Environmental Policy

Basic Approach

Approach Policy

With growing awareness of environmental conservation throughout the world in the 1990s, the scope of environmental issues to be tackled by businesses grew significantly. TOPPAN reorganized the framework for environmental conservation by establishing the Ecology Center in 1991 and formulating a Declaration on the Global Environment, a basic philosophy for environmental conservation activities, in 1992.

In April 2009 we revised this declaration into the TOPPAN Group Declaration on the Global Environment, an environmental action philosophy for the entire Group. The revised declaration has reflected our commitment to realizing a sustainable society where all living things can coexist into the future. We are intensifying our environmental activities based on this action philosophy.

The TOPPAN Group Declaration on the Global Environment

As responsible members of international society, we who work within the TOPPAN Group strive to realize a sustainable society through forward looking corporate activities with consideration for the conservation of the global environment.

Basic Principles

- 1. We observe all laws, regulations and in-company rules relating to the environment.
- 2. For the future of the Earth, we strive for the effective utilization of limited resources and the reduction of all types of environmental burden.
- 3. With foresight, we promote the development and widespread

use of products that show consideration for the environment, and contribute to the environmental activities of customers.

- 4. We engage in communication related to the environment with a wide range of peoples both inside and outside the company, and strive for mutual understanding.
- 5. We also take a proactive approach to environmental conservation in corporate activities in international society.

Formulated in April 1992 Revised in October 2023

TOPPAN Group Environmental Policy

1. Environmental Issues to Address

The TOPPAN Group uses life-cycle assessment (LCA) to identify environmental issues based on the environmental impact of its business activities.

Environmental Issues

Mineral resources

- 1. Contributing to
- Decarbonization
- 2. Preserving Biodiversity
- 3. Contributing to Resource Circulation
- 4. Optimal Water Use

TOPPAN Group Environmental Policy

Governance (G)

Policy

In April 2024 we formulated a TOPPAN Group Environmental Policy as a replacement to the Annex to the TOPPAN Group Declaration on the Global Environment. This policy sets forth the environmental issues to address, our commitments, and systems and initiatives for implementation for the creation of a sustainable society as advocated in the declaration. Under this policy, we will deploy solutions to global environmental issues as means of enhancing our corporate value and shaping a sustainable society.

Environmental Issues

- 1) Contributing to Decarbonization: Working to tackle climate change, conserve forest resources, and reduce fossil resource consumption.
- Preserving Biodiversity: Working to conserve forest and water resources and prevent pollution.
- 3) Contributing to Resource Circulation: Working to ensure the circular use of fossil, forest, and mineral resources.
- Optimal Water Use: Working to optimize water consumption, recharge water by conserving forest resources, and prevent pollution.

2. Commitments

1. Scope

We advance initiatives and collaboration focused not only on our own business activities but on the entire value chain. This includes

Sustainability Report 2024 < 🔺 💙

Water resources Climate change

Atmospheric pollution Photochemical oxidants

Land use

Waste

Environmental Impact

Fossil resources

Forest resources

Contents	Introduction	Management	Social (S)	Environment (E)	Governance (G)	Recognition / Assurance

production activities and business facilities, products and services, distribution and logistics, waste management, suppliers, service providers, contractors, and other major business partners (businesses outside of our control, joint venture partners, licensees, subcontracting partners, etc.), due diligence, mergers, and acquisitions.

2. Legal Compliance

In conducting our business activities, we comply with laws, regulations, and other requirements related to environmental conservation.

3. Environmental Conservation and Pollution Prevention

In conducting our business activities, we will strive to prevent pollution of the atmosphere, water, and soil; control water consumption; and protect the environment to ensure the provision of sanitary water to employees and local residents.

4. Measures to Address Climate Change

We will strive to reduce greenhouse gas emissions in our business activities and through the products and services we provide.

5. Preservation of Natural Capital and Biodiversity

In conducting our business activities, we will strive to preserve natural capital, including biodiversity, and to consider the human rights of local residents in procurement.

6. Deforestation Prevention

We will strive to achieve zero deforestation associated with forest resources in paper procurement.

7. Continuous Improvement

To fulfill our commitments, we will make continuous efforts to improve our environmental management system, environmental vision and targets, and relationships with internal and external stakeholders.

3. Systems and Initiatives for Implementation

1. Environmental Management System

Our environmental management system is structured based on ISO 14001. Environmental management systems based on ISO 14001 drive

improvements through a PDCA cycle of planning, support and operation, assessment, and improvement. In addition, the Ecology Center, which is the organization responsible for overseeing environmental conservation activities, monitors, checks, and audits environmental performance data and legal compliance to ensure continuous improvement.

2. Governance

The Board of Directors of TOPPAN Holdings Inc. is the highest level body responsible for the TOPPAN Group's environmental conservation activities. As the organization that oversees environmental conservation activities, the Ecology Center advances efforts under the direction of an officer appointed by the Board of Directors, supervises and assesses activities, and reports the results of verification to the Board of Directors. By supervising and providing guidance on the approval and progress of the TOPPAN Group Environmental Policy, the TOPPAN Group Environmental Vision, and the TOPPAN Group Medium-and-Long-Term Environmental Targets, the Board of Directors advances initiatives focused on key environmental issues for management, such as countermeasures to climate change and preservation of natural capital.

3. Environmental Vision and Targets

To drive solutions to environmental issues, we will formulate a long-term environmental vision as well as medium-term environmental targets that serve as milestones and will advance initiatives to achieve the targets.

4. Raising the Awareness of Internal and External Stakeholders

We will contribute to solutions to environmental issues by disclosing information on the TOPPAN Group's environmental initiatives including our declaration on the global environment, environmental policies, performance data, and the progress of our efforts—and communicating with internal and external stakeholders based on the information disclosed.

5. Employee Education

To drive solutions to environmental issues, we will provide TOPPAN Group employees with educational opportunities that enable them to acquire and put into practice the necessary knowledge on the environment.

Formulated in April 2024

Management

Envi

Environment (E)

Environmental Policy | Disclosure in Accordance with the TCFD and TNFD Recommendations | Environmental Management | Contributing to Decarbonization | Biodiversity | Building of a Recycling-oriented Society | Control of Chemical Substances | Pollution Control | Environmental Data

Social (S)

Environmental Targets

Policy Activity results, performance data

TOPPAN Group Environmental Vision 2050

We pledge our ongoing commitment to addressing environmental issues throughout the supply chain in cooperation with the communities we work with around the world. To accelerate the Group's initiatives for a sustainable society that supports all forms of life in the global ecosystem of tomorrow, we have added two themes to the TOPPAN Group Environmental Vision 2050 ("Vision 2050"): preserving biodiversity and aiming for net zero Scope 3 greenhouse gas emissions. Vision 2050 is the long-term environmental policy we established in 2021.

TOPPAN Group Medium-and-Long-Term Environmental Targets for Fiscal 2030

We partially revised the TOPPAN Group Medium-and-Long-Term Environmental Targets for Fiscal 2030 ("fiscal 2030 goals") in April 2024.

April 2024 Updates to the Fiscal 2030 Goals

Main Points

- Raised the renewable energy ratio from 6.5% to 25% for the reduction of Scope 1 & 2 greenhouse gas emissions, to respond to emission increases due to the expanded boundary of the targets.
- Set fiscal 2025 as the target year for verifying 100% legality in the procurement of raw materials for paper across the Group, including overseas sites.

TOPPAN Group Environmental Vision 2050

As a member of international society, the TOPPAN Group aims to enable "fulfilling, sustainable living" by contributing to decarbonization, preservation of biodiversity, resource circulation, and the optimal use of water through forward-looking activities with consideration for preservation of the global environment.

- 1. Contributing to Decarbonization Aiming for net zero Scope 1 & 2 and Scope 3 greenhouse gas emissions.
- Preserving Biodiversity
 Aiming for a society that coexists in harmony with nature, balancing conservation with socioeconomic activity.
- 3. Contributing to Resource Circulation Aiming for zero waste emissions.
- Optimal Water Use Contributing to achieving optimal water use and improving water quality by preventing pollution.

Governance (G)

TOPPAN Group Medium-and-Long-Term Environmental Targets for Fiscal 2030

1. Contributing to Decarbonization Reduce Scope 1 & 2 greenhouse gas emissions by 54.6% (by 847 kt-CO₂e) compared to the fiscal 2017 level (1,552 kt-CO₂e). (Renewable

energy ratio of 25%) Reduce Scope 3 greenhouse gas emissions by 54.6% (by 3,769 kt-CO₂e) compared to the fiscal 2017 level (6,904 kt-CO₂e).

- 2. Preserving Biodiversity
- Confirm 100% legality in procurement of raw materials of paper by fiscal 2025.

Contribute to the conservation of regions in which humans coexist with nature both inside and outside the Group, covering an area equivalent to 10% of the area of manufacturing sites. 3. Contributing to Resource Circulation

Reduce final landfill waste disposal by 60% (by 5,296 t) compared to the fiscal 2017 level (8,739 t).

Increase waste plastic material recycling rate by 9%pt. (to 65%) compared to the fiscal 2017 level (56%).

4. Optimal Water Use

Achieve water withdrawal reduction targets for at least 50% of sites (4 out of 7 sites) with high water risk (water stress exceeding 40%). Ensure no cases of action taken by authorities due to exceeding regulatory threshold values.

SBTi Approved GHG Emission Reduction Targets

TOPPAN Holdings has received new Net-Zero Target validation from the Science Based Targets initiative (SBTi) for the TOPPAN Group's greenhouse gas (GHG) emission reduction targets for the entire value chain.

More details on our SBTi Approved GHG Emission Reduction Targets >

https://www.holdings.toppan.com/en/sustainability/environment/#anchor_07

Overall net-zero target	2050 target Net-zero Scope 1 & 2 and Scope 3 GHG emissions
Near-term targets	2030 targets Scope 1 & 2 GHG emissions: Reduce by 54.6% compared to the fiscal 2017 level. Scope 3 GHG emissions: Reduce by 54.6% compared to the fiscal 2017 level.
Long-term targets	2050 targets Scope 1 & 2 GHG emissions: Reduce by 90% compared to the fiscal 2017 level. Scope 3 GHG emissions: Reduce by 90% compared to the fiscal 2017 level.

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Environmental Policy Disclosure in	n Accordance with the TCFD and TNFD Re	commendations Environmental Managem	ent Contributing to Decarbonization	Biodiversity Building of a Recycling-oriente	d Society Control of Chemical Substances	Pollution Control Environmental Data

Transition Plan for Carbon Neutrality by 2050

Scope 1 & 2 Greenhouse Gas Emissions

By 2030, the TOPPAN Group will focus on energy efficiency measures and the preferential adoption of low-carbon power and renewable energy sources.

From 2030, we will switch fuel sources and increase the use of decarbonized fuel.

By current estimates, approximately 10% of the Scope 1 & 2 greenhouse gas (GHG) emissions resulting from our operations in fiscal 2017 will still be emitted in 2050. These emissions will be absorbed using carbon capture/storage technologies, CO₂ reuse technologies, and other carbon neutrality measures deployed to achieve net zero emissions by 2050.

Scope 3 Greenhouse Gas Emissions

By 2030, TOPPAN will further adopt low-carbon materials and switch from paper to digital data through the digital transformation (DX).

From 2030, we will adopt low-carbon logistics companies outside of the Group and shift from fossil fuels to electricity to power vehicles owned by logistics companies within the Group.

By current estimates, approximately 10% of the Scope 3 GHG emissions resulting from our operations in fiscal 2017 will still be emitted in 2050. We will absorb these emissions by investing in CO_2 recovery projects and expanding greenbelts to achieve net zero emissions by 2050.





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Single-year Environmental Targets

The Ecology Center aggregates annual environmental performance data related to targets set under the fiscal 2030 goals, reports results to the Board of Directors, sets single-year targets, and develops measures for the current year with authorization from the Board of Directors. Site-specific targets set in line with the Groupwide targets are treated as key performance indicators for managing the progress of environmental conservation activities carried out at individual sites.

Environmental Targets for Fiscal 2024

	Performance Target	Performance Indicator	Target Value for Fiscal 2024
		Scope 1 & 2 greenhouse gas emissions	1,019 kt-CO2e
1) Contributing to decarbonization	Reduce CO ₂ emissions	Renewable energy ratio	3.43%
accaroombaton		Scope 3 greenhouse gas emissions	4,875 kt-CO2e
2) Proceeding	Prevent illegal deforestation Confirm the legality of raw materials p for paper production		100%
2) Preserving biodiversity	Contribute to a society that Area of land in which humans coexist in harmony with nature		Increase by 1% (23,000 m ²) relative to the total area of manufacturing sites
3) Contributing to	Reduce final landfill waste disposal	Final landfill waste disposal	4,466 t
resource circulation	Circulate resources	Waste plastic material recycling rate	51.0%
(1) Optimal water use	Reduce water withdrawal in regions with higher water risk	No. of sites in high-water-risk regions that implement water-saving measures	4 sites
4) Optimat water use	Prevent water pollution	No. of actions taken by authorities in response to exceeded regulatory standards	0

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Environment-related Data

Activity results, performance data

TOPPAN Group Medium-and-Long-Term Environmental Targets for Fiscal 2030 (Fiscal 2023 Results)

TOPPAN has been undertaking environmental conservation activities to ensure that the entire Group attains the target values set for fiscal 2030. The values from fiscal 2017 are set as baselines.

Scope 1 & 2 Greenhouse Gas Emissions ✓ In fiscal 2023 we achieved our single-year Scope 1 & 2 greenhouse gas (GHG)-emission reduction target towards the fiscal 2030 goal (under the Science Based Targets initiative [SBTi] 1.5°C scenario).



*For Scope 1 & 2 emissions, greenhouse gas (GHG) emissions associated with electricity consumption at domestic sites are calculated using the adjusted emission factors according to the method specified in the Ministerial Ordinance Concerning the Calculation of Greenhouse Gas Emissions from the Business Activities of Specified Dischargers issued by the Ministry of the Environment (MOE) of Japan. The conversion factors used to calculate GHG emissions associated with electricity consumption at overseas sites are prioritized in the following order: 1) the factors independently set by the electric utilities from which Group sites purchase electricity, 2) the factors published by central and local governments, and 3) the latest factors published by the International Energy Agency (IEA). GHG emissions associated with fuel consumption, excluding electricity consumption, are calculated globally by the MOE method specified in the Ministerial Ordinance Concerning the Calculation of Greenhouse Gas Emissions from the Business Activities of Specified Dischargers.

Scope 3 Greenhouse Gas Emissions ✓ In fiscal 2023 we failed to attain our single-year Scope 3 GHGemission reduction target towards the fiscal 2030 goal (under the SBTi 1.5°C scenario).



*The methods for calculating Scope 3 GHG emissions are presented on page 114.

*The results for fiscal 2017 and 2022 are adjusted based on the calculation methods applied to the fiscal 2023 results. (The results before the revision were 7,365 kt-CO₂e and 5,929 kt-CO₂e, respectively.)

Renewable-derived Energy: Amount and Ratio

Fiscal Year	Renewable-derived Energy (GWh/year)	Ratio (%)
2021	11.10	0.67
2022	20.22	1.19
2023	41.81	2.52

*Renewable-derived energy (electricity derived from renewable energy sources) is the renewable energy procured from off-site power purchase agreement (PPA) providers and electricity retailers plus the total energy generated at renewable energy power facilities (for solar power and hydro power) installed at Group sites.

*The ratio of renewable-derived energy is the percentage of electricity derived from renewable energy sources out of our overall power consumption.

Final Landfill Waste Disposal 🗸

Efforts have been underway since fiscal 2021 to attain the single-year targets set in line with the fiscal 2030 goal. We succeeded in attaining the reduction target in fiscal 2023.



*The data for fiscal 2022 and earlier are adjusted based on revised calculation methods.

Waste Plastic Material Recycling Rate

Efforts have been underway since fiscal 2021 to attain the single-year targets set in line with the fiscal 2030 goal. Our recycling-rate target was not attained in fiscal 2023.





*The data for fiscal 2022 and earlier are adjusted based on revised calculation methods.

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Assessing Environmental Impact

Approach Activity results, performance data

We apply the "Life-cycle Impact assessment Method based on Endpoint modeling (LIME)" to assess the degree to which our initiatives for achieving environmental targets have reduced the total environmental impact across the Group. This life cycle assessment allows us to consolidate INPUT and OUTPUT data on the environmental burden associated with business activities into a single index of environmental impact. LIME provides us with a quantitative view of how environmental impact is changing from the base year.

Quantifying Environmental Impact based on LIME

We apply the LIME method to quantify the total environmental impact across the Group, setting the base year value to 100.

With LIME 3, we attained a 7.4% reduction in environmental impact and a 25% enhancement in environmental efficiency in fiscal 2023, compared with the baseline values in fiscal 2017 (the base year in the LIME 3 calculation).

LIME 3 Assessment across the Group

Environmental Impact and Environmental Efficiency



*The value in fiscal 2017 = 100 (baseline); calculated with nonproduction sites excluded

*Environmental efficiency = net sales / environmental impact We have been reducing our climate-change-related impact, a large component of our overall environmental impact, primarily through two channels: energy-saving and other eco initiatives that reduce energy consumption, and high-efficiency production and material recycling methods that reduce resource consumption.







*TOPPAN's environmental impact cannot be expressed in uniform terms or units, as the materials and product types handled by the Group differ among the business fields. We therefore assess the environmental impact associated with key items for each business field.