

Disclosure in accordance with the TNFD

Positioning of this disclosure:

This disclosure is a pilot disclosure that references the TNFD recommendations and, as a first-year initiative, places emphasis on current-state assessment and fundamental analysis. Going forward, we plan to progressively enhance the scope of analysis, the level of quantitative assessment, and the integration of findings into strategy.

1. Application of Materiality

In assessing nature-related issues, our Group adopts a “double materiality” approach. Specifically, we consider both (1) the impact of changes in natural capital on our business (financial materiality) and (2) the impact of our business activities on natural capital and ecosystems (impact materiality). This enables us to formulate strategies that go beyond mere risk avoidance and achieve a balance between coexistence with nature and business growth.

2. Scope of Disclosure

As our first attempt at nature-related disclosure, this report focuses on “understanding the current situation” and analyzes data primarily related to our direct operations. Going forward, we will expand the scope to cover the entire value chain, including the supply chain and product lifecycle, and strengthen our assessments of dependencies and impacts. We will also deepen our assessment of nature-related risks by region and reflect these findings in our global business strategy.

3. Regional Characteristics of Nature-Related Issues

Flat glass, our Group’s flagship product, is not well-suited for long-distance transport; consequently, product supply tends to follow a “local production for local consumption” model, and our production sites are dispersed across the globe. Due to this business structure, each site is located in a distinct natural environment, and risks and opportunities related to natural capital are significantly influenced by regional environmental characteristics.

With a full understanding of these regional characteristics, the Group places significant emphasis on the environmental characteristics of each location when assessing nature-related issues.

4. Integration with Other Sustainability Issues

Nature-related issues are closely linked to other sustainability issues, such as climate change, resource circulation, human rights, and local communities. When assessing our dependence on and impact on natural capital, the Group comprehensively considers climate risks and social aspects and reflects these in our company-wide management strategy. Going forward, we will conduct integrated scenario analysis of nature-related risks and climate risks to evaluate their combined impact on our business.

5. Time Horizons Considered

In this disclosure, we examine dependencies, impacts, risks, and opportunities across short-term (1-2 years) and medium- (2-4 years) to long-term (5 years +) time horizons. As we expand and deepen our region-based analyses, we will further explore what time horizons should be established to appropriately capture our Group's nature-related issues.

6. Engagement with Indigenous Peoples, Local Communities, and Affected Stakeholders

We believe that dialogue and collaboration with external stakeholders are essential for identifying and addressing nature-related issues. Our Group is working in partnership with local governments, NGOs, NPOs, academic institutions, and local communities to advance initiatives related to biodiversity conservation and water resource management. We are also striving to build relationships of trust with local communities through environmental education and awareness-raising activities in which employees and local residents can participate.

Furthermore, recognizing the importance of human rights for stakeholders involved in our business activities, we have established a human rights due diligence framework that extends to our supply chain. These initiatives are implemented in accordance with the "Group Supply Chain Code of Conduct" and the "Sustainable Supply Chain Charter," and we engage continuously with suppliers by evaluating and supporting improvements in their practices.

In particular, when procuring raw materials and supplies related to natural capital, we take care to ensure that the human rights of affected stakeholders—including indigenous peoples and local communities in the regions where these materials are sourced or produced—are not infringed upon. These considerations are incorporated into our processes for assessing and addressing nature-related risks in the supply chain, and we view them as contributing to the reduction of nature-related risks across the entire value chain.

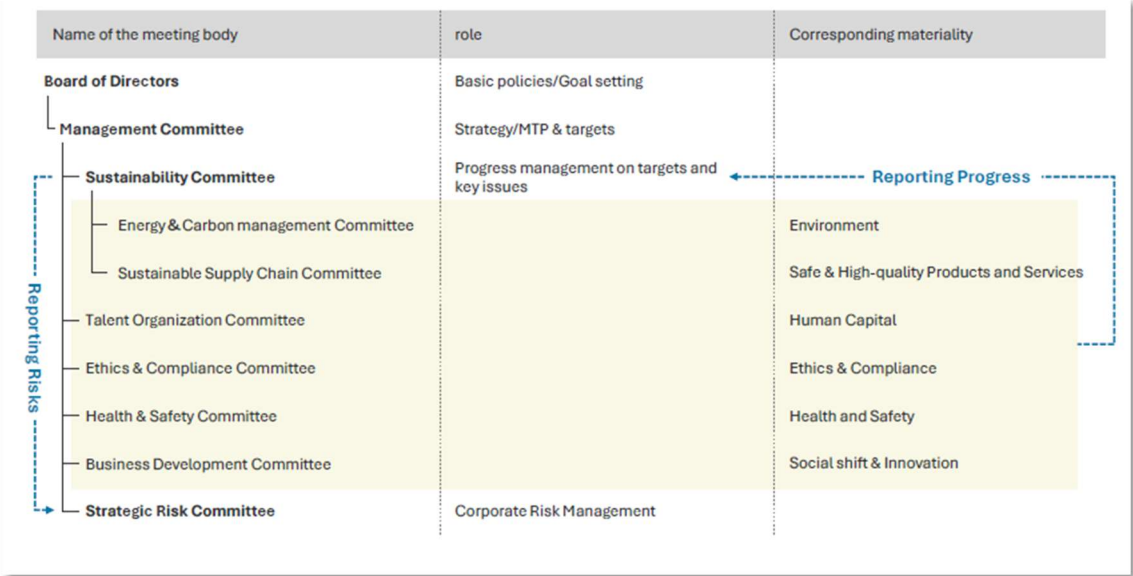
Governance

At the NSG Group, the Group CEO and the Board of Directors establish the basic policies and goals for sustainability activities, including nature-related information. Nature-related issues are discussed by the Sustainability Committee (SC) with the aim of achieving all sustainability goals and reflecting them in relevant business operations. This includes strategies and actions based on risk and opportunity analyses designed to achieve both corporate growth and active social contribution.

The Sustainability Committee reports to the Board of Directors and the Audit Committee on a regular basis, and at least once per fiscal year.

The Sustainability Committee manages the progress of specific activities toward sustainability goals, coordinates activities within the Group, and reviews strategies with the CEO. Furthermore, it monitors responses to nature-related dependencies, impacts, risks, and opportunities, and manages the progress of activities to ensure effective communication with stakeholders. The Committee is composed of the heads of all business divisions and Group functions.

Board members who are experts in the ESG field provide ongoing advice and guidance on key relevant aspects.



NSG Group’s Sustainability Governance Structure

Furthermore, the NSG Group has long formulated and implemented environmental and water policies. In 2025, based on the TNFD framework, we established a new “Biodiversity Policy” to clarify our fundamental approach to addressing nature-related risks and opportunities.

We place great importance on stakeholder engagement at the local level when assessing and addressing nature-related dependencies, impacts, risks, and opportunities.

For example, at our Maizuru site in Japan, we collaborate with a diverse range of stakeholders—including government agencies such as Kyoto Prefecture and Maizuru City, the Kyoto Biodiversity Center, and local NGOs, NPOs, and civic groups—to conduct field surveys and biodiversity conservation activities. In addition, at Lathom Technical Center in UK, we collaborate with a wide range of stakeholders, including employees, local NPOs, hospitals, and universities, to contribute to the local community (through donations to a local children’s hospital) via on-site beekeeping activities, while also conducting surveys on the natural environment within the premises.

Dialogue with these stakeholders and the results of these surveys are utilized to assess nature-related dependencies, impacts, risks, and opportunities at each business site, as well as to consider countermeasures.

Strategy

Our business activities involve multiple dependencies on and impacts on natural capital, which directly affect our business continuity and growth strategies.

Due to the nature of our products, such as flat glass, as it is characterized by local production and local consumption, they are heavily dependent on the natural capital and infrastructure conditions of the regions where our production sites are located. Therefore, the state of the natural environment—including water resources—and regional regulatory trends directly impact not only short-term operational stability but also medium- to long-term competitiveness and business continuity.

Furthermore, given that our business structure relies on equipment with a long service life, such as float furnaces, nature-related risks are closely linked to decisions regarding capital investment and operational locations; we believe these risks must be addressed strategically across short-, medium-, and long-term time horizons.

Based on the results of the ENCORE analysis as an initial screening and internal evaluations, we have confirmed that our glass manufacturing process has a significant dependency on natural capital. In particular, we have found that water resources are indispensable to the manufacturing process and that a stable supply is directly linked to business continuity.

At the same time, our business activities have multiple impacts on the natural environment. Key impacts include effects on the climate and ecosystems due to greenhouse gas emissions, changes in land use around factory sites, and the cumulative impact of waste on the natural environment.

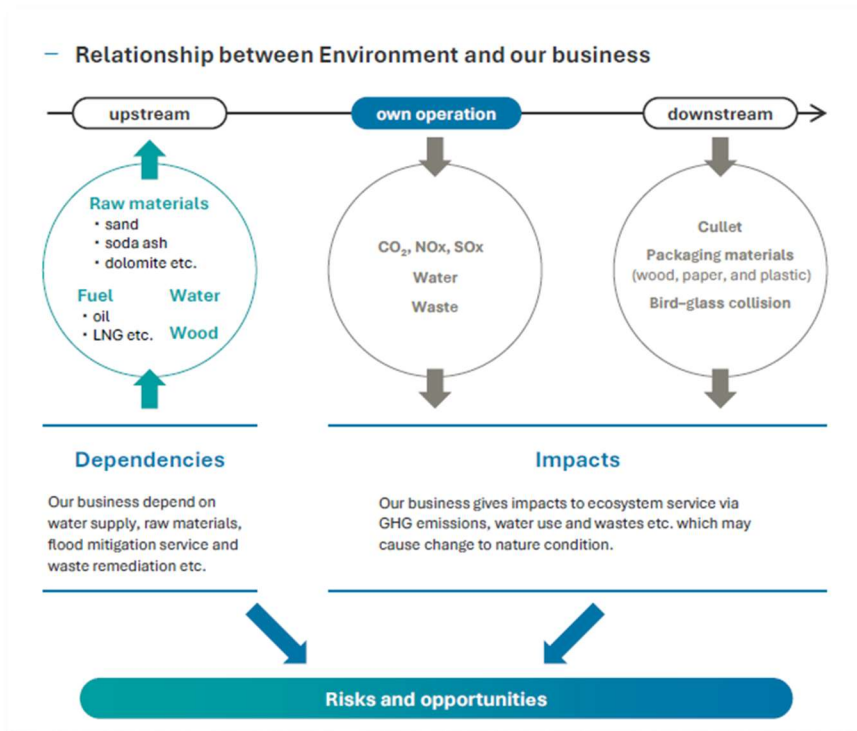
Dependencies (Ecosystem service)

Provisioning services	Water supply	High
Cultural services	Spiritual, artistic and symbolic services	Medium
Regulating and maintenance services	Flood mitigation services	Medium
	Rainfall pattern regulation services (at sub-continental scale)	Medium
	Solid waste remediation	Medium
	Storm mitigation services	Medium
	Water flow regulation services	Medium
	Water purification services	Medium
	Local (micro and meso) climate regulation services	Low
	Soil and sediment retention services	Low

Impacts (Pressures)

Land use	Area of land use	Low
Natural Resource Extraction	Volume of water use	Medium
Climate Change	Emissions of GHG	Medium
Pollution	Disturbances (e.g noise, light)	Medium
	Emissions of non-GHG air pollutants	Medium
	Generation and release of solid waste	Medium

Our Dependence on and Impacts on Natural Capital Based on ENCORE and Internal Assessments



The Relationship Between Our Business and the Environment

These dependencies and impacts have the potential to generate a variety of risks over the short to long term.

In the short term, operational risks due to water resource constraints, such as floods and droughts, may materialize.

In the medium term, there are concerns regarding stricter regulations on raw material sourcing and instability in the supply chain.

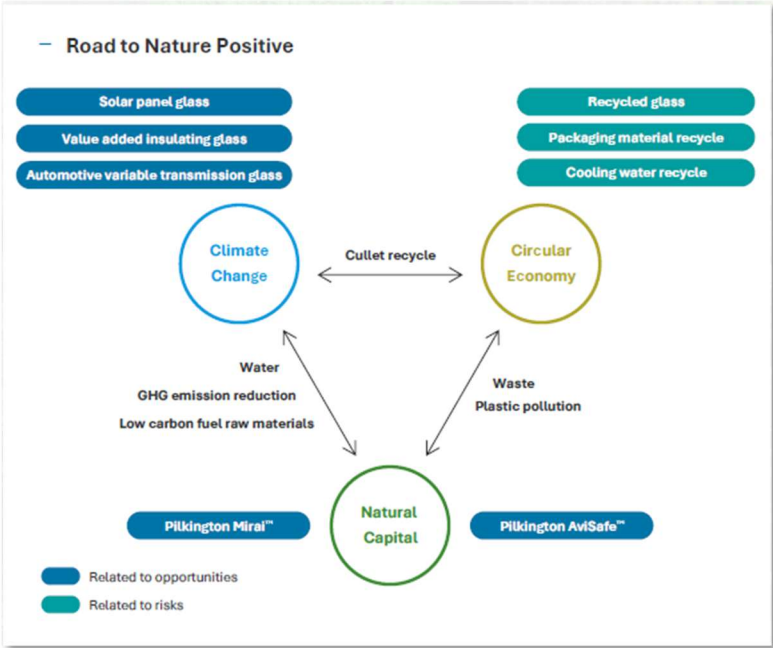
In the long term, biodiversity-related regulations and litigation risks could impact our business.

On the other hand, nature-related opportunities also exist.

For example, contributing to biodiversity conservation and the maintenance of local ecosystem functions through On-Site Ecological Conservation Measures (OECM) in areas surrounding our factories can help stabilize our business foundation and enable proactive responses to nature-related risks, thereby presenting opportunities to enhance our medium- to long-term business sustainability and corporate value. Furthermore, by contributing to the maintenance and restoration of local ecosystems through nature conservation activities in collaboration with local residents, and by building relationships of trust with the community, we can enhance the social acceptance of our business and strengthen our ability to respond to nature-related risks. Such activities with local residents also have the potential to improve employee engagement by fostering connections with the local community and society. Furthermore, in the medium term, within a market environment that demands consideration for biodiversity and water resources, there is potential for growing demand for nature-

friendly products such as the low-carbon glass “Pilkington Mirai™” and bird-collision-prevention glass “Pilkington AviSafe™.” Additionally, by supporting the expansion of renewable energy through glass products for offshore wind and solar power generation, we can assist our customers in their decarbonization and nature-friendly business initiatives, creating opportunities to enhance our competitive advantage. In the long term, through the advancement of manufacturing processes and material technologies, as well as research and development of new products and applications, there is potential to create new business areas that contribute to environmental protection and nature restoration. As a result, we are expected to fulfill our role as a technology partner supporting the transition to a society in harmony with nature.

We plan to continue evaluating these risks and opportunities going forward.



Road to Nature Positive

[Water Resource Management: Directly Linked to Business Continuity and Competitiveness]

Below, we focus on water resource management as a theme that is particularly significant for our Group, given both our high dependence on natural capital and the substantial business risks involved.

Water resources are indispensable to the glass manufacturing process, and since regional water resource constraints and regulatory trends directly impact business continuity and competitiveness, we regard them as one of our Group’s most critical forms of natural capital.

Water stress map 出典 : Aqueduct Water Risk Atlas



**Glass Manufacturing and Nature: ENCORE-based Dependency & Impact Mapping
(Modified version based on actual business conditions)**

In particular, for our float glass manufacturing and automotive glass processing businesses—which consume large amounts of water—we are addressing this as a strategically important issue, as the effectiveness of water resource management affects operational stability and cost structures, especially at sites located in water-stressed regions.

In support of the Group’s Sustainability Policy and Environmental Policy, the NSG Group established a new Water Policy in 2020 to clarify its water management initiatives and address water quality challenges and the risk of water scarcity. In 2019, the NSG Group introduced a more advanced environmental reporting and analysis database. All sites report their respective information and water-related data to this central database, which is used for aggregation, analysis, and monitoring at the corporate and site levels.

Within the NSG Group, the amount of water used at each plant varies significantly depending on differences in processes, products, and water quality. Float glass production typically requires approximately 2.6 m³ of water per ton, while the processing of automotive glass products requires approximately 0.12 m³ of water per m².

An assessment utilizing global data from the “Aqueduct Water Risk Atlas” for the purpose of priority identification has revealed that 10 of the NSG Group’s sites in Italy, Chile, and Mexico are located in water-stressed regions. Water withdrawals at these sites account for 14% of the total as of 2024. Priority reviews and improvement initiatives for water resource management are being implemented at these sites, aiming to achieve the NSG Group’s sustainability goal of “reducing water withdrawal in water-stressed regions by 50% by the end of fiscal year 2027 compared to fiscal year 2019.” Total water withdrawal in water-stressed regions in 2024 was 1.9 million m³, representing a 43% reduction compared to 3.4 million m³ in 2018.

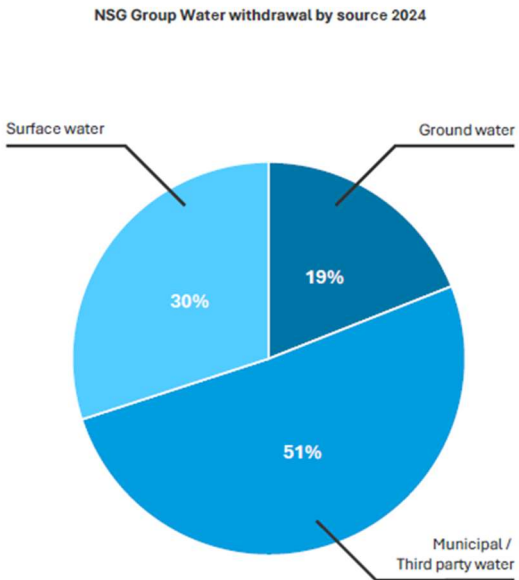
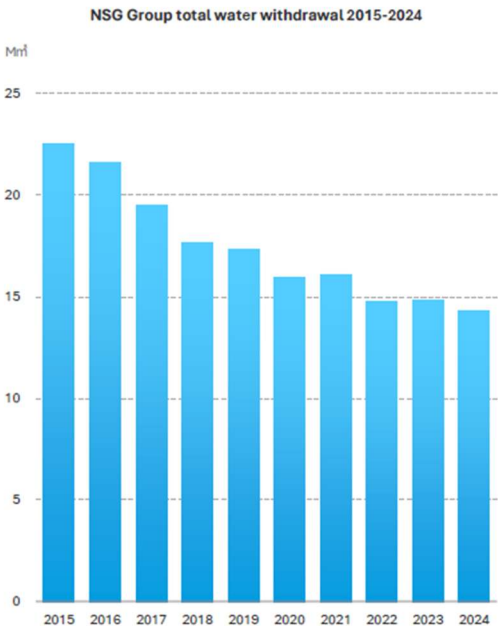
At the site level, the water conservation project at the San Salvo plant in Italy is a particularly successful example of representative case.

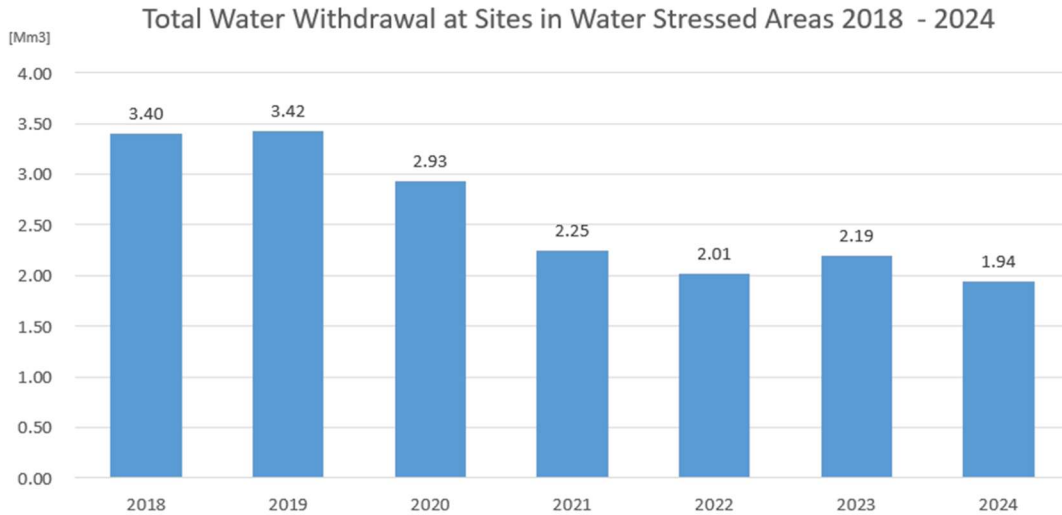
The San Salvo plant is located on the eastern coast of southern Italy, in an area prone to potential water shortages. The plant uses large amounts of water for equipment cooling, glass washing, and steam generation, with most of it drawn from nearby rivers. Consequently, there were concerns about operational risks due to water shortages, particularly during the hot summer months.

Against this backdrop, a project aimed at reducing water consumption was launched, leading to a review of production processes and investments in water-saving equipment. Specifically, the plant is working to improve water usage efficiency in production processes through measures such as valve automation, water recycling, and the promotion of rainwater utilization. As a result, the plant has been able to significantly reduce the amount of water drawn from local rivers for various uses within the facility.

In 2024, we have saved approximately 450,000 cubic meters of water—equivalent to about 180 Olympic-sized swimming pools—and 198 MWh of electricity were saved, generating an economic saving of 450,000 euros. The water not used at the plant is purified and utilized as drinking water by local public authorities, contributing to the local community, particularly during the summer when water demand rises due to an increase in tourists.

These on-site initiatives not only reduce operational risks but also contribute to building trust with the local community and ensuring long-term business continuity. These initiatives are regularly reviewed by the Sustainability Committee and incorporated into the Group’s overall strategy.





Risk Management

The identification and assessment of nature-related risks and opportunities in this disclosure are conducted based on the LEAP approach (Locate, Evaluate, Assess, Prepare) recommended by the TNFD. As this is the first year of the initiative, we are focusing primarily on the Locate and Evaluate stages with the aim of understanding nature-related dependencies and impacts and identifying areas requiring priority attention.

The NSG Group positions nature-related risks within the Enterprise Risk Management (ERM) framework, just as it does other sustainability-related risks, including climate change risks. Nature-related risks assessed at business sites and headquarters are consolidated as enterprise-wide risks and reviewed by management alongside other key risks, thereby informing business strategy and investment decisions.

Nature-related risks are regularly reviewed within the ERM framework, and their risk levels and response priorities are updated as necessary.

In identifying and assessing nature-related risks, we utilize our existing EHS risk management and supply chain audit systems as the foundation for the assessment process. At each business site, management offices or EHS teams established under the site manager continuously collect and monitor data on water intake, wastewater and exhaust emissions, and impacts on ecosystems; this information is used as baseline data to understand nature-related dependencies and impacts.

The collected data and site-level assessment results are regularly aggregated by the Sustainability Department at headquarters. After undergoing a review from a specialized perspective, they are utilized as input for nature-related risk assessments within the company-wide risk management framework.

As part of this assessment process, we conduct detailed analyses in areas where particularly significant nature-related risks have been identified. Regarding water-related issues, we utilize the central environmental database introduced in 2019 to collect and analyze water-related data from all sites. The latest review, based on global data from the Aqueduct Water Risk Atlas, confirmed that 10 sites are located in water-stressed regions. Water withdrawal at these sites accounts for 14% of the total as of 2024.

Furthermore, in assessing nature-related risks in the upstream value chain, we mapped raw materials and procurement sites and identified sand and soda ash as priority assessment targets. For sand, the impact on ecosystems from extraction is recognized as a risk, while for soda ash, the upstream environmental impact associated with the synthetic manufacturing process is recognized as a risk. As risk mitigation measures, suppliers are monitored based on their EcoVadis ratings and ISO 14001 certification.

Furthermore, due to constraints related to data availability and methodologies, direct quantitative assessments of biodiversity and ecosystem-level analyses are limited in the first year. Going forward, we plan to proceed in stages with quantitative assessments (Assess) and the formulation of response plans (Prepare) for high-priority nature-related risks, taking into account their financial and operational impacts.

Metrics and Targets

The Group is setting quantitative KPIs for key sustainability themes, including nature-related issues, and striving to enhance information disclosure. The global core disclosure indicators defined by the TNFD are as follows.

In addition, we are considering the phased introduction of other quantitative indicators related to biodiversity, taking into account regional characteristics and data availability.

Indicators on Dependence on and Impact on Nature

Metric No.	Metric	Our Group’s Disclosure	Current Status of Disclosure and Response	Goals and KPIs
–	GHG Emissions	GHG Emissions (Scope 1, 2, 3)	NSG Group’s Initiatives for Decarbonization and Reducing Environmental Impact	☉

C2.2	Waste Generation and Disposal	Total Generation of Hazardous and Non-Hazardous Waste (Tons) Amount of hazardous and non-hazardous waste incinerated (tons) Landfill Volume of Hazardous and Non-Hazardous Waste (Tons) Amount of hazardous and non-hazardous waste recycled (tons)	Waste and the Circular Economy	◎
C2.4	Non-GHG Air Pollutants	Nitrogen oxides (NOx) Sulfur oxides (SOx)	Emissions to the atmosphere	
C3.0	Water withdrawal and consumption from water-scarce regions	Water intake (m ³)	Water	◎

The NSG Group is currently utilizing existing environmental KPIs to manage nature-related risks and impacts, while identifying indicators and targets deemed important from the TNFD perspective.

The NSG Group recognizes the impact of climate change on ecosystems and biodiversity as a critical issue. In light of the potential for associated nature-related risks to affect our business, we are working to reduce GHG emissions. Absolute Scope 1 and Scope 2 GHG emissions have been reduced by approximately 16% compared to 2018 levels by the end of the fiscal year ending March 2024, and we are on track to achieve our target of a 30% reduction by 2030 compared to 2018 levels. For details on GHG emission targets and KPIs, please refer to [our Carbon Neutrality Roadmap](#) or the [“Latest Integrated Report.”](#)

Landfill waste is one of the key nature-related impacts affecting biodiversity through its effects on land use and the surrounding environment. The NSG Group has set a target to reduce the total volume of landfill waste by 20% by the fiscal year ending March 2027, compared to the fiscal year ending March 2024.

Landfill waste for the fiscal year ended March 2025 totaled 22.4 thousand tons, a 3.7% increase from 21.6 thousand tons in the fiscal year ended March 2024. Regarding the disposal of defective raw materials at major North American plants—our biggest challenge—we reduced this by 24% year-on-year through collaboration with new recycling partners; however, this reduction was offset by waste generation in other regions. We will continue to strengthen our resource circulation initiatives globally.

Dependence on water resources is a significant nature-related risk, particularly in water-stressed regions. The NSG Group has set a Group target to “reduce water withdrawal in water-stressed regions by 50% by the end of the fiscal year ending March 2027, compared to the fiscal year ending March 2019.”

Total water withdrawal in water-stressed regions for the fiscal year ended March 2025 was 1.9 million tons, achieving a 43% reduction from the 3.4 million tons recorded in the fiscal year ended March 2019. Furthermore, total water withdrawal across the entire Group was 14.3 million m³, representing a 19% reduction compared to the fiscal year ended March 2019.

Indicators Related to Risks and Opportunities

Metric No.	Category	Measurement Indicator	Our Group’s Disclosure
C7.2	Risk	Details and amounts of significant fines, penalties, and litigation incurred during the reporting year due to negative impacts related to nature	Environmental Compliance

The NSG Group recognizes significant negative impacts related to nature—such as violations of environmental laws and regulations concerning water resources, waste, and biodiversity, as well as sanctions by authorities, fines, and litigation—as critical issues. We monitor instances of environmental non-compliance and sanctions by authorities that occur despite the existence of a robust environmental compliance management system.

These are recorded as nonconformities in the environmental management system and are subject to immediate corrective action, root cause analysis, and the implementation of control measures.