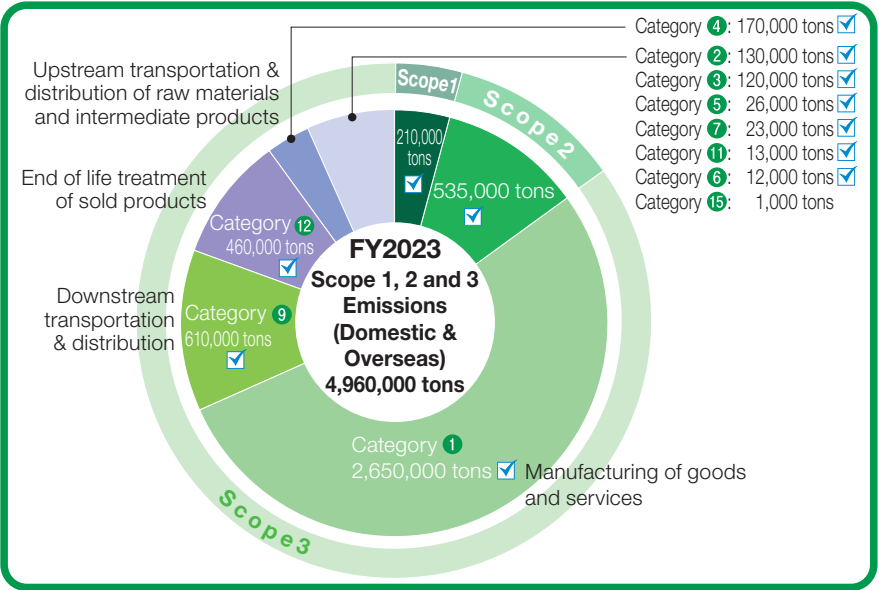
Since FY2021, the figures have been calculated using IDEA emission intensity. (IDEA Ver.3.4 was used for FY2023)

Scope of calculations

Main DNP business sites in Japan (excluding Hokkaido Coca-Cola Products and the Bookstore Group among others), and key overseas sites (PT DNP Indonesia, DNP Imagingcomm America Corporation, and DNP Imagingcomm Asia Sdn. Bhd.).



• Scope 3 GHG emissions



Environmental Management Activities—Building a Recycling Society

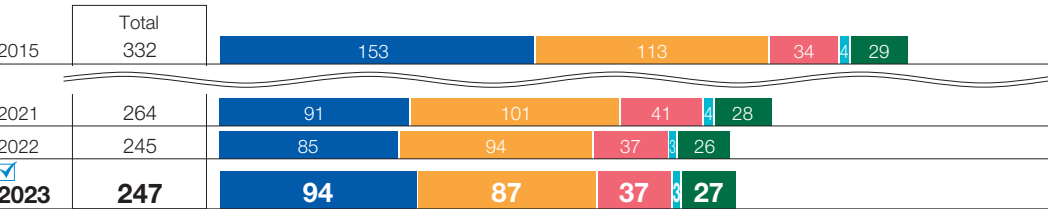
Resource Recycling

DNP Group Environmental Vision 2050 states the DNP Group will work to realize a recycling-oriented society (efficient use of resources) in pursuit of the shift from economic activities characterized by mass production, mass consumption and mass disposal to a circular economy that sustainably uses resources. To this end, we are striving to minimize total undesired materials emissions and the landfill waste rate. Additionally, from FY2021, we have encouraged recycling excluding thermal recovery using resource recycling rates as an indicator. We are pushing forward with the efficient use of resources in this way.

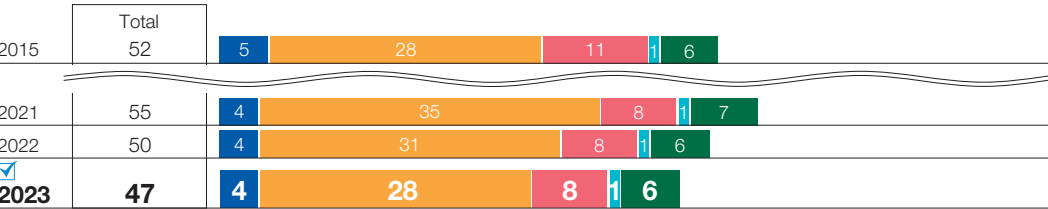
Minimizing total undesired materials emissions

We engage in yield improvement activities in production processes to control undesired materials (waste and valuable waste) emissions from our Sites. We try to limit our use of materials in production activities to the smallest amount necessary.

Undesired materials emissions (Unit: 1,000 tons)



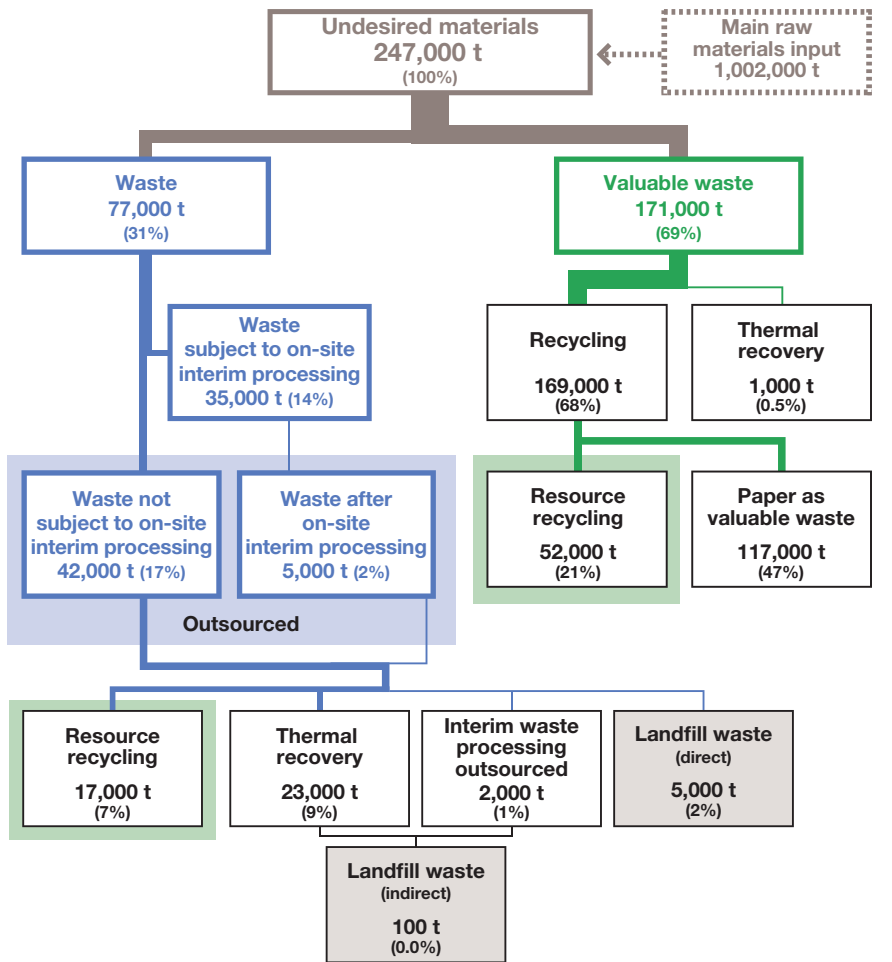
Waste emissions (outsourced) (Unit: 1,000 tons)



From left Smart Communication Life & Healthcare Electronics Other Overseas

*Past data has been revised due to changes in divisional structure.

Undesired materials processing flow



*Percentages are rounded, so they may not add up to the total.

Environmental Management Activities—Building a Recycling Society

Resource Recycling

• Promoting the Recycling of Undesired Materials (Waste and Valuable Waste)

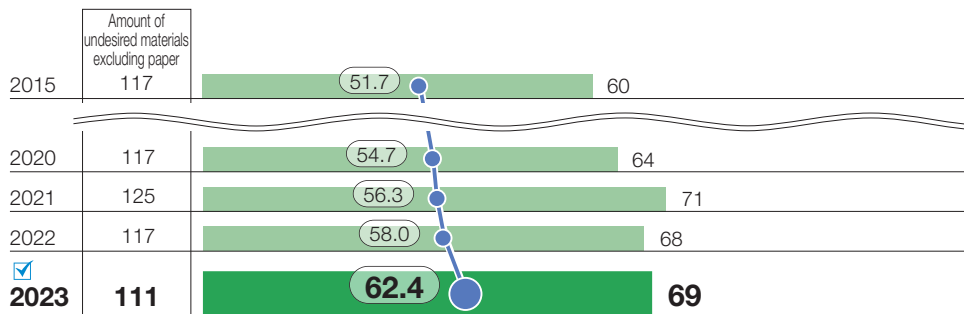
Many different initiatives are under way to increase the resource recycling rate of undesired materials (waste and valuable waste) emissions from our sites. In particular, we are focusing on plastics which are a large proportion of waste and accelerating efforts to achieve a 60% resource recycling rate by FY2030. Specifically, we are strengthening (1) change of product specifications to facilitate resource recycling, such as using a single material (shift to mono-material products); (2) promotion of material recycling by separating waste into more detailed segments, and; (3) collaboration with partner companies to shift to chemical recycling.

*Combustion, conversion into solid fuels, and other processes involving heat recovery are treated as thermal recovery and are therefore not included in recycling (resource recycling).

Undesired materials overall

Amount of resource recycling (Unit: 1,000 tons) ■ Bar graph

Resource recycling ratio (Unit: %) ● Line graph



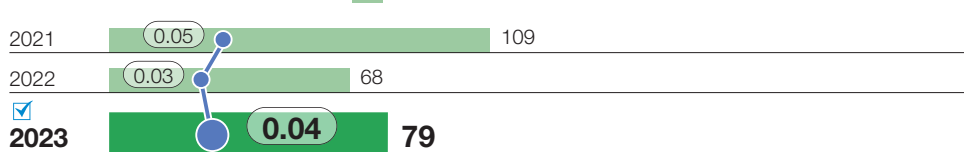
- **Resource recycling rate:** Amount of resource recycling/Amount of undesired materials excluding paper × 100
- **Amount of resource recycling:** Amount of undesired materials excluding paper as valuable waste which have been recycled by means of material recycling or chemical recycling
- **Amount of undesired materials excluding paper:** Amount of undesired materials (waste + valuable waste) excluding paper as valuable waste, which is 100% recycled, and the amount of sludge subject to on-site intermediate processing

• Minimizing the landfill waste rate (Japan)

In Japan, we are working to minimize the landfill waste rate with zero emissions as a goal. The Zero Emissions initiative aims to reduce the ratio of landfill waste to the total volume of undesired materials to 0.5% or less, and we are working toward achieving this goal.

Landfill waste ratio (Japan)

Amount of landfill waste (Unit: tons) ■ Bar graph / Landfill waste ratio (Unit: %) ● Line graph

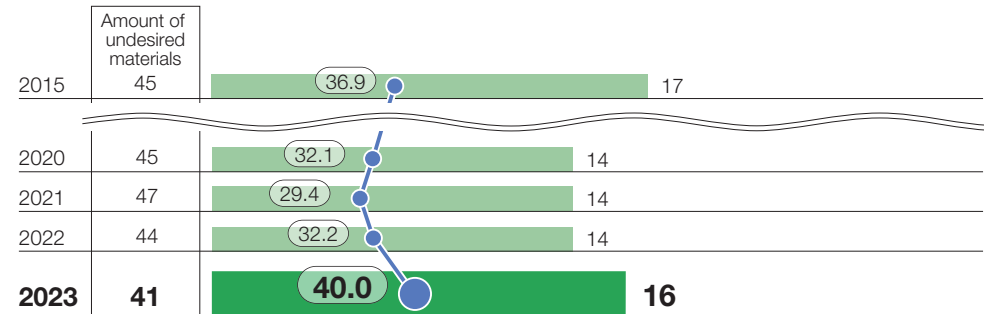


Landfill waste rate: Amount of landfill waste (direct and indirect)/total undesired materials emissions × 100

Plastic (Japan)

Amount of resource recycling (Unit: 1,000 tons) ■ Bar graph

Resource recycling ratio (Unit: %) ● Line graph



• Volume and breakdown of hazardous/non-hazardous undesired materials (waste and hazardous substances) (Japan)

Undesired materials	Emissions (unit: tons)	Breakdown (unit: tons)		
		Recycling	Landfill waste	Other
Hazardous (specially controlled industrial waste)	16.1	15.6	0.0	0.5
Non-hazardous (excluding specially controlled industrial waste)	204.6	184.6	0.1	20.0
Total	220.7	200.2	0.1	20.5

Recycling: Total volume recycled via material, chemical, and thermal recycling

Other: Emissions excluding recycling and landfill waste

Environmental Management Activities—Building a Recycling Society

Effective Use of Water Resources

The size of the risk to water resources differs by country and region. Therefore, at DNP, we carry out surveys of water risk at our manufacturing sites, including our overseas manufacturing sites. We also implement flooding countermeasures in regions with a high risk of flood damage.

• Reducing volume of water used

The DNP Group strives to reduce its water consumption by conserving water, reducing the amount of water supplied to utility systems and increasing the use of recycled water. In the Electronics and Other segments that require a large amount of water, we are making particular efforts to reduce consumption, such as optimizing the amount of water used in manufacturing processes, refining each process, installing water meters to eliminate loss as well as expanding cascade use of washing water.

We are also making effective use of rainwater in our office buildings and other sites.

FY2023 results

Water used: 7,300 [1,000 m³]

**Unit water consumption per sales:
5.12 (m³/million yen)**

• 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.

Water use

Unit: 1,000 m³

Intake source	Area	FY2021	FY2022	FY2023
Surface water (clean water and industrial water)	Japan	4,010	3,680	3,690
	Europe	60	60	60
	North America	80	70	70
	Other Asian countries	230	210	220
	Total	4,380	4,020	4,040
Groundwater	Japan	3,400	3,240	3,260
	Europe	2	1	2
	North America	0	0	0
	Other Asian countries	0	0	0
	Total	3,400	3,240	3,260
River water	Japan	0	0	0
	Europe	0	0	0
	North America	0	0	0
	Other Asian countries	0	0	0
	Total	0	0	0
Seawater	Japan	0	0	0
	Europe	0	0	0
	North America	0	0	0
	Other Asian countries	0	0	0
	Total	0	0	0
Total amount		7,780	7,260	7,300

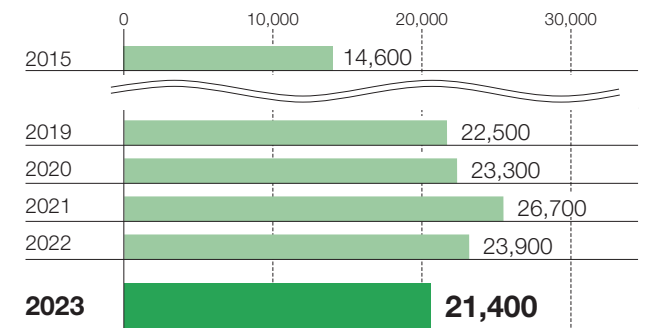
Wastewater

Unit: 1,000 m³

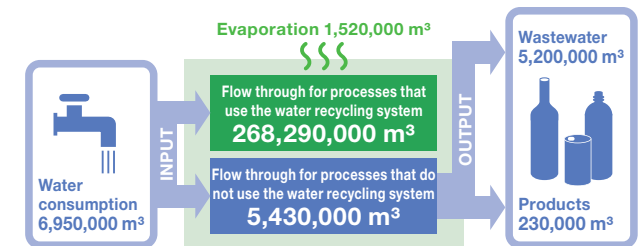
Wastewater destination	Area	FY2021	FY2022	FY2023
Public water area	Japan	2,690	2,440	2,580
	Europe	0	0	0
	North America	0	0	0
	Other Asian countries	50	50	40
	Total	2,740	2,490	2,620
Sewerage networks	Japan	3,050	2,910	2,630
	Europe	60	60	60
	North America	80	70	70
	Other Asian countries	180	160	170
	Total	3,370	3,200	2,930
Underground infiltration	Japan	0	0	0
	Europe	0	0	0
	North America	0	0	0
	Other Asian countries	0	0	0
	Total	0	0	0
Total amount		6,110	5,690	5,550

*No discharge to seawater Totals may not match the total of the figures in breakdowns due to rounding.

Use of rainwater in domestic office buildings, etc.

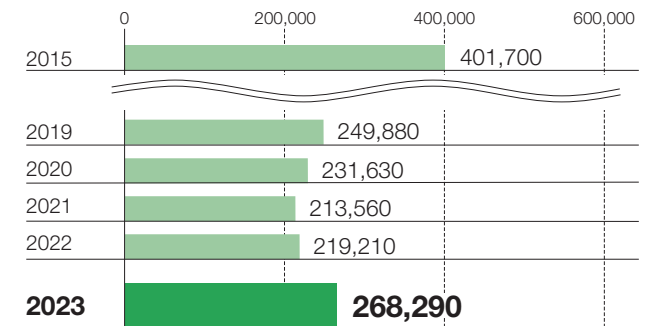
(Unit: m³)

Water input-output in domestic sites



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

Recycled water use in domestic manufacturing sites

(Unit: 1,000 m³)

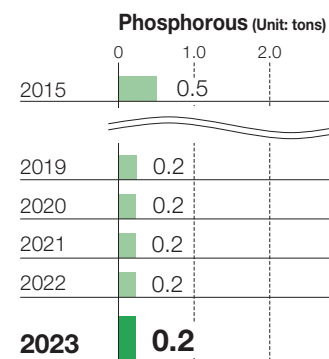
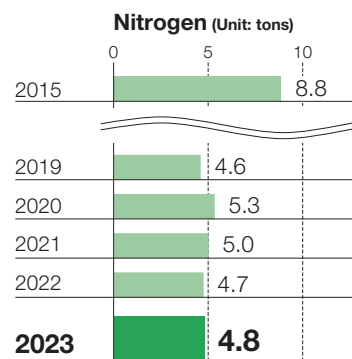
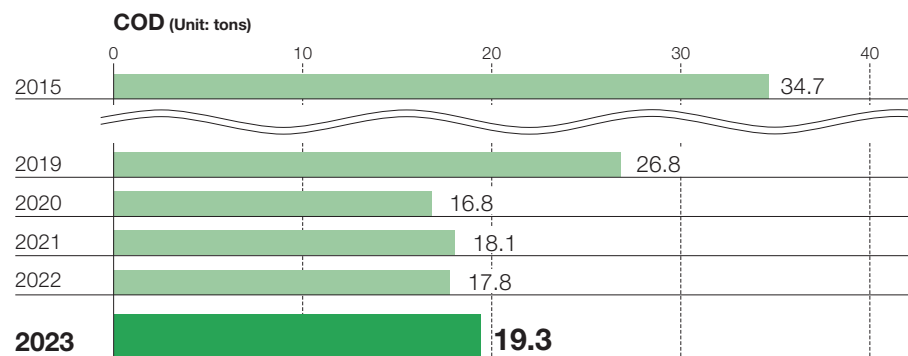
Recycled water: Total volume of water that flows through the heat exchange or cleaning equipment in our closed-cycle system in one year

Environmental Management Activities—For the Reduction of Environmental Pollutants

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. For day-to-day management, we continue to conduct measures, such as changing out the filtration membranes and absorbent materials in wastewater processing equipment, improving wastewater treatment in our kitchens.

Water pollutant emissions



Environmental Management Activities—For the Reduction of Environmental Pollutants

Reducing Air Pollutants

The Air Pollution Control Act regulates substances such as toxic air pollutants and ozone depleting substances, including sulfur oxides (SOx) and nitrogen oxides (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.

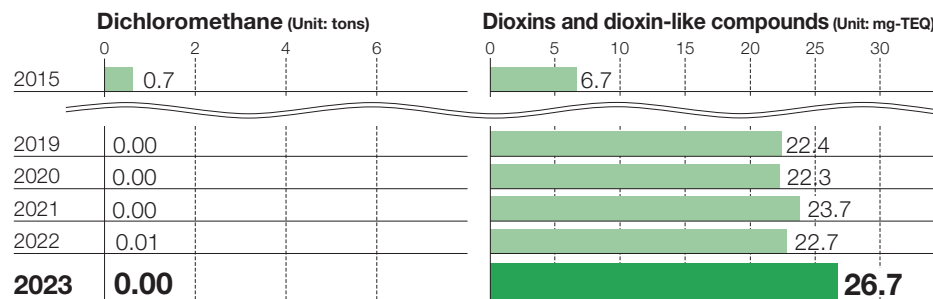
• Reducing VOC emissions

Inks, solvents, adhesives and cleaning solutions used in the printing process contain toluene and other VOCs. 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 solvent recovery.

Atmospheric emissions of VOCs (domestic)

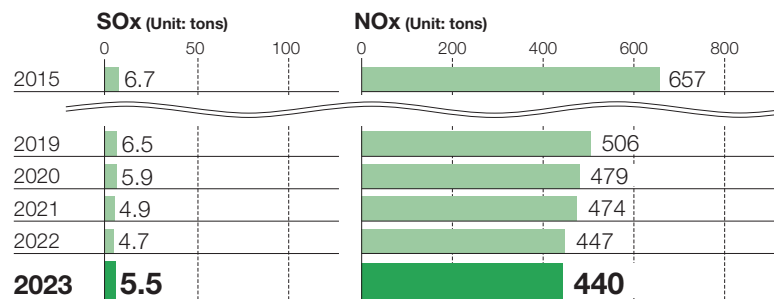
FY2023 results: 4,056 (tons)

Air pollutant emissions



Although dichloromethane was mainly used for washing in the printing process, we have pursued a switchover to substitutes and terminated using dichloromethane for washing in 2013. At present, dichloromethane is used at some sites including our laboratory; however, the discharge concentration is extremely low.

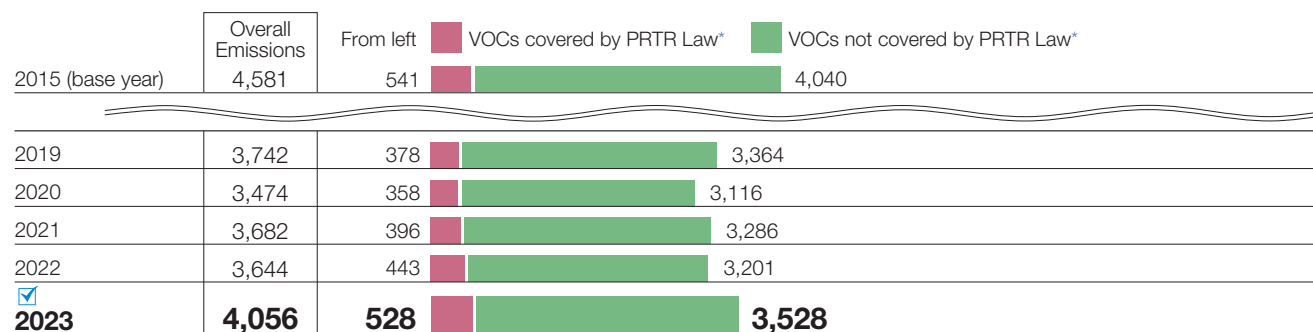
We totally eliminated small furnaces, for which burning control is difficult, and currently have four large-scale furnaces in operation, which are compliant with 2002 regulations.



Sulfur oxide is emitted through burning high-sulfur fuel oil and kerosene.

Nitrogen oxide is emitted when fuel is burned in production processes or when electric power is consumed.

Atmospheric emissions of VOCs (Unit: tons)



*PRTR Law: Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof

Environmental Management Activities—For the Reduction of Environmental Pollutants

Chemical Substances Subject to the PRTR Law

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

Annual amounts of chemical substances handled at each plant above the defined reporting levels set by the PRTR Law are tallied here (amounts listed to 2 significant figures, or to the nearest 0.1 for figures under 1).

Substance	Handled	Consumed	Removed/ consumed	Recycled	To atmosphere	Public waterways	Soil	Sewer	Waste
2-aminoethanol	43,000	–	–	–	–	–	–	–	43,000
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	3,400	3,400	3.1	–	0.4	–	–	–	–
Ethylbenzene	180,000	–	130,000	51,000	2,100	–	–	–	1,700
Ethylenediamine	1,100	540	77	–	4.1	–	–	–	460
Xylene	170,000	–	110,000	47,000	2,900	–	–	–	3,000
Cumene	3,200	–	3,200	–	20	–	–	–	–
Chromium and chromium (III) compounds	14,000	4,800	–	4,100	–	–	–	–	4,800
Hexavalent chromium compounds	5,600	3,700	1,800	–	–	–	–	–	57
2-Ethoxyethyl acetate	1,100	–	1,100	–	12	–	–	–	–
Inorganic cyanide compounds (except complex salts and cyanate)	3,000	–	280	–	460	–	–	–	2,300
N,N-dimethylformamide	140,000	–	10,000	21,000	350	–	–	–	110,000
Dioxins and dioxin-like compounds	–	–	–	–	27	–	–	–	98
Thiourea	1,100	–	1,100	–	–	–	–	–	–
Water soluble copper salts (except complex salts)	190,000	39,000	19,000	130,000	–	–	–	–	380
Triethylamine	3,400	–	240	–	13	–	–	–	3,100
Toluene	8,300,000	1,500,000	4,800,000	170,000	460,000	–	–	–	1,300,000
Naphthalene	14,000	–	12,000	1,800	69	–	–	–	90
Nickel	24,000	14,000	–	10,000	–	–	–	–	–
Nickel compounds	8,500	1,500	–	4,300	–	–	–	–	2,700
Hydrazine	1,300	1,200	1.3	–	0.1	–	–	–	64
Hexane	74,000	–	6,800	–	850	–	–	–	67,000
1,2,4-Benzenetricarboxylic acid 1,2-anhydride	1,200	1,000	–	–	–	–	–	–	180
Benzophenone	1,900	1,900	–	–	–	–	–	–	–
Boron compounds	1,700	–	–	–	–	30	–	–	1,600
Formaldehyde	710	–	180	–	530	–	–	–	–
Manganese and its compounds	1,500	–	–	–	–	–	–	–	1,500
Methacrylic acid	32,000	30,000	1,400	–	81	–	–	–	110
Methyl methacrylate	43,000	41,000	1,900	–	120	–	–	–	120
Methylnaphthalene	1,200	–	1,200	–	12	–	–	–	–
Methylenebis(4,1-phenylene) diisocyanate	13,000	2,000	2,500	–	8,700	–	–	–	–
Ethylene glycol monobutyl ether	110,000	7,500	91,000	280	250	–	–	–	12,000
Perchloric acid and its ammonium, potassium, sodium, magnesium, and lithium salts	1,100	1,100	–	–	–	–	–	–	19
Diethanolamine	1,000	–	850	–	16	–	–	–	160
Diethylene glycol monobutyl ether	1,200	–	1,100	–	87	–	–	–	–
Cyclohexane	59,000	21,000	31,000	–	1,500	–	–	–	4,700
Cerium and its compounds	7,900	6,600	–	–	–	–	–	–	1,400
Tetrahydrofuran	100,000	–	62,000	–	4,600	–	–	–	33,000
Tetramethylammonium hydroxide	37,000	–	3,100	–	–	–	–	–	34,000
Dodecan-1-thiol	4,800	4,600	220	–	24	–	–	–	–
Trimethylbenzene	52,000	–	34,000	11,000	6,400	–	–	–	740
Bis(2-ethylhexyl) (Z)-but-2-enedioate	2,100	–	1,700	–	130	–	–	–	300
(T-4)-Bis[2-(thioxo-κS)-pyridin-1(2H)-olato-κO] zinc (II)	4,300	4,100	–	–	–	–	–	–	130
Tert-butyl 2-ethylperoxyhexanoate	2,300	2,200	100	–	11	–	–	–	–
2-Tert-butoxyethanol	6,500	2,600	2,500	–	–	–	–	–	1,400
Hexanedihydrazide	25,000	24,000	–	–	–	–	–	–	770
Heptane	3,300	–	220	–	24	–	–	–	3,000
Methyl isobutyl ketone	750,000	52,000	560,000	730	31,000	–	–	–	110,000
N-Methyl-2-pyrrolidone	110,000	240	85,000	240	5,900	–	–	–	22,000
<input checked="" type="checkbox"/> PRTR-listed substances	10,550,000	1,809,000	6,009,000	450,000	528,100	30	–	0	1,754,300

Environmental Management Activities—Realizing a Society in Symbiosis with Nature

Biodiversity Conservation

To realize a society in harmony with nature, DNP minimizes its impact on biodiversity throughout the value chain and works to ensure harmony with regional ecosystems. We examine our relationship with biodiversity in our business activities and work with various stakeholders, including government agencies, municipalities, and environmental organizations, to promote specific initiatives around key themes: the sustainable procurement of raw materials and the development of green spaces on business sites.

Procurement of raw materials

In August 2012, DNP developed the DNP Group Guidelines for Procurement of Paper for Printing and Converting to achieve zero deforestation and maintain sustainable forest resources because in DNP's business activities, the procurement of paper relies heavily on and greatly affects the ecosystem. The guidelines stipulate selection criteria for suppliers and paper. Our goal is that 100% of the paper we procure is guideline compliant. We promote the use of wood from tree thinning, proactively use FSC®-certified paper, and ensure traceability to advance responsible raw material procurement.

Creation of greenery areas at business sites

DNP is promoting creation of greenery areas at business sites to establish a connection with the surrounding environment and its creatures. We can prevent the theft of animals and plants, overhunting, and overharvesting in the greenery areas of business sites because entry into them is managed. The greenery areas can contribute significantly to the preservation of biodiversity with a low risk of supporting the damage caused by invasive species and natural predators. DNP is carrying out community-based biodiversity conservation activities on the premises of our sites, including the preservation of endangered species and the creation of greenery areas in light of regional ecosystems.

Action Taken at Each Business Site

Hokkaido Coca-Cola Bottling
Forestation at Mt. Shirahata

Tree planting and nature walks at Mt. Shirahata, the source of water used in our products



Sapporo Plant,
DNP Technopack
AMA supporters club

Kyoto-Minami Plant, DNP Data Techno
Cultivation of plants designated
as endangered species by the
Kyoto prefectural government

We cultivate no-kanzo (*Hemerocallis fulva* var. *longituba*), iris, and boneset, which are designated as endangered species by the Kyoto prefectural government. We use a solar-powered rainwater sprinkling system to maintain and manage the plants.



Kitakami Plant,
DT Fine Electronics
Protection of rare species
on the property

DNP Tohoku
Million-tree project
in Miyagi Prefecture

Kamifukuoka Plant, DNP Fine Optronics
Protection of Kohanayasuri on
the premises

Protection of the habitat for Kohanayasuri (*Ophioglossum thermale* var. *nipponicum*), which grow naturally on the premises

Ashikaga Plant, CMIC CMO
Extermination of invasive
alien species

Eliminate the invasive red necked longhorn beetle (*Aromia bungii*) from the property



DNP Fine Chemicals Utsunomiya
Elimination of the non-native black locust (*Robinia pseudoacacia*)

Technology Development Center
Ushiku Plant, DNP Data Techno
Asaza Project—restoration of the Lake Kasumigaura catchment basin

Technology Development Center
Protection of pine saplings growing naturally on the premises

Research & Development Center
Protection and cultivation of a rare species of fir tree

Kashiwa Plant, DNP Technopack
Afforestation with rare Japanese beech (*Fagus crenata*) trees and Japanese beautyberry (*Callicarpa dichotoma*)

Okayama Plant

Securing a habitat for creatures by creating a Japanese blood grass (*Imperata cylindrica*) grassland

Mihara Plant, DNP Fine Optronics
Protection of the natural habitat of the Ehime ayame (*Iris rossii Baker*)

Tobata Plant,
DNP High-performance Materials
Kitakyushu municipal tree-planting project

Nara Plant, DNP Data Techno
Cultivation of a plant designated
as an endangered species by the
Nara prefectural government

We grow boneset, which is designated as an endangered species by the Nara Prefectural Government. The leaves of the plant are dried and used for sachets.



Sagami Yoki
Protection and cultivation of the medaka Japanese rice fish (*Oryzias latipes*) in the Sakawa River system

Kawasaki Plant,
DT Fine Electronics
Raising of Tama River wildlife

Yokohama Plant, DNP Technopack
Cultivation of No-kanzo (*Hemerocallis fulva* var. *longituba*) on the property
Certified supporter of the Master Plan for the Tsurumi River Basin

Nagoya area
Attracting the Chinese
windmill butterfly

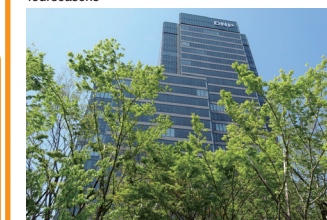
Develop green spaces to support a thriving butterfly population

Shonai River Paper Project

Fujimae tidal flat conservation activities

Ichigaya-no-Mori
(The Ichigaya forest)
in Ichigaya, Tokyo

Continue planning the Ichigaya-no-Mori (The Ichigaya forest) in this part of Tokyo where we are located
Aim: a rich landscape to feel nature and the four seasons



Environmental Activities Data

Environmental Accounting

As an environmental management tool and as a tool for communicating with society, the DNP Group calculates and publicizes its environment-related costs in accordance with the Ministry of the Environment's *Environmental Accounting Guidelines* (2005 Edition). The scope of calculation covers DNP and its consolidated subsidiaries (more specifically, manufacturing sites, development centers, office buildings and sales offices of manufacturing companies and a distribution company in Japan).

Category	Investment (million yen)		Expense (million yen)		Details of major efforts	Page(s) on which data is listed
	FY2022	FY2023	FY2022	FY2023		
(1) Business area costs						
1) Pollution prevention costs	414	466	1,078	691	VOC collection and disposal equipment, wastewater treatment facility	18, 28-30
2) Global environmental conservation costs	1,920	2,090	467	293	Switching to energy-saving facilities and lighting	18, 19, 22-24
3) Resource circulation costs	141	113	1,762	1,648	Furnace improvements, separation recycling, zero emissions (conversion to RPF/cement ingredients), resource recycling	18, 19, 25
(Total business area costs)	2,475	2,668	3,308	2,632		
(2) Up/downstream costs	0	0	153	140	Container and packaging recycling expense burden, recycling system development	20, 21
(3) Administration costs	0	0	2,525	2,458	ISO 14001 inspection and registration costs, environmental education costs, environmental report composition costs	10-13, 15-16, 21
(4) R&D costs	0	0	4,176	5,316	Research and development into environmentally conscious products and services and production methods	17, 20
(5) Social activities costs	0	0	12	15	Environmental conservation of areas outside plant compounds, biodiversity conservation, support for activities of environmental conservation groups	31
(6) Environmental remediation	0	0	0	0	Monitoring	14
Total	2,475	2,668	10,173	10,561		

● Environmental conservation costs to total costs ratio

Category	Consolidated total costs (million yen)	Costs (million yen)	Ratio
Investment of current period (FY2023)	68,300	2,668	3.91%
R&D cost of current period (FY2023)	35,236	5,316	15.09%

Environmental Activities Data

Environmental Accounting

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

Category of environmental conservation benefit	Category of indicator showing benefit	Indicator values			Remarks	Page(s) on which data is listed
		FY2022	FY2023	Difference		
1) Benefit arising from supplied resources						
Total energy input volume	Energy consumption (TJ)	15,040	13,540	−1,500		17-19, 22-24
	Unit consumption per sales for the above (TJ/billion yen)	11.0	9.5	−1.5	Energy consumed per billion yen of domestic production	17-19, 22-24
Input volume of water	Water usage (1,000 m³)	7,260	7,300	40		17-19, 27
	Unit consumption per sales for the above (1,000 m³/billion yen)	5.3	5.1	−0.2	Water usage per billion yen of domestic production	17-19, 27
Input volume of main raw materials	Supplied amount (1,000 tons)	1,131	1,002	−129		18, 25
	Amount of undesired materials generated/supplied (%)	21.8	24.7	3.0	Ratio of undesired materials to main raw materials	18, 25

2) Environmental conservation benefit related to waste or environmental impact originating from business activities

Emissions to the air	SOx emissions (tons)★	4.7	5.5	0.8		18, 29
	NOx emissions (tons)★	447	440	−7		18, 29
	Environmental pollutant emissions volume (tons)	13,166	13,351	185	VOC emissions	17-19, 29
Water quality	COD discharge (tons)★	17.8	19.3	1.5		18, 28
	Emissions of environmental pollutants (PRTR-listed substances) (tons)	0.0	0.0	0.0	None of the substances falls within the scope of reporting	30
Disposal of undesired materials	Generated undesired materials (1,000 tons)	245	247	2	Including undesired materials other than main raw materials	18, 19, 25
	Discharged waste (1,000 tons)	50.5	46.6	−3.9		18, 25
	Unit consumption per sales for the above (tons/billion yen)	178	174	−4	Discharged waste per billion yen of sales	19
	Recycling ratio (%)★	98.7	98.8	−0.1	Recycling rate of major undesired materials as a percentage of total undesired material disposal By category: Paper 99.9%, Plastics 95.5%, Metals 99.0% *Calculation method has been revised.	26
	Emissions of environmental pollutants (PRTR-listed substances) (tons)★	1,743	1,754	12	Total for 28 substances reported	30
Volume of GHG emission	GHG emissions (1,000 t-CO₂)	763	745	−18		17-19, 22
	Unit consumption per sales for the above (tons/billion yen)	560	520	−30	CO₂ emissions per billion yen of sales	17-19, 22

★ Domestic only

Environmental Activities Data

Environmental Accounting

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

Category of environmental conservation benefit	Category of indicator showing benefit	Indicator values			Remarks	Page(s) on which data is listed
		FY2022	FY2023	Difference		
Benefit related to goods produced by business activities						
CO ₂ emissions after product shipment	CO ₂ emissions (1,000 t-CO ₂)★	1,087	1,094	7	Total of part of Category 4, Categories 9, 10, 11 and 12 of Scope 3	22, 24
	CO ₂ emissions / domestic sales (1,000 t-CO ₂ /billion yen)	0.79	0.77	−0.02	CO ₂ emissions per billion yen of domestic sales	22, 24

(3) Other environmental conservation benefit

Category of indicator showing benefit	FY2022	FY2023	Difference	Remarks	Page(s) on which data is listed
Benefit related to the environmental impact of transportation					
Energy usage amount during shipment of goods (kl)★	15,710	14,850	−860	Energy consumption converted to crude oil during transport as a cargo owner	23
Energy usage amount during transport / gross sales (kl/billion yen)	11.4	10.4	−1.0	Emissions per billion yen of sales	23

Economic benefits of environmental conservation activities	Amount (million yen)			Remarks	Page(s) on which data is listed
	FY2022	FY2023	Difference		
(1) Increased sales 1) Economic benefit of R&D costs					
Sales of environmentally conscious products and services	163,100	170,590	7,490		17, 20
(2) Increased income 2) Benefit of resource recycling costs					
Income from recycling undesired materials★	2,055	1,883	−172	Sale price of waste plastics and waste oil	26

★ Domestic only

Environmental Activities Data

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 Department
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 towards comprehensive environmental issues, including product liability
FY1995	DNP wins the International Trade and Industry Minister's Prize in the 4th Grand Prize for the Global Environment Award. (The award was established in 1991 by the Japan Industrial Journal and the Fuji Sankei Communications Group, with special support by WWF Japan and sponsorship by the Environmental Agency, the Ministry of 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 ISO 14001 certification
FY1998	Mihara Plant, Display Components Operations acquires ISO 14001 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
FY2001	DNP Tokai and Sayama Plant, DNP Technopack acquire ISO 14001 certification
FY2002	DNP Tokai acquires FSC®-COC certification
FY2003	Environmental Report Division receives the 6th Environmental Report Grand Prize for superior reporting Two types of fused thermal transfer materials of the Information Media Supplies Operations receive EPD "Type III" environmental labeling certification and registration
FY2004	DNP wins the Minister for the Environment's Prize in the 14th Grand Prize for the Global Environment Award 7th Environmental Report Prize awarded for excellence
FY2005	8th Environmental Report Prize / Sustainability Report Prize awarded for excellence
FY2007	PRTR 2007 Awards PRTR Honorable Mention (Tsuruse Plant) DNP Gotanda Building wins the Green Grand Prize in the Shinagawa-ku Green Award System
FY2009	Kanto Bureau of Economy, Trade and Industry Energy Management In Business Superiority Award (received by Akabane Plant, Commercial Printing Operations)
FY2010	Revision of DNP Group Environmental Targets
FY2011	DNP's independently developed Energy-Saving Total Management System is implemented at 36 Tokyo Electric Power locations 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)
FY2012	Guidelines for Procurement of Paper for Printing and Converting are established Volume of GHG emissions are announced according to Scope 3 standards
FY2013	Targets for reduction of water usage are set Green Procurement Guidelines for Chemical Substances are set and management of chemical substances in products is strengthened
FY2014	Climate change prevention targets for FY2030 are set DNP is selected by CDP's Forest Program as sector leader in the Industrials & Autos sector DNP wins a Prize of Excellence (Judge's Prize) at the 18th Environmental Communication Awards
FY2015	DNP Group environmental targets are revised CDP places DNP on its "A List"
FY2016	DNP wins 26th Grand Prize for the Global Environment Award, Japan Business Federation Chairman's Prize DNP wins Biodiversity Action Award Japan 2016
FY2017	Hokkaido Coca-Cola Bottling wins a Special Review Panel Award in the 19th Japan Water Awards Ichigaya-no-Mori (The Ichigaya forest) certified by the ABINC
FY2018	DNP's GHG reduction targets approved by the SBT (Science Based Targets) Initiative Ichigaya-no-Mori (The Ichigaya forest) certified by the SEGES DNP wins 28th Grand Prize for the Global Environment Award, Grand Prize
FY2019	DNP endorses recommendations of Task Force on Climate related Financial Disclosures (TCFD). DNP is included in CDP's CDP Supplier Engagement leaderboard. Ichigaya-no-Mori (The Ichigaya forest) wins Award of Excellence in 2nd ABINC Awards. DNP formulates DNP Group Environmental Vision 2050.
FY2020	DNP is included in CDP's CDP Supplier Engagement leaderboard. Ichigaya-no-Mori (The Ichigaya forest) renewed the certifications of SEGES and ABINC
FY2021	Selected as an Environmentally Sustainable Company in the Environmentally Sustainable Companies category of the 3rd ESG Finance Awards Japan On the CDP Supplier Engagement Rating Leaderboard
FY2022	DNP is certified as an A-listed company, the highest CDP rating in climate change, and is included in the CDP Supplier Engagement Rating Leaderboard. For the second consecutive year, DNP has been selected as an Environmentally Sustainable Company in the Environmentally Sustainable Companies category of the 4th ESG Finance Awards Japan.
FY2023	Ichigaya-no-Mori (The Ichigaya forest) selected as a Nature Coexistence Site by the Ministry of the Environment. Received the Minister of Land, Infrastructure, Transport and Tourism Award at the 43rd Green City Awards DNP won the bronze award in the Environmental Sustainability Company category at the 5th ESG Finance Awards Japan, sponsored by the Ministry of the Environment. Certified as an A-list company, the highest CDP rating for climate change initiatives, for two consecutive years Achieved the highest Supplier Engagement Rating for five consecutive years Expanded the scope of third-party certification for its carbon footprint calculation system

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

Environmental Activities Data

Manufacturing Sites with Required Business Performance Data Disclosure

Domestic Manufacturing Sites with Required Business Performance Data Disclosure (1)

Organizations and the names used for them are current as of March 31, 2024.

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

CMIC CMO Co., Ltd. was acquired as a subsidiary in FY2023, and data from it will be included in the consolidated results starting from FY2024.

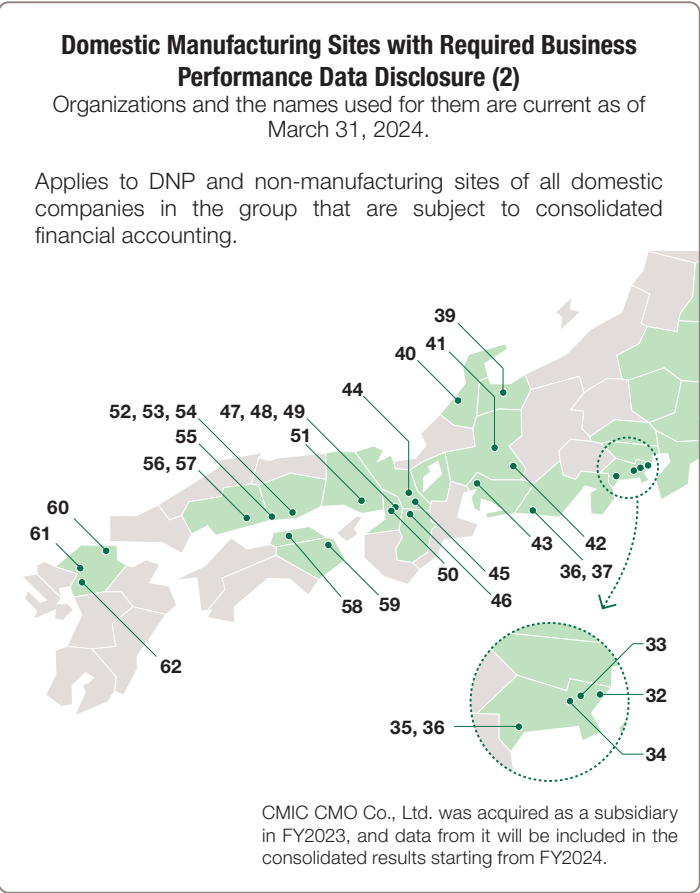
Business segments

●	Smart Communication	“Other” refers to products that do not fall under the three segments or Group companies manufacturing products that span multiple segments.
▲	Life & Healthcare	
■	Electronics	
□	Other	

Location	No.	Business segment	Site	Work content
Hokkaido	1	●	Sapporo Plant, DNP Graphica Sapporo Plant, DNP Data Techno	Printing / bookbinding Manufacturing of secure business-related products
	2	▲	Sapporo Plant, DNP Technopack	Manufacturing of packaging
	3	▲	Sapporo Plant, Hokkaido Coca-Cola Products	Manufacturing of beverages
Iwate	4	▲	Nishine Plant, CMIC CMO Co., Ltd.	Development of formulations for pharmaceuticals and related products
	5	■	Kitakami Plant, D.T. Fine Electronics	Manufacturing of electronic precision parts
Miyagi	6	●	Sendai Plant, DNP Graphica	Printing / bookbinding
Fukushima	7	▲	Izumizaki Plant, DNP Technopack	Manufacturing of packaging
	8	▲	Izumizaki Plant, DNP High-performance Materials	Manufacturing of solar cell filler
Tochigi	9	●	Utsunomiya Plant, DNP Graphica	Printing / bookbinding
	10	▲	Utsunomiya Plant, DNP Technopack	Manufacturing of packaging
	11	▲	DNP Fine Chemicals Utsunomiya	Manufacturing of pharmaceutical active ingredients and related products
Ibaraki	12	▲	Ashikaga Plant, CMIC CMO Co., Ltd.	Development of formulations for pharmaceuticals and related products
	13	●	Ushiku Plant, DNP Data Techno	Manufacturing of secure business-related products
	14	□	Tsukuba Techno Center, DNP Engineering	Manufacturing of printing machines and machine tools
Saitama	15	●	Higashimatsuyama Plant, Oguchi Book Binding & Printing	Bookbinding
	16	●	Shiraoka Plant, DNP Book Factory	Printing / bookbinding
	17	▲	Tokyo Plant, DNP Living Space	Manufacturing, printing, and processing of building materials
	18	▲	Tsuruse Plant, DNP High-performance Materials	Manufacturing of lithium ion battery outer cover materials
	19	●	Miyoshi Plant, Oguchi Book Binding & Printing	Bookbinding
	20	●	Warabi Plant, DNP Data Techno	Manufacturing of secure business-related products
	21	▲	Sayama Plant, Production of Flexible Packaging Division, DNP Technopack	Manufacturing of packaging
	22	▲	Sayama Plant, Production of Paper Packaging Division, DNP Technopack	Manufacturing of packaging
	23	●	Sayama Plant, DNP Imagingcomm	Dye-sublimation and melt-type thermal transfer Manufacturing and processing of recording materials
	24	■	Kamifukuoka Plant, DNP Fine Optronics	Manufacturing of electronic precision parts
Chiba	25	●	Kuki Plant, Publishing Innovation Operations	Printing / bookbinding
	26	▲	Kuki Plant, DNP High-performance Materials	Manufacturing of battery components and related materials
	27	▲	Kashiwa Plant, DNP Technopack	Manufacturing of packaging
Tokyo	28	●	Shinjuku-ku Enoki-cho Plant, DNP Graphica	Printing / bookbinding
	29	●	Kamiya Plant, DNP SP Innovation	Manufacturing of all types of advertising items
	30	▲	DNP Hoso Kita-ku	Processing filling and packaging
	31	●	Kamiya Plant, DNP Data Techno	Manufacturing of secure business-related products

Environmental Activities Data

Manufacturing Sites with Required Business Performance Data Disclosure



Business segments		
●	Smart Communication	"Other" refers to products that do not fall under the three segments or Group companies manufacturing products that span multiple segments.
▲	Life & Healthcare	
■	Electronics	
□	Other	

Location		No.	Business segment	Site	Work content
Kanagawa	Kawasaki	32	■	Kawasaki Plant, D.T. Fine Electronics	Manufacturing of electronic precision parts
	Tsuzuki-ku, Yokohama	33	▲	Yokohama Plant, DNP Technopack	Manufacturing of packaging
	Midori-ku, Yokohama	34	□	Tokyo Plant, DNP Fine Chemicals	Manufacturing of chemicals, etc.
	Odawara	35	▲	Odawara Plant, Sagami Yoki	Manufacturing of various plastic tubes
	Aikawa, Aiko	36	▲	Tokyo Plant, DNP Elio	Printing and processing metal sheets
Shizuoka	Shimada	37	▲	Shizuoka Plant, CMIC CMO Co., Ltd.	Development of formulations for pharmaceuticals and related products
	Iwata	38	▲	Iwata Plant, DNP Tamura Plastic	Manufacturing of car supplies and various types of plastic products
Toyama	Imizu	39	▲	Toyama Plant, CMIC CMO Co., Ltd.	Development of formulations for pharmaceuticals and related products
Ishikawa	Hakusan	40	□	Hokuriku Techno Center, DNP Engineering	Manufacturing of secure business-related products
Gifu	Gero	41	▲	Hagiwara Plant, DNP Tamura Plastic	Manufacturing of car supplies and various types of plastic products
	Nakatsugawa	42	▲	Tokai Plant, DNP Technopack	Manufacturing of packaging
Aichi	Moriyama-ku, Nagoya	43	●	Nagoya Plant, DNP Graphica	Printing / bookbinding
Kyoto	Minami-ku, Kyoto	44	●	Kyoto Plant, DNP Data Techno	Manufacturing of secure business-related products
	Kyotanabe	45	▲	Kyotanabe Plant, DNP Technopack	Manufacturing of packaging
Nara	Kawanishi, Shiki	46	●	Nara Plant, DNP Data Techno	Manufacturing of secure business-related products
Osaka	Neyagawa	47	▲	Neyagawa Plant, DNP Technopack	Manufacturing of packaging
		48	▲	Osaka Plant, DNP Elio	Printing and processing metal sheets
		49	●	Neyagawa Plant, DNP SP Innovation	Manufacturing of all types of advertising items
	Kadoma	50	●	DNP Media Support	Manufacturing of magnetic cards
Hyogo	Ono	51	●	Ono Plant, DNP Graphica	Printing / bookbinding
Okayama	Okayama	52	●	Okayama Plant, DNP Imagingcomm	Manufacturing of dye-sublimation transfer materials
		53	▲	Okayama Plant, DNP Living Space	Manufacturing, printing, and processing of building materials
		54	■	Okayama Plant, DNP Fine Optronics	Manufacturing of electronic parts
	Kasaoka	55	□	Kasaoka Plant, DNP Fine Chemicals	Manufacturing of chemicals, etc.
Hiroshima	Mihara	56	■	Mihara East Plant, DNP Fine Optronics	Manufacturing of electronic precision parts
		57	■	Mihara West Plant, DNP Fine Optronics	Manufacturing of electronic parts
Kagawa	Sakaide	58	▲	Sakaide Plant, Sagami Yoki	Manufacturing of various plastic tubes
Tokushima	Tokushima	59	□	DNP Shikoku	Plate-making / printing / manufacturing of packaging
Fukuoka	Tobata-ku, Kitakyushu	60	▲	Tobata Plant, DNP High-performance Materials	Manufacturing of lithium ion battery outer cover materials
	Minami-ku, Fukuoka	61	●	Fukuoka Plant, DNP Graphica Fukuoka Plant, DNP Data Techno	Manufacturing, printing, and bookbinding of secure business-related products
	Chikugo	62	▲	Chikugo Plant, DNP Technopack	Manufacturing of packaging

Environmental Activities Data

Manufacturing Sites with Required Business Performance Data Disclosure

Overseas Manufacturing Sites with Required Business Performance Data Disclosure

Business segments

●	Smart Communication
▲	Life & Healthcare
■	Electronics

CMIC CMO Co., Ltd. was acquired as a subsidiary in FY2023, and data from it will be included in the consolidated results starting from FY2024.

Country	City	No	Business segment	Site	Work content
Italy	Agrate Brianza	①	■	DNP Photomask Europe S.p.A.	Manufacturing of semiconductor photomasks
Denmark	Karlslunde	②	■	DNP Denmark A/S	Manufacturing and processing of electronic precision parts and lithium-ion battery components
Netherlands	Amsterdam	③	●	DNP Imagingcomm Europe B.V.	Dye-sublimation and melt-type thermal transfer Manufacturing and processing of recording materials
USA	Concord, NC	④	●	DNP Imagingcomm America Corporation	Dye-sublimation and melt-type thermal transfer Manufacturing and processing of recording materials
	Pittsburgh, PA	⑤	●	DNP Imagingcomm America Corporation	Dye-sublimation and melt-type thermal transfer Manufacturing and processing of recording materials
	Cranbury	⑥	▲	CMIC CMO USA Corporation	Development of formulations for pharmaceuticals and related products
Malaysia	Johor Bahru	⑦	●	DNP Imagingcomm Asia Sdn. Bhd.	Dye-sublimation and melt-type thermal transfer Manufacturing and processing of recording materials
Indonesia	Pulo Gadung	⑧	▲	PT DNP Indonesia	Manufacturing of packaging
	Karawang	⑨	▲	PT DNP Indonesia	Manufacturing of packaging
Vietnam	Binh Duong Province	⑩	▲	DNP Vietnam Co., Ltd.	Manufacturing of packaging
Korea	Bucheon	⑪	▲	CMIC CMO Korea Co., Ltd.	Development of formulations for pharmaceuticals and related products

①,②,④,⑤,⑦ April 2023–March 2024 totals ③,⑧–⑩ January 2023–December 2023 totals

Independent Review Report Comments by an Independent Institution



LRQA Independent Assurance Statement Relating to DNP Group's Environmental Data within DNP Group Environmental Report 2024 for the fiscal year 2023

This Assurance Statement has been prepared for Dai Nippon Printing Co., Ltd.'s in accordance with our contract.

Terms of engagement

LRQA Limited ("LRQA") was commissioned by Dai Nippon Printing Co., Ltd. ("the Company") to provide independent assurance on DNP Group's environmental data and information ("the report") within DNP Group Environmental Report 2024 for the fiscal year 2023, that is, 1 April 2023 to 31 March 2024¹, against the assurance criteria below to a limited level of assurance and professional judgement of the verifier using ISAE3000 (Revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information and ISO14064-3:2019 Greenhouse gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions for GHG emissions.

Our assurance engagement covered the operations and activities relating the Company and its consolidated subsidiary in Japan and overseas^{2,3,4} and specifically the following requirements:

- Verifying conformance with the Company's reporting methodologies;
- Evaluating the accuracy and reliability of data for the selected environmental indicators listed Appendix 1;^{5,6}

Our assurance engagement excluded the data and information of the Company's suppliers, contractors and any third-parties mentioned in the report.

LRQA's responsibility is only to the Company. LRQA disclaims any liability or responsibility to others as explained in the end footnote. The Company's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of the Company.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that the Company has not, in all material respects:

- Complied with the Company's reporting methodologies
- Disclosed accurate and reliable environmental data

The opinion expressed is formed on the basis of a limited level of assurance⁷ and at the materiality of the professional judgement of the verifier.

¹ The reporting period for some overseas manufacturing subsidiaries are 1 January 2023 to 31 December 2023.

² The scope is covered Dai Nippon Printing Co., Ltd. and its 26 Manufacturing companies and 1 logistics company.

³ The scope is covered non-manufacturing sites of Dai Nippon Printing Co., Ltd. and domestic subsidiaries (including 3 Development base, office building, and business offices etc.)

⁴ Overseas 9 manufacturing subsidiaries (DNP Photomask Europe S.p.A., DNP Denmark A/S, DNP Imagingcomm Europe B.V., DNP Imagingcomm America Corporation (Concord), DNP Imagingcomm America Corporation (Pittsburgh), DNP Imagingcomm Asia Sdn. Bhd., PT DNP Indonesia (Karawang), PT DNP Indonesia (Pulogadung), DNP Vietnam Co., Ltd.)

⁵ LRQA undertook a limited assurance engagement of the environmental data marked with "✓" within DNP Group Environmental Report 2024. And see Appendix 1 for detailed information on the data covered by this Independent Assurance Statement.

⁶ When breakdown data for each department is listed in DNP Group Environmental Report 2024, the data is also assured.

⁷ The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.



LRQA's approach

LRQA's assurance engagements are carried out in accordance with ISAE3000 (Revised) and ISO14064-3:2019 for GHG emissions. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:

- Auditing the Company's data management systems to confirm that there were no significant errors, omissions or misstatements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification.
- Interviewing with those key people responsible for compiling the data and drafting the report.
- Sampling datasets and traced activity data back to aggregated levels;
- Verifying the historical environmental data and records for the fiscal year 2023; and
- Visiting Kamifukuoka Plant of DNP Fine Optronics Co., Ltd. and Kyotanabe Plant of DNP Technopack Co., Ltd. to confirm the data collection processes, record management practices.

Observations

It is expected the company to actively seek opportunities for further improvement through the information from sites and other means to ensure efficient and accurate aggregation and calculation of environmental data.

LRQA's standards, competence and independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 Greenhouse gases - Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition and ISO/IEC 17021-1 Conformity assessment - Requirements for bodies providing audit and certification of management systems - Part1: Requirements that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

LRQA is the certification body of ISO9001 and ISO14001 for the DNP Elio Co., Ltd. which is the consolidated subsidiary of the Company and as such does not compromise our independence or impartiality.

Signed

Dated: 22 June 2024

Kazuyori Yukinaka

LRQA Lead Verifier

On behalf of LRQA Limited

10th Floor, Queen's Tower A, 2-3-1 Minatomirai, Nishi-ku, Yokohama, JAPAN

LRQA reference: YKA00000845

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Appendix 1: The Scope of Work

LRQA undertook a limited assurance engagement of the environmental data listed below within the Environmental Report 2024. (The number of pages on the left side of this table below is the page published in the Environmental Report 2024.)

P.17	GHG emissions ^a
	Fuel use for transport per amount of sales
	Emissions of VOCs (except for methane)
	Resource recycling rate
	Landfill waste rate
	Water use per amount of sales (includes overseas location)
	Percentage of super-eco products sales
P.18-19	Main raw materials consumption (Paper, Film, Plastic, Metal, Ink, and Others)
	Solvent use
	Acid and alkaline use
	Energy consumption (Electricity, City gas, LNG, LPG, Fuel oil, Steam, and Kerosene)
	Water use
	GHG emissions ^{a,b}
	Atmospheric emissions of VOCs
	Water discharged
	Total amount of undesired materials
	Waste emissions
	Landfill waste amount
P.20	Sales of super-eco products (including the breakdown of the sales amount of the department)
	Percentage of super-eco products sales
P.22	Scope 1 and Scope 2 GHG emissions ^{a,b} (including the breakdown of Scope 1 and Scope 2 [Market-based])
	Domestic fuel composition
P.23	Fuel use for transport
	Fuel use for transport per amount of sales
	Power consumption at major offices
P.24	Scope1,Scope2,Scope 3 GHG emissions ^{a,b,c} (Categories 1,2,3,4,5,6,7,9,11, and 12)
P.25-26	Amount of resource recycling, Amount of waste (waste + valuable waste) excluding paper valuable waste, Resource recycling rate,
	Landfill waste amount, Landfill waste rate (domestic)
	Non valuable emissions, Non valuable emissions (amount excluding resources)
	Waste emissions
P.27	Water used, Water discharged
P.29	Atmospheric emissions of VOCs (includes the breakdown of PRTR and non-PRTR VOCs)
P.30	Chemical Substances Subject to the PRTR Law (includes the breakdown of Release and Transfer amount)

Verification period

- Fiscal year 2023 (1 April 2023 to 31 March 2024)
- Some overseas plants collect and aggregate the environmental data in the calendar year 2023 (1 January 2023 to 31 December 2023).

^a GHG quantification is subject to inherent uncertainty.

^b Regarding Scope3 GHG emissions, the scope is covered major domestic sites (excluding Hokkaido Coca-Cola Products and the subsidiaries book stores etc.) and major overseas sites (PT DNP Indonesia, DNP Imagingcomm America Corporation, and DNP Imagingcomm Asia Sdn.Bhd). The companies included in each category differ. GHG emissions from the Company's own logistics transportation should be partially categorized as Scope 1, but due to difficulties in separating it out, all GHG emissions are calculated as Category 4 of Scope 3.

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