

2024



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About this Report

In response to the growing concern of all stakeholders on climate and nature issues, in 2022 WNC released its first TCFD report, disclosing climate information in the four core aspects of "governance," "strategy," "risk management," and "indicators and targets." In 2024, we began compiling our first combined TCFD & TNFD Report based on the Task Force on Nature-related Financial Disclosure (TNFD) and the Task Force on Climate-related Financial Disclosure (TCFD) frameworks. For more information on environmental, social, and governance aspects, please refer to [WNC's Sustainability Report](#). This report is produced in both Chinese and English, and is posted on [WNC's ESG website](#).

Reporting Period

January 1, 2024 to December 31, 2024.

Scope

The report covers information regarding operations at WNC's headquarters (HQ) in the Hsinchu Science Park, the S1 site located on Lihsin Rd., and the S3 Plant located in the Tainan Science Park, WNC (Kunshan) Corporation, Wistron NeWeb (Kunshan) Corporation, NeWeb Service (Kunshan) Corporation, WebCom Communication (Kunshan) Corporation - Kunshan Plant, WebCom Communication (Kunshan) Corporation - Nanjing Branch, and Neweb Vietnam Co., Ltd.

Depending on information availability and significance, some of the content covers our R&D center in Taipei's Neihu district, Branchburg, U.S.A., Tustin, U.S.A., WNC USA Corporation, W-NeWeb Co. (US), WNC UK Limited., NeWeb GmbH (Germany), WNC Japan Inc., W-NeWeb Mexico, and other service centers, as remarked in the Report.

External Assurance

The Report has been verified by SGS Taiwan Ltd., an independent third-party organization, in June 2025, and WNC received a TCFD Performance Assessment Statement (see [Appendix 6.4](#)). The statistics in this Report are consistent with those in WNC's 2024 Sustainability Report.

Contact Information

If you have any questions or suggestions, feel free to contact us at any time:

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A Message from the Chairman

According to the World Economic Forum (WEF) 2025 Global Risks Report, global risks in the next decade will be headed up by extreme weather, with loss of biodiversity and ecosystem collapse, major Earth system changes, and shortages of natural resources following. WNC deeply understands that climate change and natural capital management are urgent issues for companies worldwide. We should take management actions and incorporate them into operational strategic planning, taking into account both environmental and economic benefits, so as to maintain the company's long-term competitive advantage. WNC introduced the TCFD framework in 2021, and issued its first TCFD report in 2023. The second report was issued in 2024 and was rated at "Highest Level - Pioneer" by SGS. In the same year, we became a TNFD Adopter, using the LEAP (Locate, Evaluate, Assess, Prepare) framework to identify dependencies and impact, risks and opportunities of value chain operations on the natural environment, and then to establish appropriate management strategies and measurement indicators. We hope to exert a positive influence, and drive the industry value chain to enhance sustainable operating capabilities.

Collaborating with Value Chain Partners to Pursue Carbon Transformation

WNC passed the Science Based Targets initiative (SBTi) audit in 2025 and has set science-based carbon reduction targets, committing to reducing Scope 1 and Scope 2 GHG emissions by 42% by 2030, compared to a 2022 baseline, and Scope 3 emissions by 25%, compared to a 2023 baseline. We also aim to achieve net-zero emissions across all scopes by 2050. To accelerate the achievement of carbon reduction goals, WNC has completed a full-scope greenhouse gas inventory and third-party verification for the entire group in accordance with ISO14064-1. By establishing a global supply chain management policy, a supplier code of conduct, and holding sustainable supplier conferences, WNC encourages suppliers to set carbon reduction goals and actions to reduce the environmental impact arising from corporate growth.

Improving Energy Efficiency and Having a Positive Ecological Impact

At the same time, WNC has joined RE100 and is committed to achieving 100% renewable energy use by 2040. We have formulated an environmental sustainability policy as a guiding principle for environmental projects, follow ISO 50001 and have introduced an energy management platform. Solar panels are installed in factories in Taiwan, China and Vietnam to improve energy efficiency. In addition, in response to the United Nations Sustainable Development Goals (SDGs) and the Convention on Biological Diversity (CBD), WNC has set a goal of Net Positive Impact, No Net Loss, and No Gross Deforestation by 2050. It has invested in afforestation and forest restoration, carried out local ecological monitoring surveys, and worked to support biodiversity conservation. As a leading network communications company, we develop green products that meet safety and low carbon requirements and that comply with Restriction of Hazardous Substances (RoHS), thus ensuring our products are harmless to the environment and to the human body, and reducing carbon emissions across the product life cycle from raw material procurement, manufacturing,

transportation, consumption and use to waste recycling. WNC has also been promoting the use of paper manufacturers certified by the Forest Stewardship Council (FSC) or other forest-friendly paper, recycled eco-friendly paper and eco-friendly ink printing, becoming a bridge for diverse ecological benefits. We also take biodiversity risk assessment processes into consideration when we build new plants. We avoid locating newly established production or office sites near biodiversity-sensitive and important habitats or nature reserves. The best available low-impact construction methods are adopted, and factory planning and design are carried out in accordance with green building standards to create buildings with ecological, energy-saving and healthy characteristics. As of now, our S3 site has obtained Taiwan Green Building Certification, and our Vietnam Phase II plant has also been awarded LEED Gold Certification by the U.S. Green Building Council (USGBC).

Continuing to Practice Social Responsibility and Responding to International Trends

Low-carbon transformation has become the responsibility and mission of global companies. WNC is not only incorporating environmentally-friendly concepts into product design and operations management, but is also improving the disclosure quality of its sustainability information and actively participates in CDP and other international evaluations. In 2024, WNC received an A- leadership level result in CDP's climate change questionnaire and water security questionnaire, and was ranked in the top 1% of the industry in the 2025 S&P Global Sustainability Yearbook and won the title of Industry Mover. WNC will continue to devote itself in its sustainable development efforts and work with global partners to create a more environmentally resilient manufacturing model, implement a net-zero transformation and move towards a low-carbon, environmentally-friendly future.

Chairman

謝宏波



A Message from the Chief Sustainability Officer

Faced with global challenges such as climate change, natural resource depletion and biodiversity loss, modern businesses have an unshirkable responsibility to rethink their relationships with the environment. WNC has always believed that a company's success comes not only from financial performance, but also from the exercise of its responsibilities towards future generations and the sustainability of the planet. To this end we have implemented two major international sustainability frameworks, TCFD (Taskforce on Climate-related Financial Disclosures) and TNFD (Taskforce on Nature-related Financial Disclosures), and incorporated climate- and nature-related risks and opportunities into our operations, decision-making, and risk management processes.

Guided by the TCFD framework, we analyze and respond to the potential impacts of climate change on our business, operations, and supply chain, and plan and promote specific carbon reduction pathways based on the science-based carbon reduction targets set by the SBTi. As of 2024, we have exceeded our original mid-term carbon reduction targets across all scopes of emissions, demonstrating our determination in taking action to protect the environment.

At the same time, under the guidance of the TNFD framework, we introduced the LEAP (Locate, Evaluate, Assess, Prepare) methodology to systematically identify the company's dependency and impact on the land, water resources and biodiversity. We have not only worked with local government agencies, academic institutions, and the community to promote the WNC Forest Park carbon sequestration project, but have also focused efforts on conservation, species restoration, and community engagement, helping technology and nature to coexist.

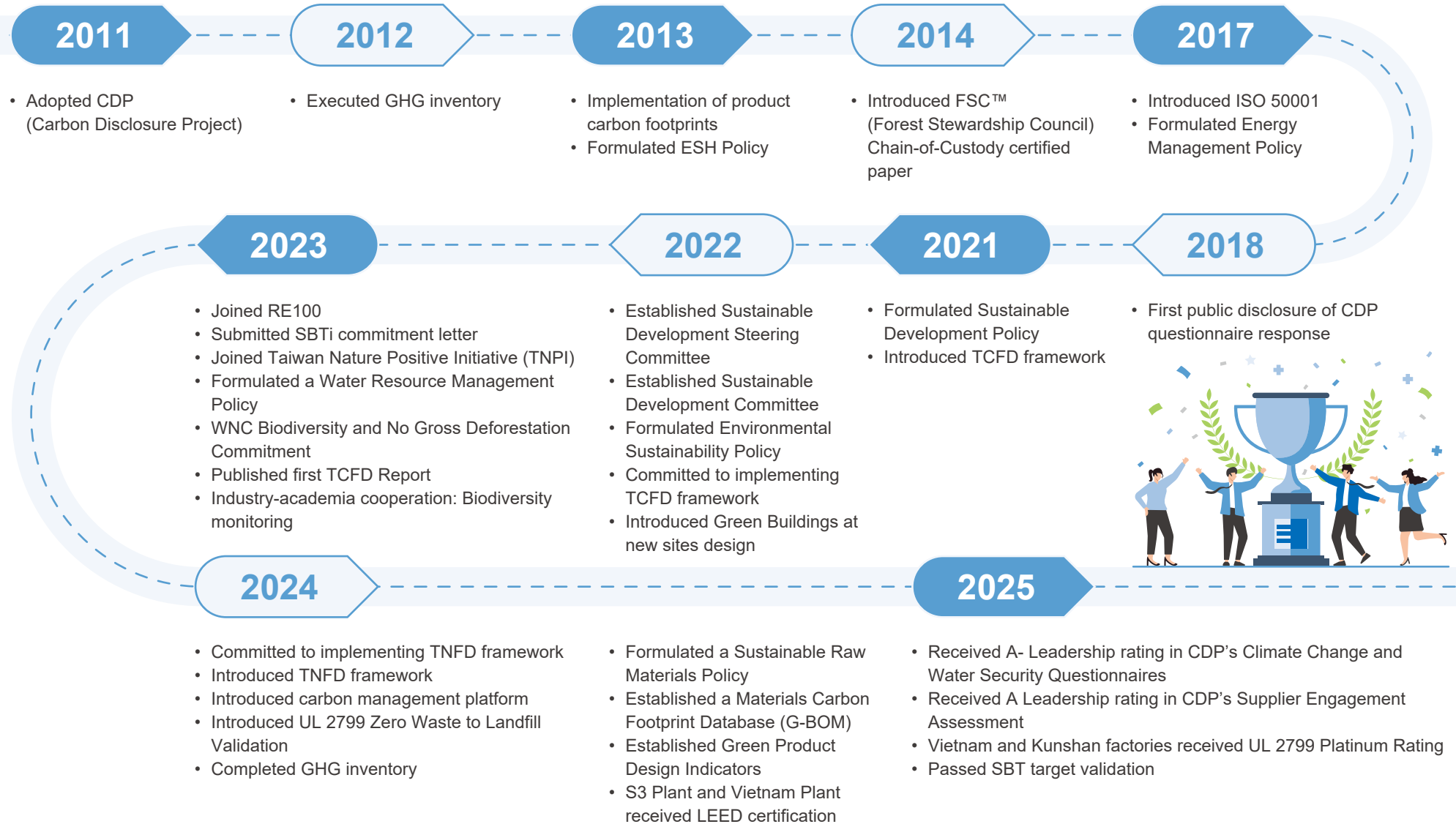
We are deeply aware that climate and nature risks are not only environmental issues, but are also closely linked to corporate resilience, value chain stability and brand trust. Therefore, WNC will continue to enhance the transparency of its information disclosure, strengthen ESG mechanisms, and promote cross-departmental and supply chain collaboration to embed ESG practices into its corporate culture and core operations.

In the future, we will continue to create positive changes in the aspects of technological innovation, care for humanity and environmental responsibility, and work with global stakeholders to create a low-carbon, sustainable and prosperous future.

Chief Sustainability Officer



Milestones



1 Governance

1.1 Climate and Natural
Ecosystems Vision

1.2 Governance Structure and
Mechanism

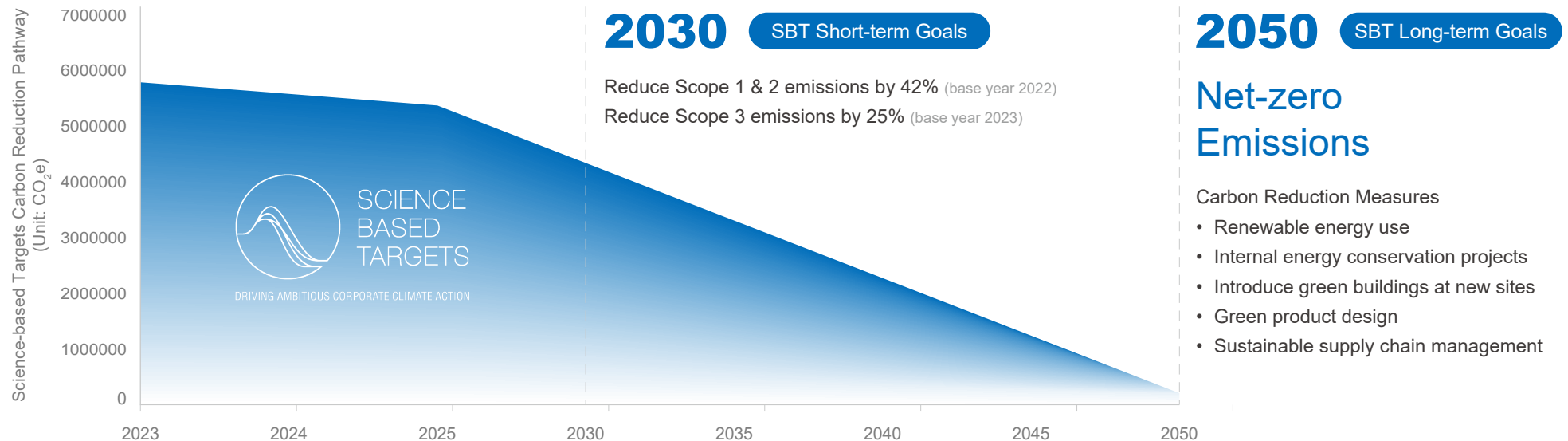


1.1 Climate and Natural Ecosystems Vision

In line with the goals of the Paris Agreement, WNC has formulated an Environmental Sustainability Policy, with climate change mitigation and adaptation, gradual improvement of energy efficiency and renewable energy use ratio, resource recycling and ecological conservation as development axes. This policy is helping the company set environmental performance indicators and implement environmental protection concepts such as carbon reduction, energy and resource conservation, waste reduction, and pollution prevention at each operating location.

In 2023, in addition to joining the RE100 initiative and pledging to use only renewable energies by 2040, WNC also submitted a carbon reduction commitment to the Science Based Targets initiative (SBTi). In 2024, after completing third-party verification of full-scope greenhouse gas inventory for all its sites, the company submitted the following science-based carbon reduction targets to SBTi: Reduce Scope 1 and Scope 2 greenhouse gas emissions by 42% by 2030 compared to a 2022 baseline, reduce Scope 3 greenhouse gas emissions by 25% compared to a 2023 baseline, and achieve net zero by 2050. The company hopes to increase its efforts to respond to climate change by responding to international climate initiatives. In February, 2025, SBTi validated WNC's science-based targets.

In 2023, WNC's President and CEO signed a WNC Biodiversity and No Gross Deforestation Commitment. The commitment clearly expresses WNC's position on protecting the ecological environment, and commits the company to continuously improving its operations, products and services. In addition, it calls on suppliers and partners in our value chain to join in responding to the UN's SDGs and the Convention on Biological Diversity. In response to the Kunming-Montreal Global Biodiversity Framework (K-M GBF), we are committed to introducing a mitigation hierarchy and adopting the strategic approach of "avoidance, mitigation, restoration and offset" to achieve the goals of Net Positive Impact, No Net Loss and No Gross Deforestation by 2050.



1.2 Governance Structure and Mechanism

WNC adopted the TCFD (Task Force on Climate-related Financial Disclosures) framework in 2021. We have adjusted the organizational structure to account for climate-related governance and have clearly defined the responsibilities of each senior management role. The Board of Directors is WNC’s highest governing body regarding sustainability matters and oversees sustainability-related policies, strategies, and goals. In 2024, in order to enhance the breadth and depth of governance, internal organizational adjustments were made to raise the Sustainability Development Committee to the level of the Board, with the Chairman as the convener. The committee reports to the Board of Directors on the progress of sustainability-related matters on a regular basis, coordinates overall strategies, and supervises the management status and key performance indicators of senior managers. Under the jurisdiction of the committee are the Environmental Protection, Social Responsibility, and Corporate Governance working groups. These working groups conduct quarterly reviews on the progress of ESG projects, develop goals based on the company’s sustainability strategy, and formulate related management policies and implementation plans.

Sustainable Governance Framework



Organization	Environment-related Issues Monitoring and Management Responsibilities
Board of Directors	The Chairman of the BOD convenes at least one Board meeting every quarter to review major environmental investment plans, strategic planning and actions, and annual goals and budgets, incorporate climate and nature-related risks and opportunities into decision-making, and monitor the company's performance on environmental issues.
Sustainable Development Committee	The Chairman of the BOD serves as Chairperson and convenes at least two meetings each year. The Chief Sustainability Officer reports to the committee on the progress of key working group projects. The committee is responsible for making major decisions of the company and reviewing climate and nature-related policies, systems or management guidelines and specific promotion plans.
Environmental Protection, Social Responsibility and Corporate Governance Working Groups	Meetings are convened by the Chief Sustainability Officer and held quarterly to review regulations and customer requirements, track progress of projects by each responsible unit/department, and provide suggestions for implementation of measures in key areas such as greenhouse gas emissions inventories, carbon management, energy management, renewable energy use, supply chain management, and climate and nature-related risk identification.

Key Environment-related Report Items for the BOD in 2024

- 2023 TCFD Report: Evaluation results for material risks and opportunities, and response plans relating to material risks and opportunities
- Establishment of the WNC Sustainable Raw Materials Policy
- Establishment of the WNC Water Resource Management Policy
- Establishment of the Energy Management Policy
- Amendment of the WNC Biodiversity and No Gross Deforestation Commitment
- Amendment of the Environmental Sustainability Policy
- Progress report on establishment of WNC’s digital carbon management systems
- Sustainability-related awards and recognition
- Greenhouse gas inventory taking and verification plans
- GHG inventory results for all WNC sites in 2023

Management Level Responsibilities

In 2022, WNC established a Sustainability Steering Committee and a Sustainable Development Committee to coordinate cross-departmental collaboration of expertise and resources, and in May of the same year the position of Chief Sustainability Officer was established, held by the highest-ranking executive of the Sustainability and Marketing Division. In 2024, in order to more effectively promote sustainable development and achieve consistent top-down management, the Board of Directors approved the inclusion of the Sustainable Development Committee into the management structure of the Board of Directors. A Sustainable Development Center was set up to further integrate internal and external resources and review documents for external communication such as documents detailing sustainability information. Important documents (such as the annual sustainability report) are submitted to the Board of Directors for approval.

Under the jurisdiction of the Sustainable Development Committee are the Environmental Protection, Social Responsibility, and Corporate Governance working groups. They serve as a cross-departmental collaboration platform for the company's sustainable development issues. The Chief Sustainability Officer serves as the convener of the working groups, and the Sustainable Development Center oversees related matters. Working groups are made up of the company's top-tier managers. They review the implementation status of ESG projects every quarter, set goals based on the company's sustainable development direction and strategy, and formulate relevant management policies and promotion plans. In addition, in order to strengthen the company's climate and nature-related risk management capabilities and ensure the implementation of management measures, the Sustainable Development Center will coordinate with relevant responsible units to organize TCFD and TNFD project teams, which will be responsible for identifying the risks and opportunities that the company may face, assessing potential financial impacts, and formulating management policies and carbon management action plans.



1.2.1 Board of Directors' Training Courses

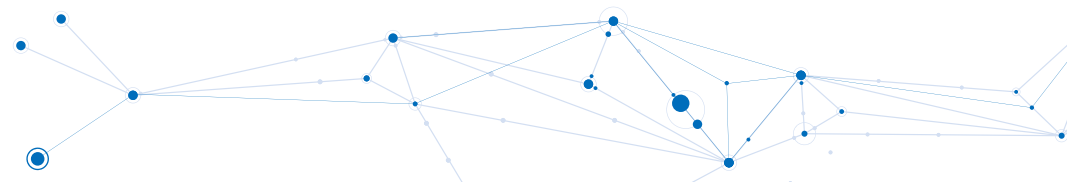
To ensure that our directors are well-versed in the latest trends in corporate governance and to boost the board's sustainable governance capabilities, all directors of WNC are required to complete annual training on ESG-related issues in accordance with the Directions for the Implementation of Continuing Education for Directors and Supervisors of TWSE Listed and TPEX Listed Companies. WNC also arranges a continuing education program for its board of directors. By sharing information on economic, environmental and social issues related to company operations from time to time or planning external courses, we help directors keep up with the latest trends and best practices thereby ensuring that they can effectively respond to risks and challenges in the face of climate change and nature and biodiversity-related issues. These training programs cover areas such as corporate governance, environmental sustainability, climate change, and risk management. The total number of training courses for WNC directors in 2024 was 26, with 84 hours in total and 21% of that dedicated to climate- and nature-related education and training. For detailed information on these trainings, please refer to the Market Observation Post System or the Corporate Governance section in the 2024 WNC Annual Report.

Date	Organizer	Course Name	Course Hours	Participants
07/03/2024	Taiwan Stock Exchange	2024 Cathay Pacific Sustainable Finance and Climate Change Summit	6	Directors, Representatives of institutional directors
08/03/2024	Independent Directors Association Taiwan	How do foreign institutional investors view ESG sustainable governance and investment responsibility?	3	Directors
06/05/2024	Corporate Operating and Sustainable Development Association	New global trends in ESG	3	Independent Directors

1.2.2 Compensation Linked to Sustainable Performance Indicators

In order to boost the commitment of senior managers to the company's sustainable development and overall performance, starting from 2025, WNC will add sustainable development-related performance indicators to the performance evaluation of senior managers. WNC uses sustainable performance indicators as one of the important bases for the company's President & CEO, and senior managers' short-term performance bonuses and long-term incentive systems, linking senior managers with the company's sustainable development commitments, and promoting the implementation and continuous improvement of sustainable development strategies. Personal annual goals include operational goals and ESG indicators. The achievement of ESG performance indicators directly affects bonus distribution, and the amount of bonuses can be increased or decreased by up to 10%.

Aspect	Accounting Metric	Weight
Financial Performance	Status of achievement of the company's overall performance indicators and individual performance indicators	100%
Sustainability Performance	Sustainability performance indicators (including SBTi greenhouse gas reduction target achievement rate, renewable energy use ratio)	±10%



2 Climate Change

- 2.1 Identification of Climate-related Risks and Opportunities
- 2.2 Scenario Analysis of Transition Risks
- 2.3 Scenario Analysis of Physical Risks

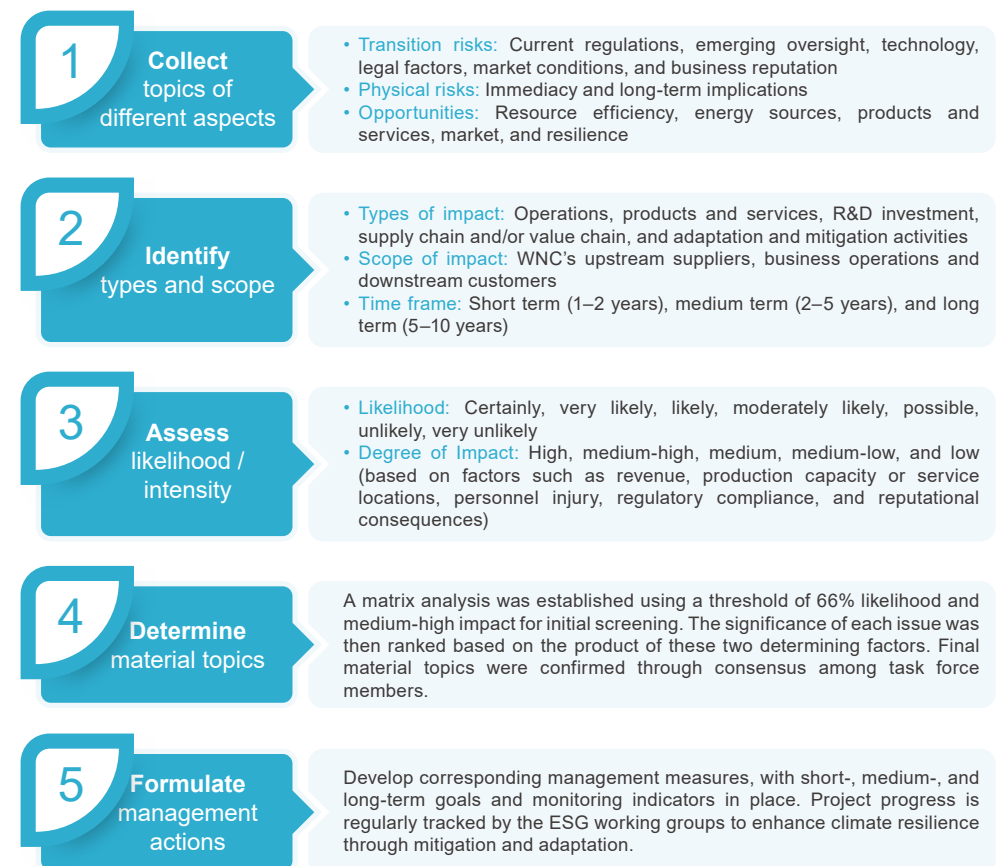


2.1 Climate-related Risks and Opportunities

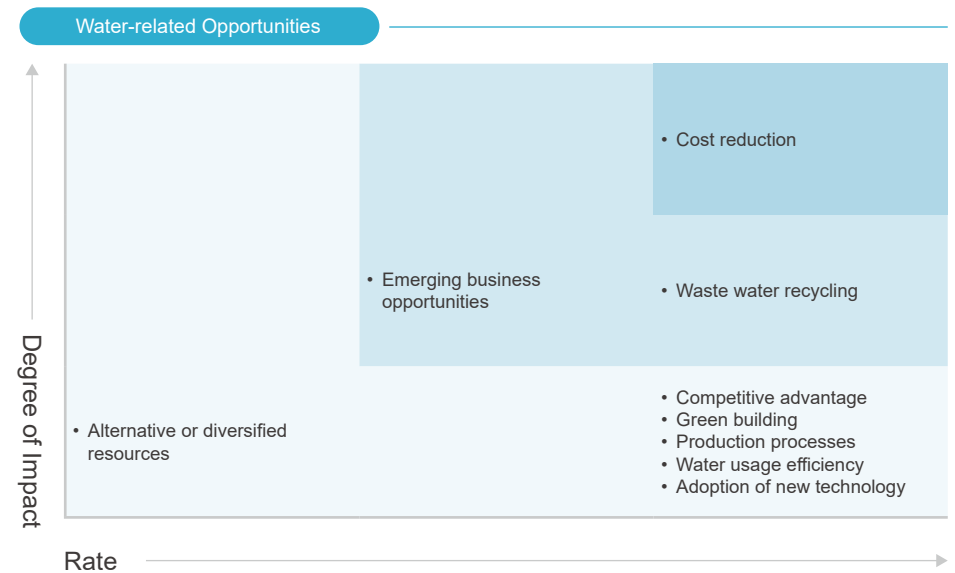
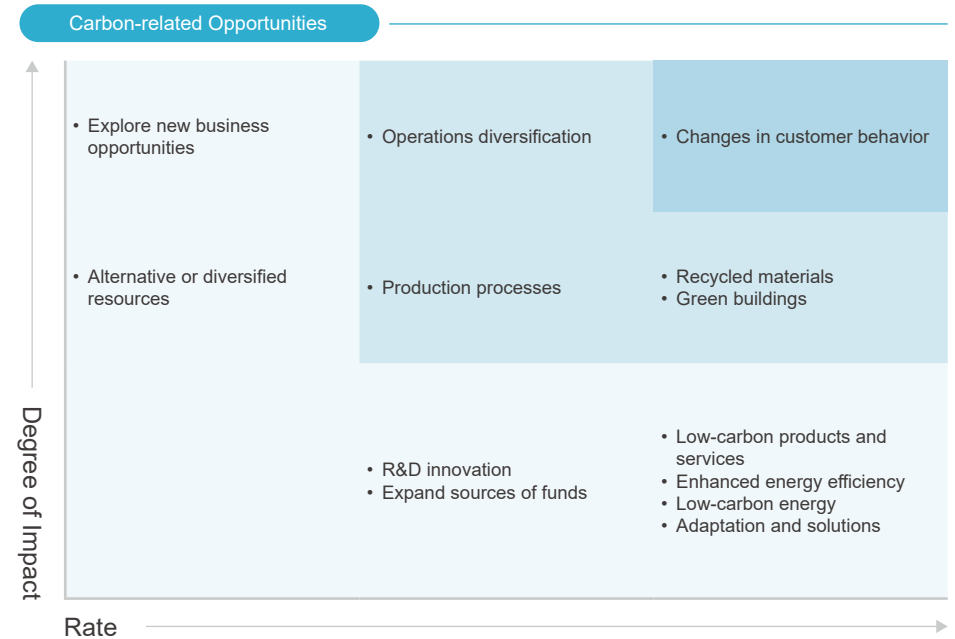
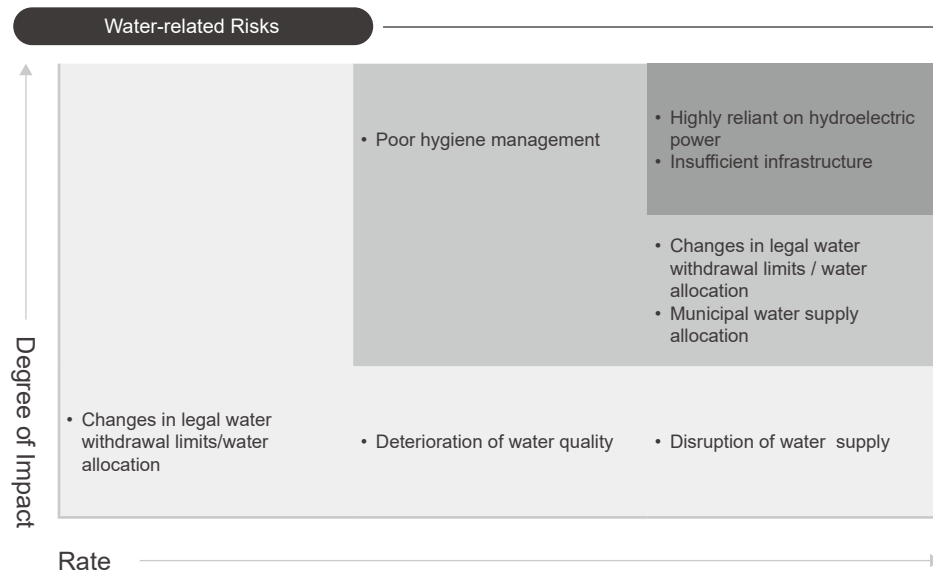
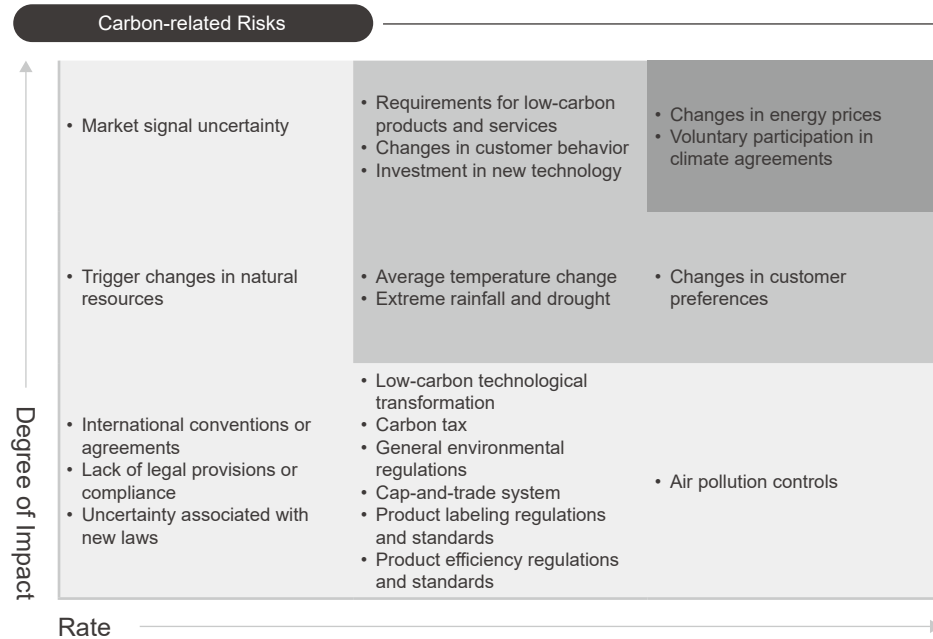
WNC controls risk related to business operations through its existing administrative organization and internal control mechanisms. Senior management from each business unit hold regular executive meetings to review stakeholder concerns and customer requirements. These meetings assess internal and external factors—such as the macroeconomy, industry trends, technology, customers, markets, supply chain, workforce, and operations—to identify risks across financial, operational, market, and business continuity aspects. For significant risks, strategies and measures are developed to prevent, mitigate, or transfer them. In response to the global climate crisis and low-carbon transition trends, WNC adopted the TCFD framework in 2021, incorporating climate change into its risk assessments. A dedicated task force holds annual meetings to review climate-related risks, develop adaptation and mitigation measures, track action plans and progress, and report findings to the Sustainable Development Committee's working groups.

Identification Process and Assessment Methods







WNC's TCFD Working Group conducts a comprehensive review every three years and annually monitors the status of risk management. The team also considers emerging domestic and international industry issues and global trends to ensure the relevance and comprehensiveness of the risk assessment. With support from external experts, the Sustainability Development Center considered eight categories of risk and the upstream, midstream, and downstream segments of the value chain. Climate-related issues were preliminarily identified and categorized by their potential time of occurrence—short-term (1–2 years), mid-term (2–5 years), and long-term (5–10 years). An internal risk identification questionnaire was developed, and cross-functional workshops were held with participation from various departments, including business units, facility management, occupational safety, general affairs, finance, IT, legal, quality assurance, mechanical and industrial design, industry research, procurement, and sustainability. Drawing on their respective expertise and experience, participants discussed five key areas: energy and resource management, products and technologies, business and market dynamics, supply chain management, and asset and administrative operations.









Matrix Analysis of Climate Risks and Opportunities



Important Climate-related Risks and Opportunities

Sources of Carbon-related Risks	Characteristics	Impact Scope	Impact Category	Time Frame	Management Measures, Cost Expenditure, and Management-related Expenditure
 <p>Changes in energy prices</p>	With rising electricity and fuel prices, WNC must continue optimizing energy management in the short term to mitigate cost escalation risks.	Business operations	Rising energy prices	Short-term	In addition to promoting energy-saving projects each year, WNC is committed to increasing its renewable energy usage. This is achieved through installing solar power stations and purchasing renewable energy certificates to reduce reliance on traditional energy sources. We also implement an energy management platform that utilizes data analysis and monitoring technology to track and manage energy usage in real-time, optimizing energy distribution. An estimated NT\$34 million to NT\$38 million will be invested each year.
 <p>Voluntary participation in climate agreements</p>	WNC must ensure that its commitments are aligned with the company's sustainability goals or WNC's reputation may be affected. The same applies to suppliers, and their carbon reduction costs may be passed on to WNC as increased material costs.	Business operations Upstream supply chain vendors	Increase in direct operating costs Increase in indirect operating costs	Mid-term	Replaced outdated equipment and upgraded existing systems with high-efficiency electro-mechanical equipment and lighting systems. Annually publish sustainability-related reports to disclose carbon emissions data and progress in emissions reduction, maintaining good communication with stakeholders. Look for alternative sources to reduce the risk associated with cost transfers from specific suppliers. An estimated NT\$74 million to NT\$82 million will be invested each year.
 <p>Requirements for low-carbon products and services</p>	WNC generates most of its revenue from wireless products in the U.S. and Europe. As demand for low-carbon solutions and supply chain transparency grows, delayed product adjustments risk unsold inventory and stock buildup.	Business operations Upstream supply chain vendors	Increase in direct operating costs Decrease in operating revenue Loss of existing customers	Short-term	Establish a centralized data management platform to collect information on product raw materials, manufacturing processes, and transportation. Regularly update it to reflect the latest production and environmental changes. Obtain relevant carbon footprint certifications to boost customer trust. An estimated NT\$3.2–3.6 million will be invested in platform setup, maintenance, and related certifications.
Sources of Carbon-related Opportunities	Characteristics	Impact Scope	Impact Category	Time Frame	Management Measures, Cost Expenditures, and Management-related Expenditures
 <p>Changes in customer behavior</p>	In response to customers' increasing focus on energy issues, WNC is developing innovative energy-saving products and technologies to boost market appeal, enhance brand competitiveness, and strengthen its sustainable supply chain image and long-term partnerships.	Business operations	New products or services	Short-term	WNC participates in environmental awards and actively obtains third-party green certifications to strengthen customer trust in its eco-friendly products. An estimated NT\$2.1–2.4 million will be invested in certifications and award applications.
 <p>Recycled materials</p>	WNC prioritizes renewable materials—such as oyster shell fabrics, recycled plastics, and metals—to enhance competitiveness and tap into green market opportunities.	Business operations Upstream supply chain vendors	Decreased operating costs Supply chain stability	Short-term	Increase investment in research and development, explore innovative applications of renewable materials, and develop new products to meet market demands. Increase the proportion of renewable materials used and emphasize their environmental benefits in the product design stage to enhance the product's market appeal. An estimated NT\$110–120 million will be invested in renewable material procurement and reliability testing of new materials.
 <p>Operations diversification</p>	WNC offers customers a range of low-carbon product options, including low-carbon design (materials, modularity, recycled packaging, reduced printing) and low-carbon manufacturing (energy-saving and green power use).	Business operations	Improved competitiveness	Mid-term	Starting in 2024, WNC has established green design metrics to guide new product development and gradually expand the range of products meeting these criteria.

Sources of Water-related Risks	Impact	Impact Scope	Impact Category	Time Frame	Management Measures, Cost Expenditures, and Management-related Expenditures Time Frame
 Highly reliant on hydroelectric power	40% of the Vietnam site relies on hydropower, and there was a power outage in 2024, which caused the production line to shut down, affecting product deliveries and customer satisfaction.	Business operations Upstream supply chain vendors	Increase in direct operating costs Supply chain disruption	Short-term	Establish a mechanism for regularly reviewing and updating the risk management plan based on actual conditions. Invest in backup generators or uninterruptible power systems to address potential power shortages. An estimated NT\$8.7 million to NT\$9.6 million will be invested.
 Insufficient infrastructure	Insufficient infrastructure has led to water supply issues at the company's operating site, affecting local residential water use.	Business operations	Increase in direct operating costs Increase in indirect operating costs	Mid-term	Install additional water purification equipment (e.g., filters) and upgrade outdated or substandard infrastructure to ensure compliance with drinking water standards. We have also installed water quality monitoring equipment to continuously track indicators such as pH, turbidity, and bacteria levels. Samples are also regularly sent to professional institutions for testing to ensure water safety. An estimated NT\$66 million to NT\$72 million will be invested.
 Changes in legal water withdrawal limits or water allocation	Government-imposed legal water withdrawal limits may hinder WNC's expansion and transformation. At the Southern Taiwan Science Park, the S3 facility relies on water truck dispatches coordinated by the Science Park Administration, with water usage allocated by zone.	Business operations	Increase in direct operating costs	Short-term	Develop a drought emergency response plan that includes proactive measures for water restrictions, such as purchasing water tickets, shutting off non-essential water supplies, and storing water in reservoirs. Conduct regular drills to ensure all employees understand the emergency procedures and enhance response readiness. An estimated NT\$5.3 million to NT\$5.9 million will be invested.

Sources of Water-related Opportunities	Impact	Impact Scope	Impact Category	Time Frame	Management Measures, Cost Expenditures, and Management-related Expenditures
 Cost reduction	WNC reduces reliance on raw water by implementing water-saving plans and recycling measures, including RO wastewater from dispensers, AC condensate, and process ultrapure water.	Business operations	Reduced asset costs	Short-term	Installing high water-efficiency equipment—such as low-flow faucets, water-saving toilets, and high-efficiency cooling systems—helps reduce water consumption. WNC also monitors new technologies in water resource management and updates equipment and systems as needed.
 Recycled water	WNC's S1 site has introduced a water recycling system, repurposing ultrapure water waste for restrooms and irrigation, increasing overall water reuse.	Business operations	Decreased operating costs	Short-term	Establish evaluation metrics for water reuse, such as water savings and cost reduction, and regularly report system performance and benefits to management to ensure continuous improvement. Adopt advanced water treatment technologies to ensure the safety and usability of recycled water; regularly evaluate and update these technologies to improve recovery efficiency and reduce operating costs. An estimated NT\$23 million to NT\$26 million will be invested.
 Emerging business opportunities	With growing market demand for advanced water technologies, WNC can leverage its strengths in wireless communications and data analytics to offer customized smart water meter solutions, helping customers manage and conserve water resources.	Business operations	Increase in operating revenue	Mid-term	Strengthen marketing efforts through both online and offline channels to actively promote smart water meters and related solutions, with the goal of increasing market share for smart water meters. An estimated NT\$30–40 million will be invested.

Note: As water-related issues have minimal actual impact on WNC, they do not meet the threshold for materiality assessment. Therefore, the aforementioned water-related risks and opportunities are disclosed based on their ranking determined by the product of their "likelihood" and "impact severity."

Quantitative Assessment of Financial Impact

WNC conducts financial impact assessments for risks and opportunities that meet materiality thresholds as a reference for developing strategies to mitigate risk. In collaboration with external experts, we conducted scenario simulations based on research reports from international organizations and historical data. Assuming a no-action scenario, we estimated the potential additional financial impacts WNC may face.

In terms of carbon risk

The financial impact of transition risks mainly stems from energy price fluctuations, voluntary agreements, and demand for low-carbon products and services. Among these, the demand for low-carbon products and services poses the greatest financial impact, with estimated impact exceeding 10% of revenue.

In terms of carbon opportunities

WNC is committed to increasing the use of recycled materials and launching products or solutions that meet customers' low-carbon requirements. With the introduction of green design criteria, WNC is gradually expanding the range of products that meet these standards to offer green products for different markets. In the short term, WNC is expected to increase customer orders and boost overall revenue through its "Products and Services" efforts, with an estimated revenue increase of over 10%.

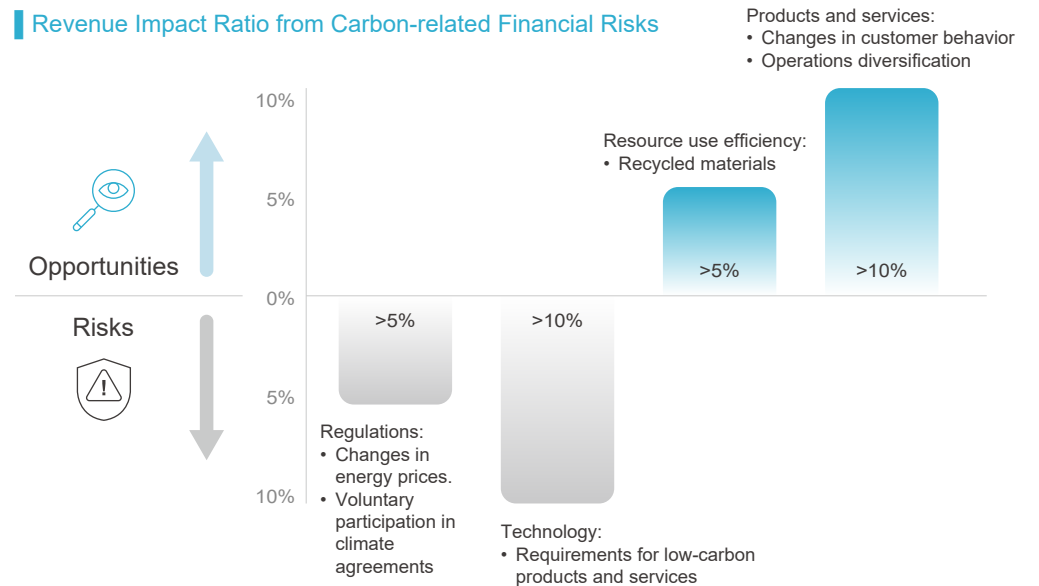
In terms of water-related risks

Although the likelihood is relatively low, it remains a key issue for WNC to monitor—particularly the potential impact of regulatory water restrictions or supply allocation issues caused by drought. The estimated financial impact of such risks could affect nearly 10% of revenue.

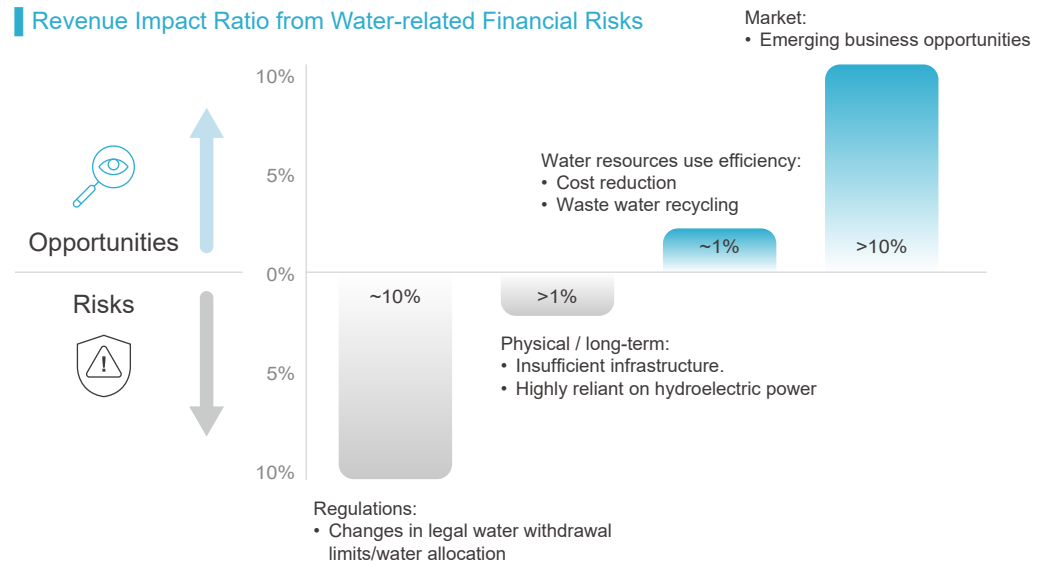
In terms of water-related opportunities

WNC implements water-saving plans and improves water recycling systems each year, significantly reducing raw water usage and dependence. WNC is also actively expanding its presence in the water resource management solutions market, which may present future business opportunities. This is expected to generate a more than 10% increase in revenue. To further strengthen our advantage, we will enhance our green design and R&D capabilities, pursue third-party green certifications, and upgrade and maintain water management equipment and technologies.

Revenue Impact Ratio from Carbon-related Financial Risks



Revenue Impact Ratio from Water-related Financial Risks



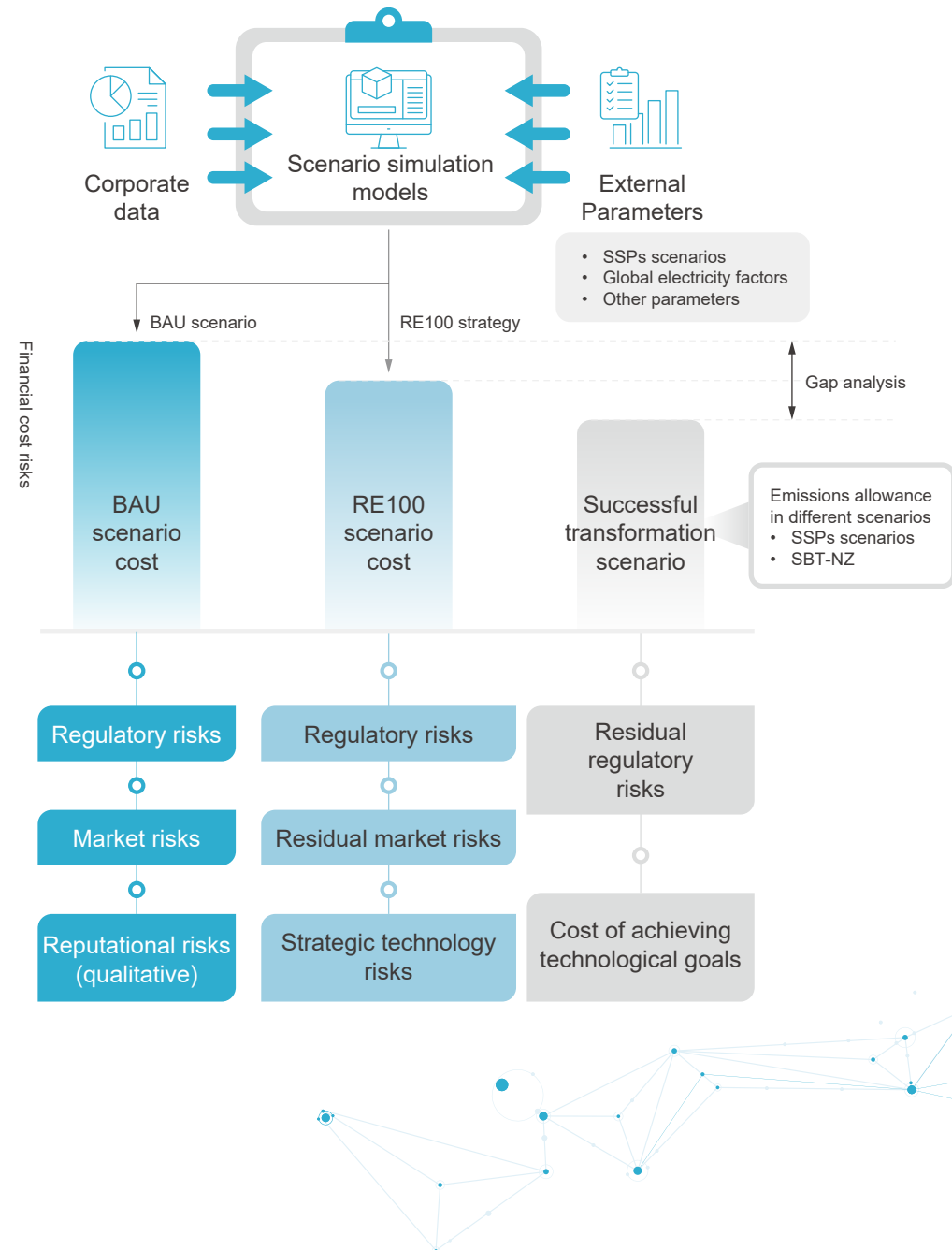
2.2 Scenario Analysis of Transition Risks

This analysis primarily examines financial impact and management cost assessment under climate change transition risks, recognizing that different risk pressures may lead to varying financial effects. The following assessment is based on the transition scenario requirements outlined in IFRS S2 "Climate-related Disclosures," issued by the International Sustainability Standards Board (ISSB). It evaluates low-carbon transition scenarios aimed at limiting the global average temperature rise to 2°C or even 1.5°C, while also incorporating national climate policy transition scenarios into the analysis. Since our different sites around the globe have different climate conditions, regulations and resources, the analysis focused on key sites in Taiwan, China, and Vietnam.

Assessment Framework and Source of Parameters

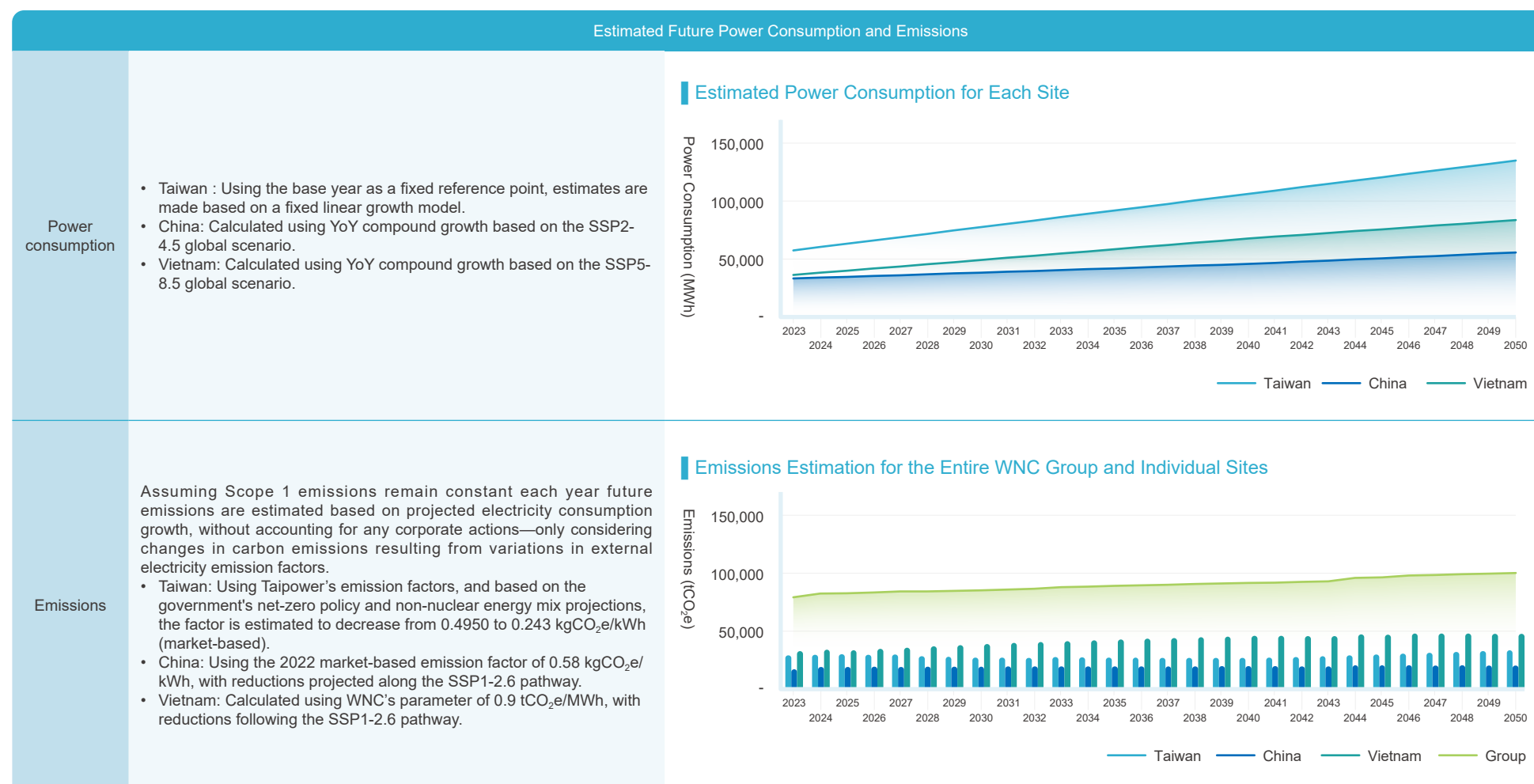
WNC adopts well-established international climate scenarios as tools for forward-looking simulations in line with TCFD recommendations. Using credible international scenario parameters, we analyze projected emissions under different scenarios, potential financial impact on existing strategies, and the management costs required to meet external pressures. We also estimate the potential financial outcomes of strategies already implemented or planned and compare them against the projected impacts to identify any gaps. The sources of parameters referenced include:

- ▶ The Shared Socioeconomic Pathways (SSPs) scenarios from the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6).
- ▶ Internationally credible reports, including the International Renewable Energy Agency (IRENA), the International Energy Agency (IEA).
- ▶ Energy parameters from the Taiwan Bureau of Energy and Taiwan Power Company.
- ▶ Climate policies publicly available from governments
- ▶ Parameters provided by companies: Basic emissions parameters, existing and long-term mitigation and transition strategies.



WNC's Strategy Selection and Future Data Estimation

WNC's strategic choices are primarily divided into two categories. The first is the BAU (Business As Usual) strategy, which follows the company's existing plans and timelines without introducing any additional measures or considering future long-term strategies. The second is the RE100 strategy—a long-term renewable energy plan aimed at achieving 50% renewable energy usage by 2030 and 100% by 2040.



Assumptions for External Scenarios and Financial Consideration Factors

External Scenario	Scenario Description	Financial Impact Factors Included	Parameter for Management Costs		
Scenario where the local government authorities push for transformation	Taiwan: Based on the Taiwan government's net-zero pathway: Reduce emissions by 20% by 2030, and achieve net zero by 2050 using 2005 emission levels as the baseline. • China: Carbon emissions are projected to peak in 2030 and achieve carbon neutrality by 2060 • Vietnam: Referenced the emission pathway of IPCC's SSP2-4.5 scenario	Focuses primarily on regulatory costs and estimates only the price variations of carbon fees/taxes under different transition scenarios. • Taiwan: Estimated at US\$10 per ton of CO ₂ e • China: Estimated carbon tax values under SSP1-2.6 • Vietnam: Estimated carbon tax values under SSP2-4.5	Management costs refer to the expenses required to implement mitigation transitions, including costs of existing strategies and additional costs for procuring renewable electricity to align with external scenarios. Renewable energy: the assumed parameters for procurement costs are as follows:		
			Reference Price (unit: USD/kWh)		
			Item	Taiwan Bureau of Energy	International Renewable Energy Agency (IRENA)
			Renewable energy (average)	0.124214809	0.064714286
			Solar photovoltaic (PV)	0.128465	0.048000
			Offshore wind energy	0.139183	0.075000
			Onshore wind energy	0.146978	0.033000
			Concentrated solar power (CSP)	0.114000	0.114000
			Biomass energy	0.123699	0.067000
			Geothermal energy	0.169179	0.068000
			Hydropower	0.048000	0.048000
			Renewable energy certificate (surcharge)	0.167970	0.050000
			Renewable energy (unspecified)	0.169179	0.062875
SBT-NZ scenario	Under the 1.5 °C low-carbon transition scenario, the long-term target is to reduce carbon emissions by 90% by 2050, ultimately achieving net-zero through BVCM (Beyond Value Chain Mitigation).	Estimated based on the carbon prices from IPCC AR6 SSP1-1.9 scenario	In addition to the costs mentioned above, the SBT-NZ scenario also includes carbon removal costs. This analysis uses direct air capture technology, based on the following three assumptions: (1) Technology at an immature stage: US\$ 340/tCO ₂ e (2) Average market price: US\$ 235/tCO ₂ e (3) Technology at a mature stage: US\$ 130/tCO ₂ e		

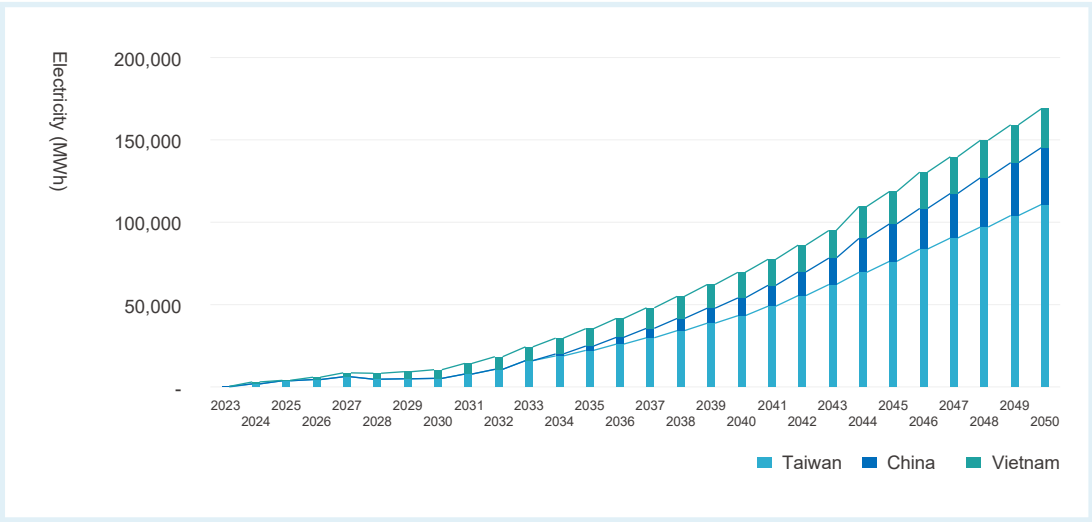


Impact of WNC's Existing Strategies Under Different

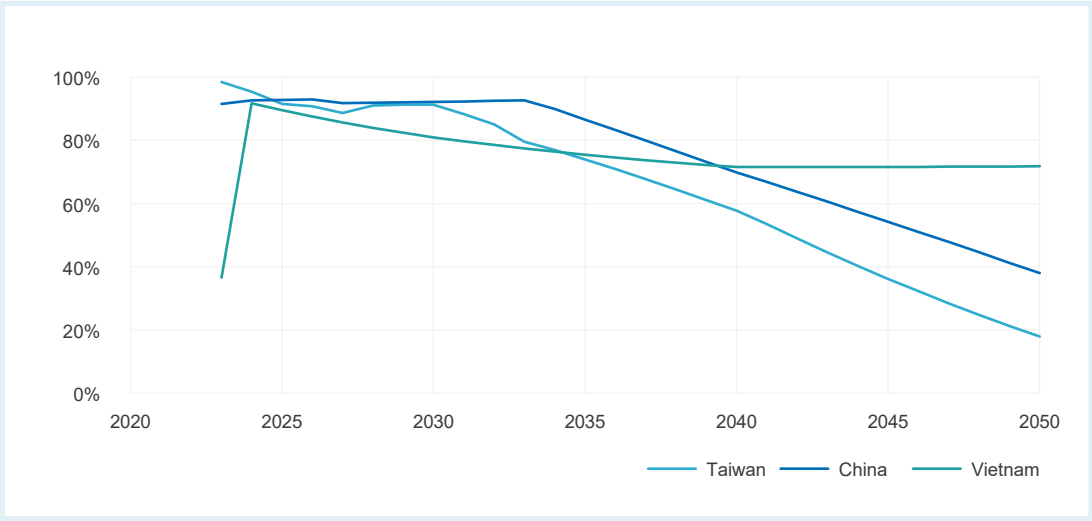
(a) Scenario where local government authorities push for transformation
Overall, among the three areas, Taiwan requires the highest additional renewable electricity purchases after meeting local regulations, mainly due to its more ambitious net-zero targets (as shown in Chart A on the right). The following provides an estimated financial impact of the local government transition scenarios for Taiwan, China, and Vietnam:

Region	Estimated Financial Impact
Taiwan	The Taiwanese government has set an annual carbon emissions quota of 25,000 tonnes; companies whose annual emissions are below this do not have to pay a carbon fee. As the annual carbon emissions of WNC headquarters, the S1 site, and the S3 site are all below 25,000 tonnes, WNC does not have to pay any carbon fees. All financial impact on the company comes from costs associated with BAU strategies and the purchase of renewable electricity to meet emissions targets. We expect to spend approximately US\$4.88 million in 2040 to purchase renewable electricity (amounting to about 43 million kWh); this expenditure is expected to reach approximately US\$12 million in 2050 (amounting to about 110 million kWh in purchased power).
China	The Kunshan site's carbon emissions are expected to meet China's current emissions standards through 2033. However, starting in 2034 emissions are expected to exceed said standards, and the amount of carbon tax that will need to be paid is projected to reach around US\$1.2 million in 2050. In addition, to comply with relevant local emissions regulations, the Kunshan site will need to spend approximately US\$240,000 in 2040 to purchase renewable electricity (amounting to about 11 million kWh); this expenditure is expected to reach approximately US\$800,000 in 2050 (amounting to about 35 million kWh in purchased power).
Vietnam	The Vietnam site purchased a large amount of renewable energy certificates in 2023, lowering the site's overall emissions. In the future, taking into account the rapid growth of the site's electricity needs and the comparatively slower reduction of the emission factor for the market, overall carbon emissions for the site are projected to exceed the transition target (based on the SSP2-4.5 scenario). As a result, the amount of carbon tax that will need to be paid is projected to reach around US\$160,000 in 2050. In addition, to comply with relevant local emissions regulations, the Vietnam site will need to spend approximately US\$450,000 in 2040 to purchase renewable electricity (amounting to about 15 million kWh); this expenditure is expected to reach approximately US\$700,000 in 2050 (amounting to about 23 million kWh in purchased power).

(a) Additional Purchase of Carbon-free Electricity After Meeting Local Regulations



(b) Ratio of Gray Electricity^{Note} at Each Site



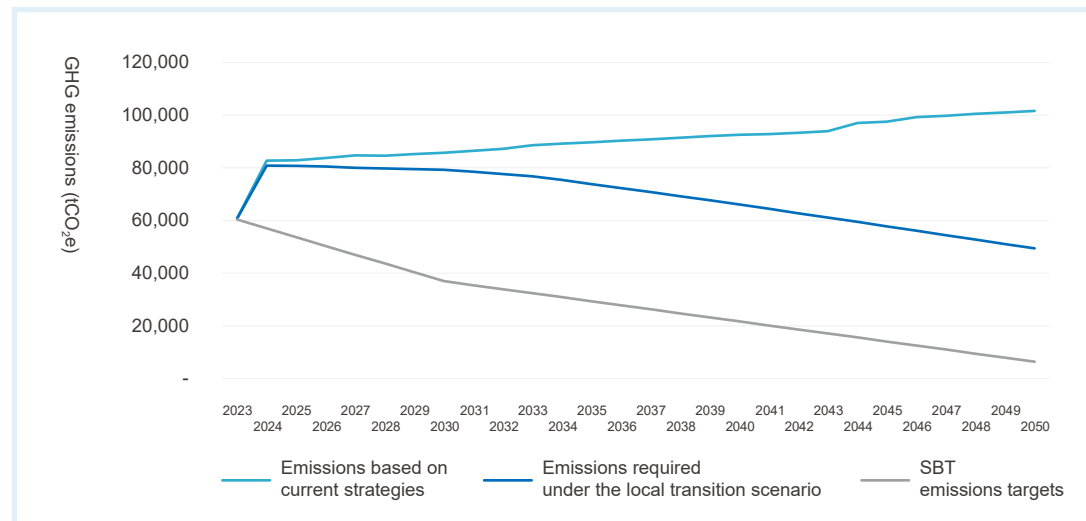
Note: Gray electricity refers to electricity generated from fossil fuels, whose production emits large amounts of carbon dioxide and other greenhouse gases that seriously pollute the environment.

(b) SBT-NZ Scenarios

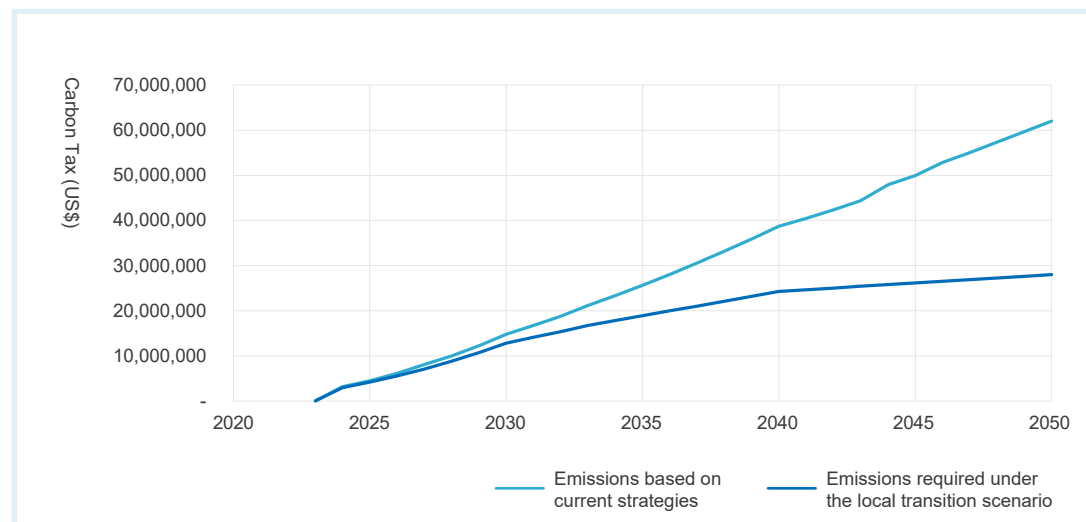
The SBT-NZ scenario corresponds to the most stringent 1.5°C transition pathway, requiring a 42% reduction in Scope 1 and 2 emissions by 2030 and a 90% reduction in emissions across all scopes by 2050. This scenario has the highest carbon tax/fee parameters and is the most stringent decarbonization pathway. Even after achieving the required 90% emissions reduction to meet the SBT target, Beyond Value Chain Mitigation (BVCM) may still be needed to reach net zero. As the SBT-NZ scenario is calculated at the organizational level, emission reduction targets are not broken down by or allocated to individual sites. The graph on the top right shows the difference in the amount of emissions between the SBT target and the emissions under the BAU strategy and the emissions after meeting local carbon transition standards. The difference in emissions is then multiplied by the carbon tax value in the SSP1-1.9 scenario to get the amount of carbon tax that needs to be paid in each scenario (listed in graph on bottom right). The results indicate that if we only follow local transition scenarios, we will be unable to meet our SBTi targets. Therefore, to achieve said targets, the site(s) in each region will need to purchase additional renewable electricity, with estimated carbon tax costs ranging from US\$30 million to 60 million.



(a) Difference Between the SBT Target and Two Scenarios



(b) Carbon Tax Under the SBT-NZ Scenario



To simulate WNC's transition from meeting local government transition scenarios to achieving SBT-NZ targets, this scenario assumes that the Vietnam site will receive highest priority in terms of reaching 100% renewable electricity usage. This is because Vietnam has the highest electricity emission factor, maximizing the effectiveness of renewable electricity purchases. Sites in China will come next, followed by sites in Taiwan, as the cost of renewable electricity in Taiwan is higher than in China.

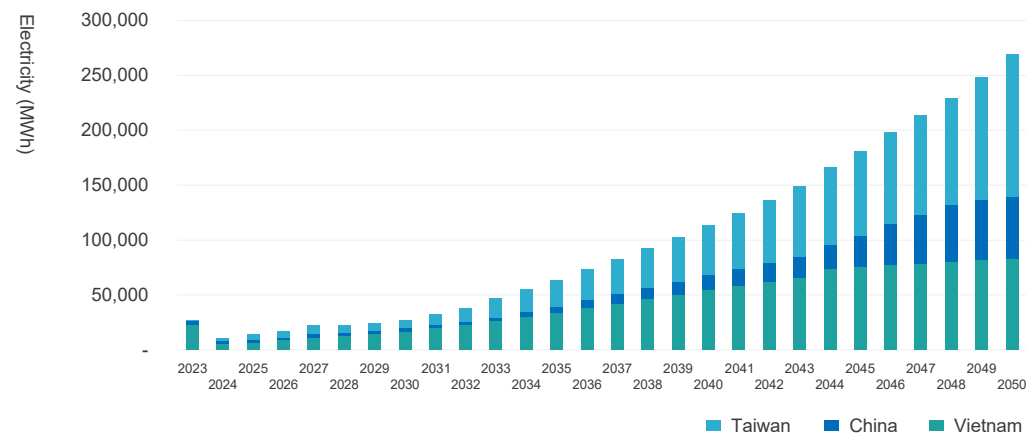
After integrating the local government transition scenario with the SBT-NZ scenario, we found that meeting the local government targets in Vietnam does not require a significant purchase of renewable electricity. However, to meet the SBT-NZ scenario requirements, nearly 60 million kWh of additional renewable electricity needs to be purchased. In China, priority must be given to meeting local government targets. Purchase of renewable electricity will become necessary starting around 2033. To meet SBT-NZ scenario requirements, an additional 20 million kWh of renewable electricity needs to be purchased in 2044. The Taiwan government's net-zero target is more stringent than China and Vietnam, necessitating the purchase of renewable electricity at an early stage. As a result, not a lot of additional renewable electricity needs to be purchased to achieve SBT-NZ; only an extra 20 million kWh of renewable electricity needs to be purchased starting in 2049.

Note: The greatest uncertainty in this assessment stems from the estimation of the electricity emission factor. It is assumed that the Taiwan government will achieve its goal of eliminating the use of nuclear power, and will rely on renewable energy and natural gas as the two main methods of power generation. If the Taiwan government is unable to ensure stable power generation from these two main sources in the future, the electricity emission factor will increase. As a result, a greater reduction in gray electricity will be required to achieve SBT-NZ and government net-zero targets and keep emissions within the limits of the transition goals.

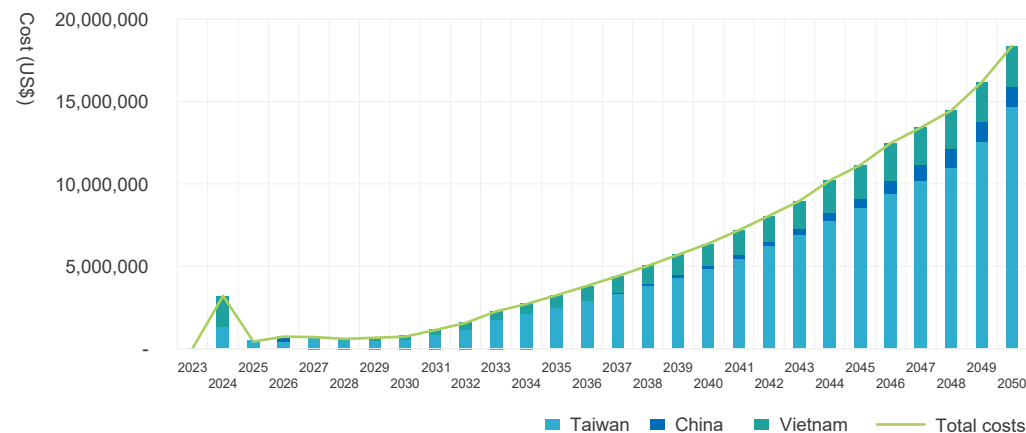
Secondly, since future emission estimates are primarily based on Scope 2 emissions, the regulatory risk in this area also depends on whether the Taiwan government's policies on carbon charges and the methodologies used to calculate Scope 2 emissions are standardized. Currently, the calculation methods adopted by government agencies for Scope 2 emissions are not aligned with the internationally recognized GHG Protocol. There are no clear regulations regarding region- or market-specific calculation methods, which results in discrepancies between the government's net-zero pathway and the SBT-NZ scenario for Scope 2 emissions, thereby introducing uncertainty into the final financial impact calculations.

In addition, Taipower is planning to sell low-carbon electricity products. This will cause changes in the market-based emission factors used for conventional (gray) electricity, as these low-carbon electricity products would be decoupled from the Taipower grid, thus creating a new residual mix. This will lead to a high degree of uncertainty when estimating demand for renewable electricity and the financial implications of carbon fees and carbon taxes.

Amount of Gray Electricity Reduction Required to Achieve SBT-NZ



Total Cost of Reaching SBT-NZ

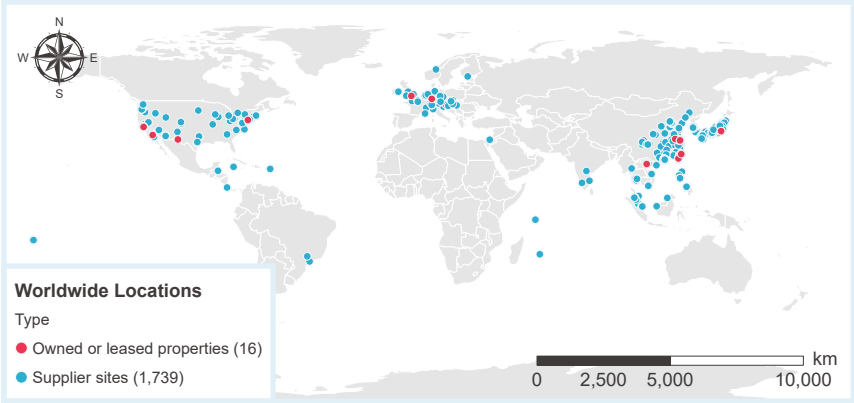


2.3 Scenario Analysis of Physical Risks

According to the Climate Change in Taiwan: National Scientific Report 2024, since 1850, human activities have led to a significant increase in greenhouse gas emissions, causing global surface temperatures to rise steadily. In recent years, the pace of global warming has increased dramatically. As a result, weather events such as heatwaves, torrential rainfall, and droughts will become more frequent and severe.

We have adopted Aqueduct 4.0, a tool launched in 2023 by the World Resources Institute (WRI), to analyze water risk. The tool integrates climate models from international organizations (such as CMIP6), hydrological models (such as PCR-GLOBWB, HYPE), and surface and groundwater data, transforming complex hydrological data into intuitive water-related risk indicators.

We analyzed water risk at a total of 1,755 sites worldwide, 16 of which are our sites (owned or rented) and 1,739 of which are supplier sites. Our sites are located in China, Japan, Taiwan, Vietnam, the United Kingdom, Germany, Mexico, and the United States. Supplier sites are primarily located in Asia, with some in Europe, the Americas, Africa, and Oceania. We utilized international databases and assessment tools to analyze the natural disaster risks faced by our sites under different climate scenarios to help us understand the actual impact of physical risks on WNC's assets and operations.



Global Baseline Overall Water Risk

The baseline overall water risk is a score derived from 13 indicators, and includes physical risk quantity indicators (baseline water stress, baseline water depletion, interannual variability, seasonal variability, groundwater table decline, riverine flood risk, coastal flood risk, drought risk), physical risk quality indicators (untreated connected wastewater, coastal eutrophication potential) and regulatory and reputational risk indicators (unimproved/no drinking water, unimproved/no sanitation, peak RepRisk country ESG risk index). It is primarily used to evaluate water resource risks of different areas during the baseline period.

Analysis of Global Baseline Overall Water Risk at WNC/Supplier Sites			
Level	Site Type	Amount	Site Location
Extremely high	WNC site	0	-
	Supplier site	114	China, India, the Philippines, Thailand, Vietnam, Mexico, the US
High	WNC site	5	China, Vietnam, the US
	Supplier site	414	China, India, Indonesia, Israel, the Philippines, Thailand, Vietnam, the US
Medium-high	WNC site	2	Mexico, the US
	Supplier site	321	China, Hong Kong, Thailand, Brazil, Canada, the US
Medium-low	WNC site	9	China, Japan, Taiwan, the UK, Germany, the US
	Supplier site	814	China, Japan, South Korea, Malaysia, Taiwan, Czech Republic, the UK, France, Germany, Hungary, Italy, Ireland, the Netherlands, Slovakia, Belize, Brazil, British Virgin Islands, Costa Rica, the US
Low	WNC site	0	-
	Supplier site	67	Japan, South Korea, Singapore, Austria, the UK, Finland, Germany, Hungary, the Netherlands, Norway, Switzerland, the US

Global Baseline Water Stress Analysis

Baseline water stress is a key indicator for measuring the ratio between water withdrawal and available freshwater supply, reflecting the degree of competition for water resources. This indicator calculates the ratio between total water withdrawals (including water for domestic, industrial, agricultural (irrigation), and animal husbandry use) and the available renewable freshwater supply from both surface water and groundwater, taking into account upstream usage and the impact of dams.

Analysis of Baseline Water Stress at WNC/Supplier Sites			
Level	Site Type	Amount	Site Location
Extremely high	WNC site	5	China, Mexico, the US
	Supplier site	367	China, India, Israel, the Philippines, Thailand, Mexico, the US
High	WNC site	3	The UK, Germany, the US
	Supplier site	68	China, South Korea, Thailand, France, Germany, the Netherlands, Canada, the US
Medium-high	WNC site	1	Japan
	Supplier site	157	China, India, Japan, South Korea, the Philippines, Vietnam, Czech Republic, France, Brazil, the US
Medium-low	WNC site	6	Taiwan, Vietnam, the US
	Supplier site	905	China, Hong Kong, Japan, Taiwan, Vietnam, the UK, Finland, France, Germany, Italy, Ireland, Slovakia, Costa Rica, the US
Low	WNC site	1	China
	Supplier site	234	China, Indonesia, Japan, South Korea, Malaysia, Singapore, Austria, the UK, Germany, Hungary, the Netherlands, Norway, Switzerland, Belize, Brazil, British Virgin Islands, Cayman Islands, the US

Level of Water Stress During Different Time Periods Under Different Climate Scenarios

The WRI Aqueduct tool enables the assessment of water stress changes under three climate change scenarios (BAU, OPT, and PES) over short-, medium-, and long-term timeframes, resulting in a total of nine water stress assessment outcomes. These assessments are used to identify high-risk areas, help address water resource-related challenges under different climate change pathways, and facilitate decision-making for short-term policy adjustments and long-term planning.

Level of Water Stress During Different Time Periods Under Different Climate Scenarios (WNC Sites)										
Baseline		BAU			OPT			PES		
		Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term
Extremely high	5	2	3	5	6	4	4	3	4	4
High	3	6	5	3	2	4	4	5	4	4
Medium-high	1	1	1	1	2	2	2	2	2	2
Medium-low	6	6	6	6	5	5	5	5	5	5
Low	1	1	1	1	1	1	1	1	1	1

Level of Water Stress During Different Time Periods Under Different Climate Scenarios (Supplier Sites)										
Baseline		BAU			OPT			PES		
		Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term
Extremely high	367	126	118	371	369	134	134	129	129	129
High	68	348	360	99	69	317	319	343	350	358
Medium-high	157	157	117	110	205	176	144	189	152	108
Medium-low	905	926	960	916	911	873	897	895	924	974
Low	234	179	181	240	182	236	242	180	181	167

Time period definitions: Short-term: 2015–2045; medium-term: 2035–2065; long-term: 2065–2085

Climate change scenario definitions: BAU (Business As Usual): Corresponds to the SSP3-RCP7.0 scenario, which assumes insufficient climate policy intervention and represents a medium-to-high forcing pathway; OPT (Optimistic): Corresponds to the SSP1-RCP2.6 scenario, an optimistic scenario where global warming is limited to 2°C or less by the year 2100, representing a low forcing pathway; PES (Pessimistic): Corresponds to the SSP5-RCP8.5 scenario, a pessimistic scenario characterized by continued heavy reliance on fossil fuels, representing a high forcing pathway.

Drought Risk Analysis for Regions in Taiwan













After going over the locations of its owned or rented sites and the sites of its tier 1 suppliers in Taiwan as well as the water reservoirs that supply the aforementioned sites, WNC has divided Taiwan into 11 regions for drought risk analysis. The historical water shortage frequency and the estimated water shortage frequency for these reservoirs under different climate change scenarios were assessed. A water shortage event is defined as a situation where a reservoir, due to a lack of stored water, is unable to maintain normal water supply. This typically occurs when the reservoir's water level or storage volume falls below the operational threshold, triggering water supply restrictions. The likelihood of a water shortage under different climate change scenarios is assessed using the Standardized Precipitation Index (SPI). Based on the reservoirs' historical water shortage frequency and the estimated likelihood of water shortage under different climate change scenarios, WNC uses a water shortage risk matrix to determine the water shortage risk level for each climate change scenario in different timeframes.





• Low • Medium • Medium-high • High

Region	Source of Water	Historical Water Shortage Frequency ^{Note 1}	Estimated Likelihood of Water Shortage (SPI-3<-1) in the Future ^{Note 2}											
			SSP1-2.6			SSP2-4.5			SSP3-7.0			SSP5-8.5		
			Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term
Keelung	Xinshan Reservoir and Xishi Reservoir	•	••	••	••	••	••	••	••	•••	•••	••	••	•••
Taipei City and New Taipei City	Nanshi River and Feicui Reservoir	•	••	••	••	••	••	••	••	•••	•••	••	••	•••
Taoyuan	Shimen Reservoir	••••	•••	•••	•••	•••	•••	•••	•••	••••	•••	•••	•••	••••
Hsinchu	Baoshan Reservoir, Baoshan No. 2 Reservoir, Yongheshan Reservoir	•	••	••	••	••	•••	•••	•••	•••	•••	••	•••	•••
Miaoli	Yongheshan Reservoir, Liyutan Reservoir, Mingde Reservoir	••••	••	••	••	••	••	•••	•••	•••	•••	••	•••	•••
Taichung	Liyutan Reservoir and Techí Reservoir	•	••	••	••	•••	•••	•••	•••	•••	•••	•••	••	•••
Changhua	Groundwater, Hushan Reservoir, Techí Reservoir	•	•••	•••	••	•••	•••	•••	•••	••••	••••	•••	•••	•••
Nantou	Surface water and groundwater	••	•••	•••	••	•••	•••	•••	•••	••••	•••	•••	•••	•••
Chiayi	Lantan Reservoir, Renyitan Reservoir, Zengwen Reservoir, Wushantou Reservoir	•	•••	•••	••	•••	•••	••	•••	••••	•••	•••	•••	•••
Tainan	Zengwen Reservoir, Wushantou Reservoir, Nanhua Reservoir	••	•••	•••	••	•••	•••	•••	•••	••••	•••	•••	•••	•••
Kaohsiung	Gaoping River Weir (incl. water from hyporheic flows) and Fengshan Reservoir	••••	•••	•••	••	•••	•••	•••	•••	••••	•••	•••	•••	•••

Note 1: The historical water shortage frequency is based on the number of times the relevant reservoirs' water levels have fallen below the low water line. Data from 2004 to 2022 was used.

Note 2: Short-term: 2021–2040; medium-term: 2041–2060; medium- to long-term: 2061–2080.

Water Shortage Risk Matrix				
Historical Water Shortage Frequency	Estimated Likelihood of Water Shortage in the Future			
	Low	Medium	Medium-high	High
Low				
Medium				
High				

 No risk: Maintain normal operations at the site. Monitor changes in disaster potential and regularly review risks.
  Low risk: Maintain normal operations at the site. Monitor changes in disaster potential and regularly review risks.
  Medium risk: Maintain normal operations at the site. Strengthen monitoring of disaster potential changes and formulate emergency response plans and risk management measures.
  High risk: Implement emergency response plans, risk management measures and disaster mitigation measures.

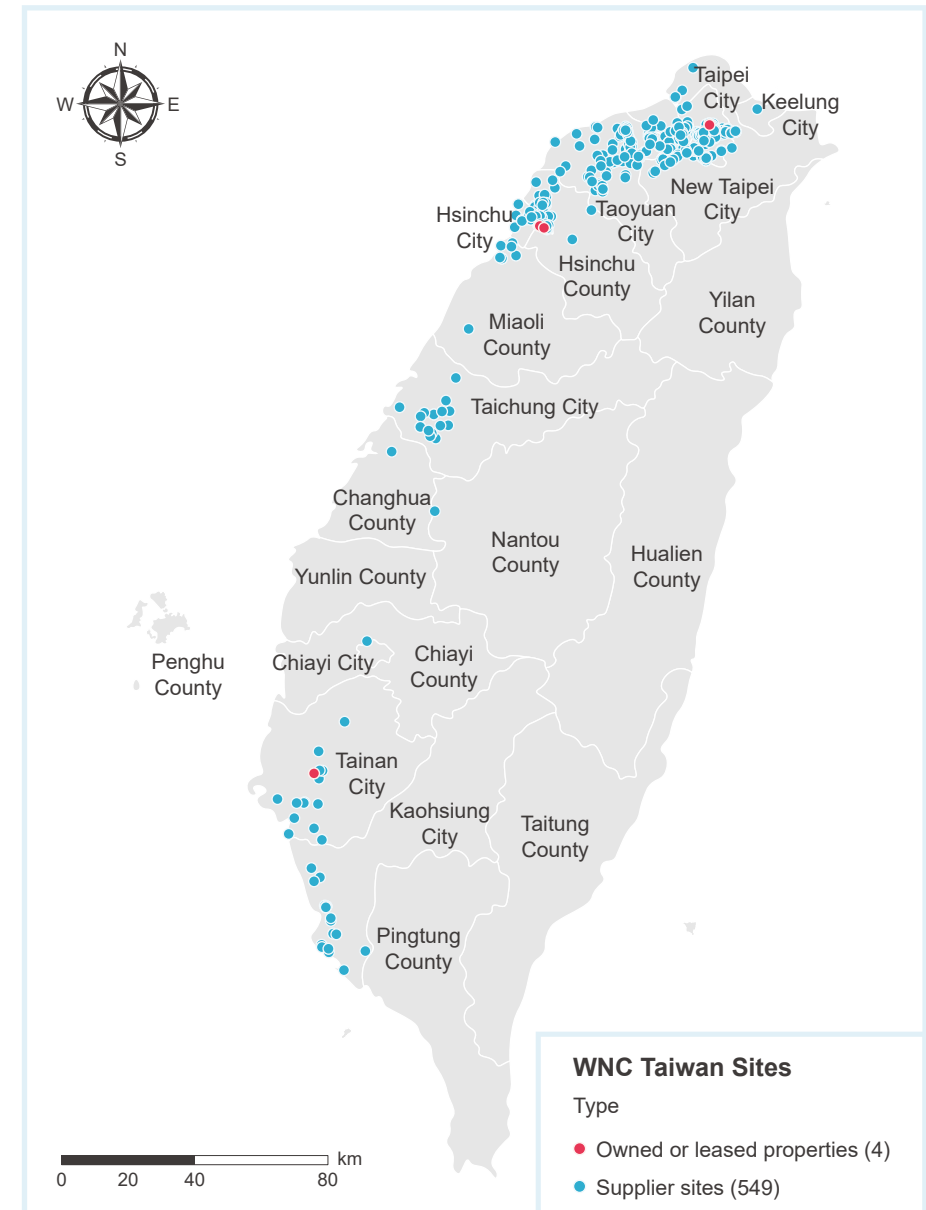
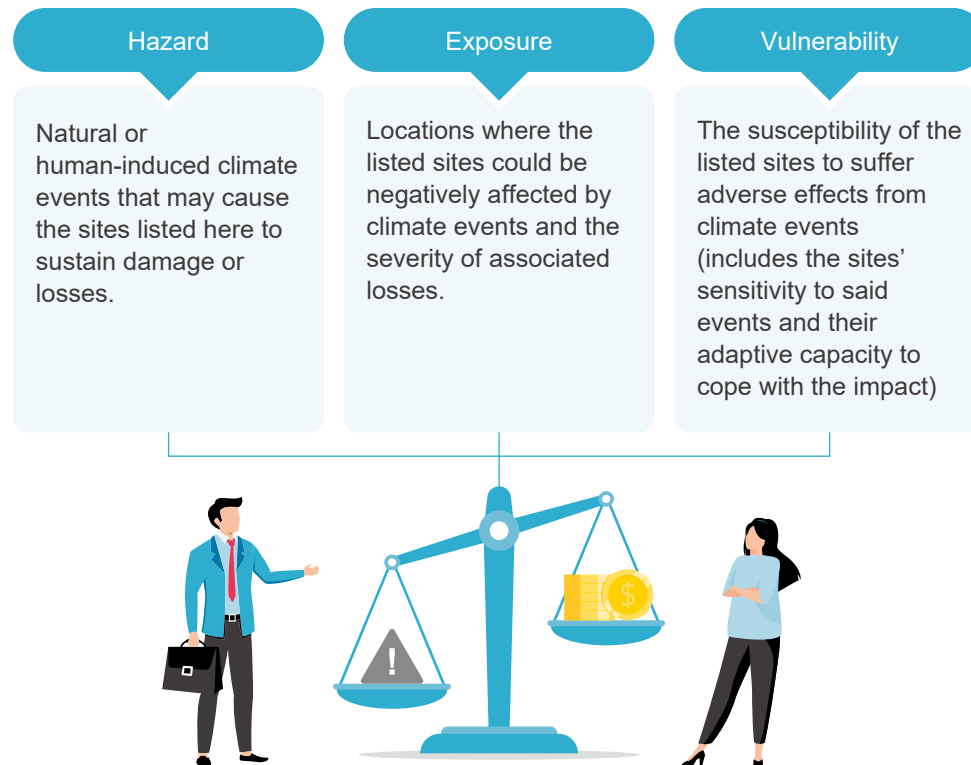
Region	Number of Sites		Water Shortage Risk Under Different Climate Change Scenarios											
	WNC Sites	Supplier Sites	SSP1-2.6			SSP2-4.5			SSP3-7.0			SSP5-8.5		
			Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term
Keelung	0	1	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟢	🟢	🟡	🟡	🟢
Taipei City and New Taipei City	1	268	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟢	🟢	🟡	🟡	🟢
Taoyuan	0	118	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴
Hsinchu	2	98	🟡	🟡	🟡	🟡	🟢	🟢	🟢	🟢	🟢	🟡	🟢	🟢
Miaoli	0	8	🟡	🟡	🟡	🟡	🟡	🔴	🔴	🔴	🔴	🟡	🔴	🔴
Taichung	0	17	🟡	🟡	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
Changhua	0	1	🟢	🟢	🟡	🟢	🟢	🟢	🟢	🟡	🟡	🟢	🟢	🟢
Nantou	0	1	🟡	🟡	🟢	🟡	🟡	🟡	🟡	🔴	🟡	🟡	🟡	🟡
Chiayi	0	1	🟢	🟢	🟡	🟢	🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢
Tainan	1	17	🟡	🟡	🟢	🟡	🟡	🟡	🟡	🔴	🟡	🟡	🟡	🟡
Kaohsiung	0	19	🔴	🔴	🟡	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴	🔴



Extreme Rainfall Risk Analysis in Taiwan

Climate risk level is assessed by quantifying and categorizing three factors: hazard, exposure, and vulnerability. We define extreme rainfall as the hazard, while the flooding, landslides, and debris flows caused by such rainfall represent vulnerability, and the locations of sites represent exposure. Based on these parameters, we conducted a physical risk analysis of each site under different climate change scenarios.

We referenced the IPCC Sixth Assessment Report and adopted multiple Shared Socioeconomic Pathways (SSPs) and Representative Concentration Pathways (RCPs) to estimate the hazard levels of extreme rainfall under four scenarios (SSP1-2.6, SSP2-4.5, SSP3-7.0, and SSP5-8.5) across short-, medium-, and long-term timeframes. For vulnerability, we assessed disaster scope and severity using disaster-related map data published by government agencies in Taiwan. Exposure analysis was based on the locations of WNC's four owned or rented sites in Taiwan and 549 supplier sites, totaling 553 locations.



According to our analysis, WNC's four owned or rented sites in Taiwan show no potential for encountering flooding, landslides, or debris flows under any of the climate change scenarios. Among 549 supplier sites, 413 were identified as having no risk of encountering flooding, landslides, or debris flows and are classified as having no risk. The remaining 136 supplier sites were identified as having varying levels of flood risk. Across different climate scenarios and timeframes, between 79 to 108 of these sites fall under low risk, between 22 to 50 fall under medium risk, and between five to seven are categorized as high risk. High risk sites are primarily located in Hsinchu, Taichung, and Tainan. We implement tiered management measures according to different risk levels. These measures include formulation of emergency response procedures, evacuation plans, and emergency supply preparation. We also closely monitor changes in hazard potential and conduct regular risk reviews to mitigate future risks and potential losses.

Disaster Risk Levels of WNC Sites During Different Time Periods Under Different Climate Scenarios

	SSP1-2.6			SSP2-4.5			SSP3-7.0			SSP5-8.5		
	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term
High risk	0	0	0	0	0	0	0	0	0	0	0	0
Medium risk	0	0	0	0	0	0	0	0	0	0	0	0
Low risk	0	0	0	0	0	0	0	0	0	0	0	0
No risk	4	4	4	4	4	4	4	4	4	4	4	4

Disaster Risk Levels of Supplier Sites During Different Time Periods Under Different Climate Scenarios

	SSP1-2.6			SSP2-4.5			SSP3-7.0			SSP5-8.5		
	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term	Short-term	Mid-term	Long-term
High risk	5	6	6	6	5	7	6	6	5	6	6	5
Medium risk	40	41	25	53	39	36	40	35	48	38	42	35
Low risk	91	89	105	77	92	93	90	95	83	92	88	96
No risk	413	413	413	413	413	413	413	413	413	413	413	413

Short-term: 2021–2040; medium-term: 2041–2060; long-term: 2061–2080

Risk management: For high-risk sites, emergency response plans and risk management measures should be activated and disaster mitigation action items implemented. For medium risk sites, closely monitor changes in disaster potential, and emergency plans and risk management strategies should be developed. For low risk or no risk sites, the focus is on maintaining normal site operations while continuing to monitor disaster potential and periodically reviewing risk status.

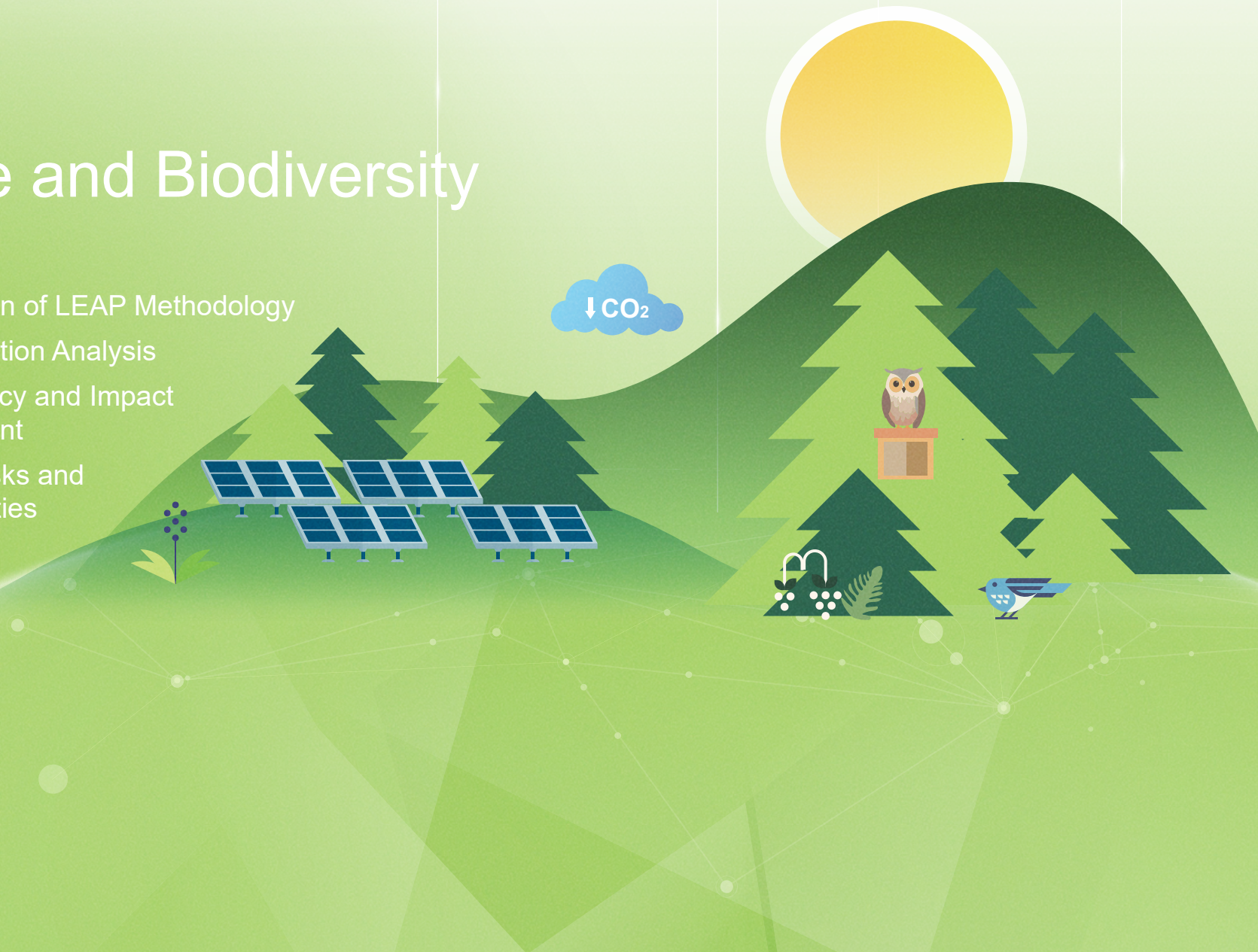
Physical Risk Adaptation Strategies

To address potential physical risks to our sites, we have developed short-term (1–2 years), medium-term (3–5 years), and long-term (over 5 years) adaptation strategies. These strategies encompass risk identification, enhancement of adaptive capacity, and sustainable operational planning. A Business Continuity Plan (BCP) has also been established to ensure employee safety and to protect assets. We have also incorporated risk assessment results into our supplier engagement processes. We provide higher levels of risk management and monitoring for suppliers with high disaster risk levels and provide support or guidance when necessary.

Time Period	Physical Risk Adaptation Strategy
Short-term (1–2 years)	<p>Build internal risk identification and emergency response capabilities: Conduct annual disaster risk assessments, establish a disaster risk database, and develop comprehensive emergency response SOPs that cover details on items such as personnel evacuation, protection of supplies, emergency contacts, and use of emergency equipment. Regular drills are conducted to ensure that employees are familiar with emergency response procedures.</p> <p>Assess physical risks to suppliers: Perform regular risk assessments on suppliers to understand their level of risk from natural disasters such as flooding, landslides, and earthquakes. Utilize data analytics and monitoring tools to continuously track and evaluate the risk levels of suppliers.</p>
Mid-term (3–5 years)	<p>Enhance site resilience and operational stability: Conduct detailed geographic and hydrological analyses on sites identified to have high flooding potential and build flood prevention facilities such as drainage channels, detention basins, levees, and underground water storage facilities. In addition, implement structural upgrades in company buildings, such as reinforcing foundations, improving water resistance of walls, and implementing permeation prevention technologies to increase the ability of said buildings to withstand extreme weather events.</p> <p>Strengthen suppliers' climate resilience: Provide disaster response and risk management training to suppliers to enhance their response capability. Encourage suppliers to formulate disaster response plans tailored toward different types of disasters; said plans should include details on personnel evacuation, emergency supply preparation, and communication protocols.</p>
Long-term (> 5 years)	<p>Reconstruction or relocation of high-risk sites: For sites located in high-risk areas such as seismic zones or regions exposed to extreme hazards, conduct comprehensive assessments based on actual requirements and formulate plans for site reconstruction or relocation in order to minimize related risks. Encourage suppliers in high-risk areas to consider site relocation or reconstruction. For suppliers in high-risk areas where relocation is not feasible, look for ways to reduce dependency on said suppliers or seek alternative suppliers in order to diversify supply chain risk.</p>

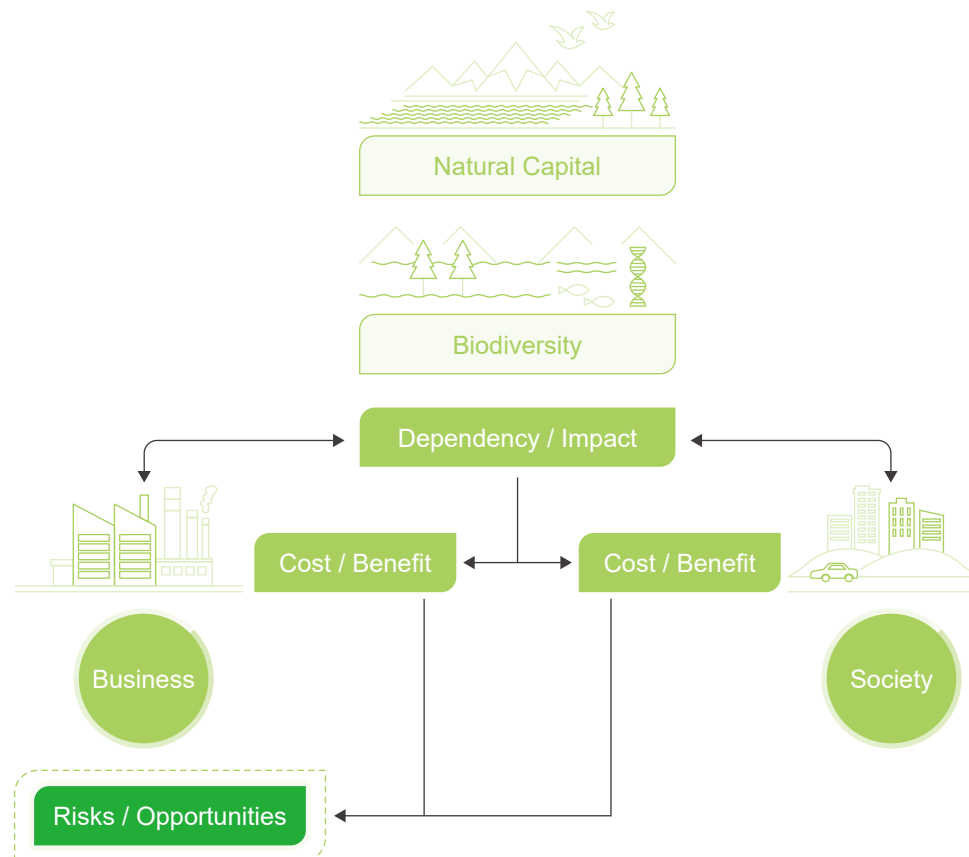
3 Nature and Biodiversity

- 3.1 Introduction of LEAP Methodology
- 3.2 Sites Location Analysis
- 3.3 Dependency and Impact Assessment
- 3.4 Nature Risks and Opportunities



3.1 Introduction of LEAP Methodology

Business operations rely on the ecosystem services provided by nature, but at the same time, business activities or other external factors may also generate driving forces that alter the natural environment, thereby impacting the normal functioning of ecosystems and giving rise to risks and opportunities for businesses. To assess stocks and flows of natural capital, including the ecosystem and abiotic services provided by nature as well as the value these services create for businesses and society, from 2023, WNC has implemented the LEAP (locate, evaluate, assess and prepare) assessment process by referencing definitions provided by the TNFD framework. We regularly investigate the interactions between business operations within the value chain and the natural environment, and analyze the corresponding nature-related risks and opportunities based on dependency and impact assessment results. In addition, we prioritize risks and opportunities through materiality analysis, and develop corresponding control measures, monitoring metrics and management objectives. These efforts help reduce negative impact on biodiversity and enhance the positive impact, thereby achieving a nature-positive goal.



Locate

Define the scope of operational sites (including owned or leased assets) and upstream suppliers and identify their interaction with natural ecosystems.

Evaluate

Evaluate the dependence and impact level of each operating site and supplier on natural ecosystem services.

Assess

Identify significant nature-related risks and opportunities.

Prepare

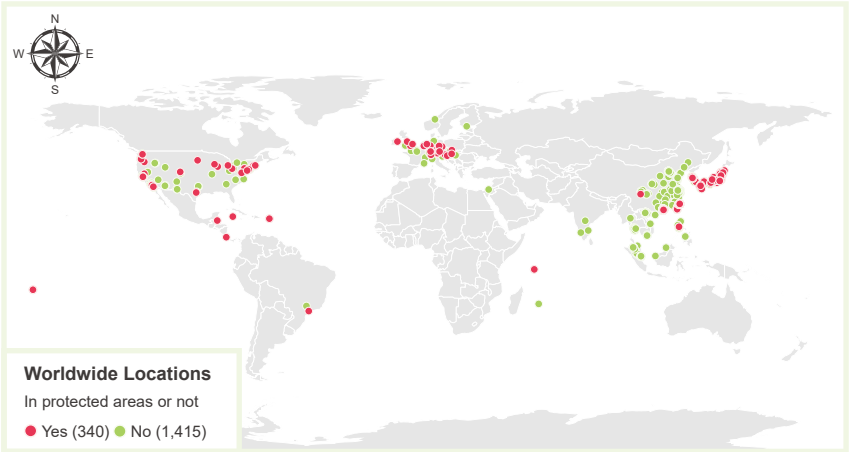
Develop management strategies and objectives for regular tracking and management based on analysis results. Disclose a report of nature-related significant issues.

3.2 Sites Location Analysis

WNC has conducted biodiversity impact assessments (BIA) for 1,755 sites around the globe (16 WNC owned sites and 1,739 supplier sites). These assessment subjects were categorized and analyzed based on two geographical scopes: Taiwan and the rest of the world. With reference to the DJSI indexes, our analysis methodology designates a zone with a two-kilometer radius around each operational site as the area of potential impact. These zones are overlaid with local protected area maps to further analyze potential impact of business operations on biodiversity.

Worldwide Locations Analysis of IUCN Protected Area Locations

The IUCN World Database on Protected Areas (WDPA) is the most extensive and comprehensive database of protected areas worldwide, covering a vast number of terrestrial and marine sites. By referencing this database, we adopt the IUCN's protected area categories, which include category Ia - strict nature reserve, Ib - wilderness area, II - national park, III - natural monument or feature, IV - habitat or species management area, V - protected landscape or seascape, VI - protected area with sustainable use of natural resources, and not reported or not assigned. These categories reflect different protection goals and management strategies.



Sources: Esri, GEBCO, NOAA, National Geographic, Garmin, HERE, Geonames.org, and other contributors, Esri, Garmin, GEBCO, NOAA NGDC, and other contributors.

Analysis Results

According to our analysis, three properties owned or leased by WNC and 337 supplier sites are located in or near IUCN protected areas.

Global Sites Located Within IUCN Protected Areas

Countries		Owned or Leased	Supplier
Asia	China, Hong Kong, Japan, South Korea, the Philippines, Taiwan	0	263
Europe	Austria, Czech, the UK, Germany, Hungary, Ireland, the Netherlands, Switzerland	2	24
The Americas	Belize, Brazil, British Virgin Islands, Costa Rica, Cayman Islands, the US	1	43
Africa	Republic of Seychelles	0	2
Oceania	Samoa	0	5

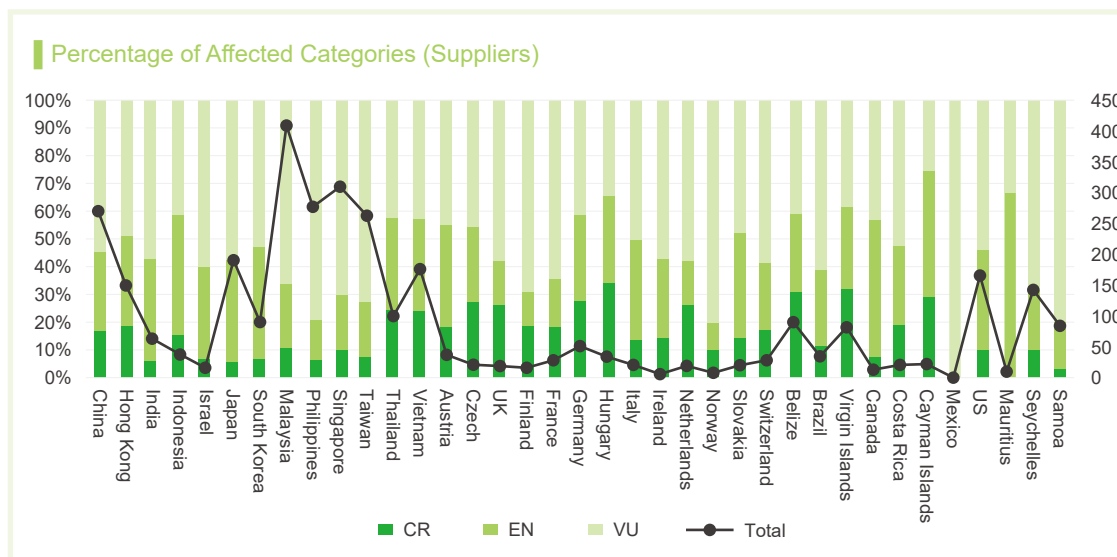
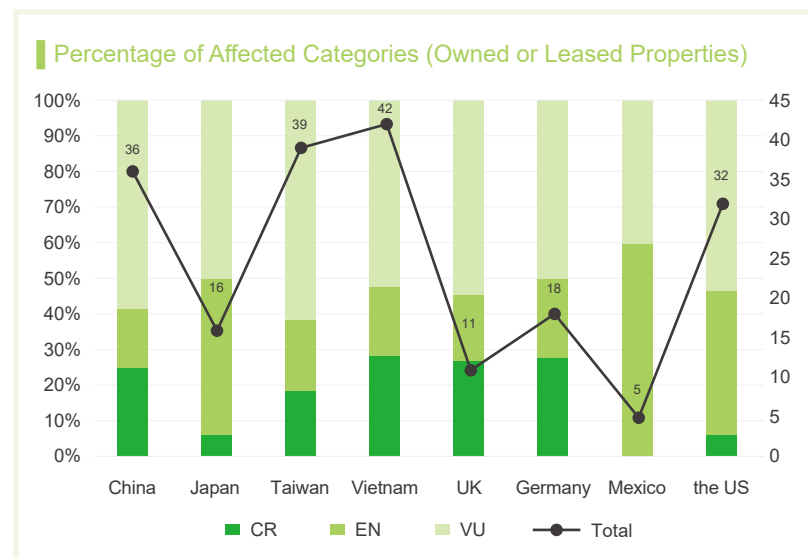
Analysis of Endangered Species Within Worldwide Locations

In 1964, the IUCN published its first Red List of Threatened Species (the Red List), which is an assessment tool for global biodiversity conservation. It provides standardized categories for evaluating the conservation status of species worldwide. Currently, the IUCN Red List covers more than 150,000 species, including animals, plants, fungi and microorganisms. Species are classified into different conservation statuses based on their population size and trends, geographic distribution, population structure, habitat requirements and specific threats. Conservation statuses include extinct (EX), extinct in the wild (EW), critically endangered (CR), endangered (EN), vulnerable (VU), near threatened (NT), least concern (LC) or data deficient (DD). Such classifications reflect the risk level and degree of threat each species faces. The number of species classified as CR, EN, and VU is commonly used as an indicator of threatened species.

Analysis Results

All 1,755 WNC and supplier sites worldwide overlap with the distribution of species in the Red List, indicating a potential risk of impact. Among the 16 sites owned or leased by WNC, the Vietnam site has the highest overall score for threatened species indicators, as well as the highest total number of CR species. This reflects the conservation pressures faced by these habitat types. In general, human activities have a multifaceted impact on biodiversity. Therefore, conservation strategies should be tailored to the specific characteristics of different species and habitats to reduce potential impacts on ecosystems.

Furthermore, according to species analysis at supplier sites, the impact encompasses a wide range of species, including mammals, amphibians, reptiles, fish, marine organisms, plants, and freshwater organisms. The conservation status varies significantly across species, with the Malaysia sites having the highest total number of threatened species across all categories and the Hungary sites having the highest percentage of CR species. WNC will conduct detailed analyses of operational practices at each site to determine whether our business activities place additional pressure or pose further threats to threatened species and to formulate conservation and management measures.



Number of Species by Conservation Status as Defined in the Red List

● Owned or Leased Properties
● Supplier

Conservation Status		Description	Asia	Europe	The Americas	Africa	Oceania
EX	Extinct	Species are labeled as extinct (EX) when they can no longer be found in the wild and all individuals in captivity have also died.	● 1	● 0	● 3	● 0	● 0
			● 4	● 1	● 7	● 8	● 0
EW	Extinct in the Wild	Animals are considered extinct in the wild (EW) when they only survive in cultivation, in captivity or as a naturalized population outside their historic range. This status indicates that the species' natural populations can no longer be sustained and can only be preserved through artificial means.	● 1	● 1	● 0	● 0	● 0
			● 1	● 1	● 1	● 0	● 0
CR	Critically Endangered	Species facing an extremely high risk of extinction, with a continuing and rapid population decline. This status may be caused by habitat destruction, disease, climate change or other threats.	● 29	● 8	● 2	● 0	● 0
			● 281	● 70	● 87	● 14	● 3
EN	Endangered	Species facing a very high risk of becoming extinct, with a continuing and obvious population decline. Such species may become extinct in the near future due to various threats.	● 29	● 6	● 16	● 0	● 0
			● 618	● 86	● 143	● 41	● 16
VU	Vulnerable	Species facing some risk of extinction. Population size is relatively large but still considered threatened. Appropriate conservation measures must be adopted to prevent it from becoming endangered.	● 75	● 15	● 19	● 0	● 0
			● 1,455	● 161	● 204	● 101	● 67
NT	Near Threatened	Species that do not qualify for critically endangered, endangered, or vulnerable status but still face some threat. Without appropriate measures, they are likely to qualify for endangered or vulnerable status in the near future.	● 62	● 31	● 30	● 0	● 0
			● 1,312	● 254	● 202	● 109	● 78
LC	Least Concern	Does not currently face severe threats and has a relatively stable population size.	● 2,367	● 1,161	● 1,087	● 0	● 0
			● 16,919	● 8,000	● 5,455	● 770	● 649



Analysis of IUCN Protected Areas at Taiwan Sites

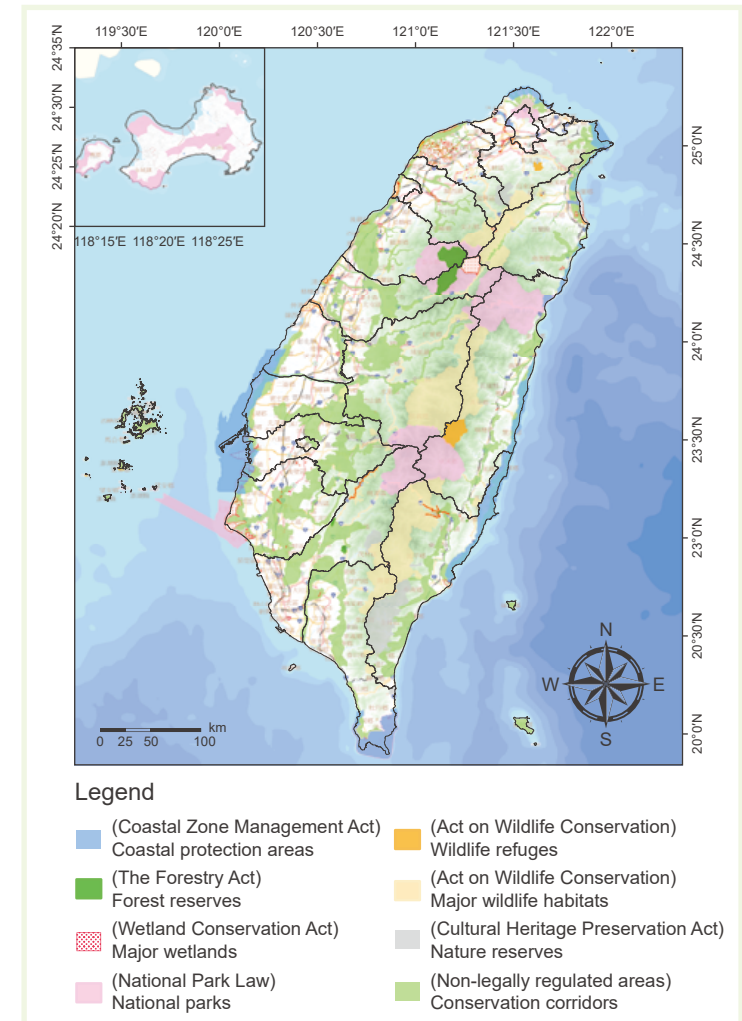
Analyses were conducted at Taiwan sites for both legally regulated and non-legally regulated protected areas. In addition to identifying protected species that may be influenced by business activities at our Taiwan sites, WNC was also able to evaluate all related regulations. After reviewing relevant ecological conservation regulations in Taiwan and protected areas designated by NGOs, we have consolidated a total of nine types of protected areas. To align with analysis results from other international organizations, WNC conducted analyses of the causes and protected subjects of each protected area and matched them with the IUCN's protected area categories. The diagram below summarizes protected areas under different statutory regulations, the IUCN categories and the data sources.



Analysis Results

None of the properties owned or leased by WNC are located within legally-regulated protected areas. Only one site overlaps with a conservation corridor that is not legally regulated and its potential impact is relatively low. With regard to supplier sites, 160 sites are located within legally-regulated protected areas and 224 are in conservation corridors that are not legally regulated. Areas impacted by each site are listed in the table below:

Area	Protected Areas that Overlap with WNC's Sites
Coastal protection areas	General protected areas along the northern coast, general protected areas at the Tamsui estuary and the Tamsui River Mangrove Nature Reserve
National parks	Taijiang National Park and Yangmingshan National Park
Wildlife refuges	Taipei City Waterbird Refuge, Taoyuan Guan-Xin Algal Reefs Ecosystem Wildlife Refuge, Tainan City Sicao Wildlife Refuge, Hsinchu City Coastal Wildlife Refuge, and Taoyuan Gaorong Wildlife Refuge
Major wildlife habitats	Taipei City Zhongxing and Yongfu Bridges Waterbird Major Wildlife Habitat, Taoyuan Guan-Xin Algal Reefs Ecosystem Wildlife Refuge, Tainan City Sicao Wildlife Refuge, Keya River Mouth and Sianshan Wetland Major Wildlife Habitat, and Taoyuan Gaorong Wildlife Refuge
Major wetlands	Nangang 202 Arsenal and surrounding important wetlands, important wetlands in the Tamsui River watershed, important wetlands of Taoyuan's reservoirs and canals, Xucugang Important Wetland, Niasong Important Wetland, Sihcao Important Wetland, important wetlands surrounding Jiianan's reservoirs and canals, Siangshan Important Wetland, Sinfong Important Wetland, Banping Lake Important Wetland, and Ecological Park of Toucian River
Nature Reserves	Danshui River Mangrove Nature Reserve, and Hokutolite Nature Reserve
Forest reserves	n/a
Conservation corridors	Grassland conservation corridor in the southern Jianan Plain, conservation corridor in Zengwen River basin, conversation corridor in Fongshan River and Toucian River basins, low mountain conservation corridor in Mount Dadu, Wu River Basin (mid- and downstream areas and Fazi river area) conservation corridors, Taoyuan ponds and plains wetlands conservation corridor, downstream Gaoping river conservation corridor, coastal wetland conservation corridors in Taoyuan, Hsinchu, and Miaoli, farmland conservation corridor in the northern Chianan Plain, coastal wetland conservation corridor in the Chianan area, North Coast low mountain conservation corridor, wetland conservation corridor in the southern Chianan plain, low mountain conservation corridor in Baguashan Mountain, and hilly conservation corridor in southern Miaoli.
Key biodiversity areas	Taipei City Waterbird Refuge, Gaoping River, Dapingding and Xucugang IBA, Tainan City Sicao Wildlife Refuge, Yangmingshan National Park, Hulupi Nature Park, coastal regions in Hsinchu, Guandu, and Wazihwei Nature Reserve



3.3 Dependency and Impact Assessment

Following the analysis of locations, we then examined the dependency of business activities within our value chains on specific ecosystem services, as well as their impact on the natural environment. The analysis covers resource consumption, ecological degradation, pollutant emissions and impact on biodiversity. In 2024, with reference to the ecosystem services categories specified in the System of Environmental Economic Accounting (SEEA), and the five main drivers of nature change defined by the TNFD: climate change; land, freshwater, and sea use change; resource exploitation and recovery; pollution and pollution removal; and invasive alien species and their removal, WNC conducted a questionnaire across its supply chain and operations to assess dependencies and impact. A total of 235 valid questionnaires were collected. In the assessment, we identified significant nature-related issues based on level of concern and degree of impact. For the top five dependency and impact issues, we disclosed the potential risks, opportunities, relevant metrics and management measures:

Level of Concern

The number of responding stakeholders or suppliers facing this environmental dependency or impact issue.

- The greater the number of respondents facing this issue, the higher the level of concern.
- If the issue attracts a higher level of concern among stakeholders or suppliers, this issue is more likely to be an overall key issue.

Level of Dependency

Degree of impact on business operations when a disaster or shortage occurs. It may range from the most severe scenario, such as plant closure, to very minor, such as impact on the employee environment. If contingency measures are in place, the impact can be mitigated.

Degree of Impact

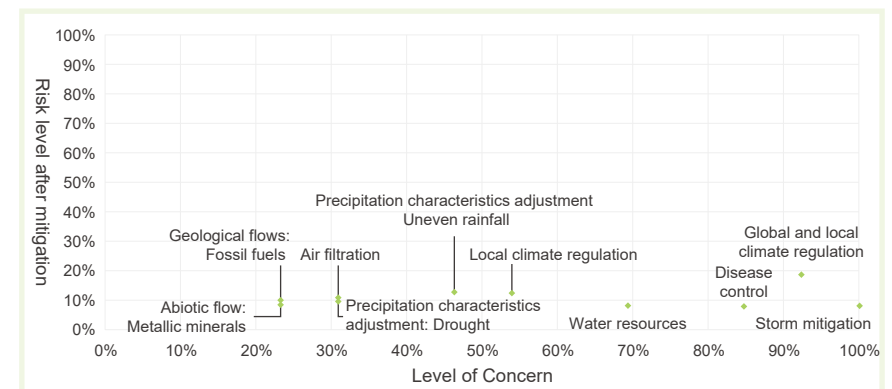
This category indicates that a company engages in business activities involving pollutant emissions or change to local ecosystems. Thus, in the absence of management measures, these activities are assumed to carry the highest level of risk (100%). However, the risk can be mitigated through either of the following two measures, with the lowest risk level reduced to 10%.

- Management Measures: Are basic management measures in place (max. reduction: 45%)?
- Mitigation targets: Are targets set for reducing relevant activities and is progress being tracked (max. reduction: 45%)?

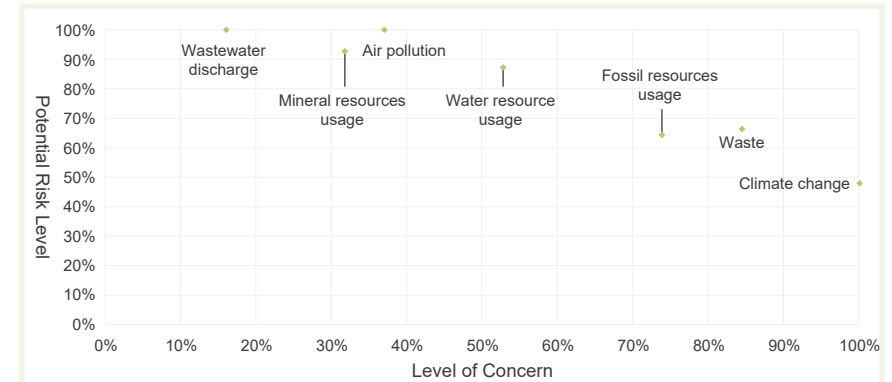
Dependency and Impact Analysis of Business Operations

According to the analysis results, WNC primarily relies on three ecosystem services: global and local climate regulation, storm mitigation, and disease control. The corresponding natural disasters are extreme heat, more severe wind disasters, and outbreaks of large-scale epidemics respectively. These three types of disasters would have a greater impact on WNC before mitigation measures are implemented. Regarding the impact of WNC's own operations, the greatest environmental effects come from climate change, waste, and use of fossil resources. In addition, we have also taken into consideration the existing management actions and goals at each site and have assessed the extent to which risks can be mitigated. Overall, all disaster risks are on a downward trend.

Organizational Operations: Materiality Matrix of Nature Dependencies (After Mitigation)



Organizational Operations: Materiality Matrix of Operational Impacts

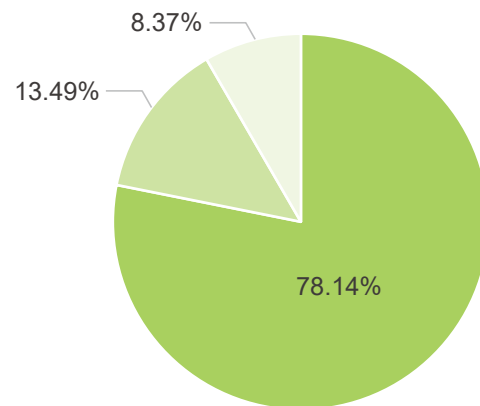


Dependency and Impact Analysis of Supply Chain

According to our survey results, over 70% of our tier-1 suppliers have preliminary knowledge of nature-related issues and have implemented related management actions, demonstrating their concern for these issues. However, some suppliers have not taken any action or lack sufficient understanding of risk assessment. To raise awareness of nature- and climate-related issues among these suppliers, we plan to provide them with necessary training and resources through sustainable supplier meetings, helping them understand the importance and potential impact of these issues.

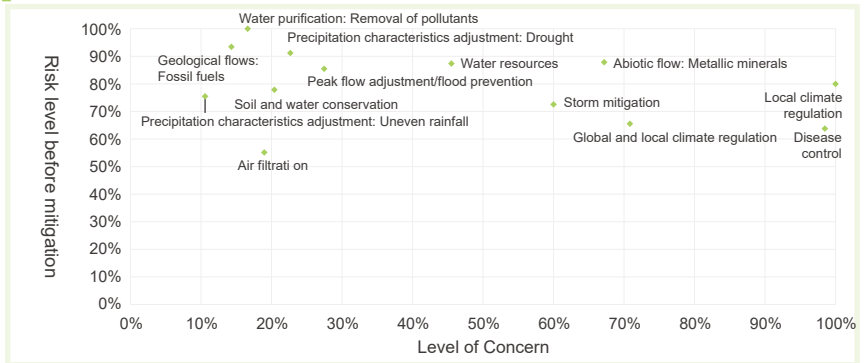
In addition, WNC gains deeper insights into suppliers' current practices in climate- and nature-related risk management through sustainable supplier questionnaires. The survey results provide us with valuable insights for developing targeted support measures that facilitate suppliers' progress in sustainable development and enhance the overall resilience and sense of responsibility across the entire supply chain. Through these efforts, we promote sustainable practices with our partners and contribute to addressing climate change and ecological challenges.

Survey on Supply Chain's Awareness of Nature and Biodiversity

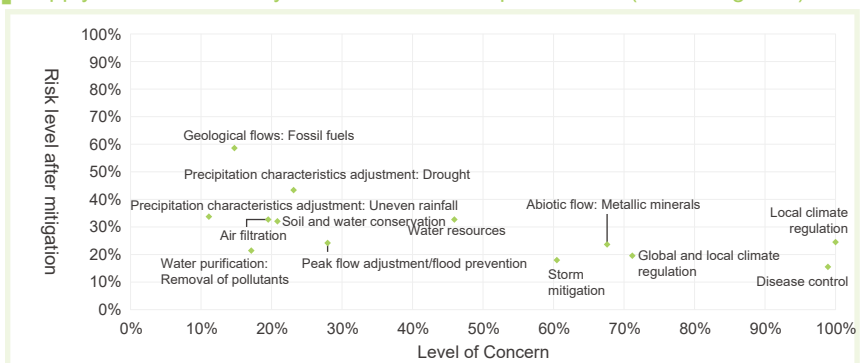


- Suppliers that are aware of the nature and climate change risks faced within their business environment and have already taken action
- Suppliers that are aware of the nature and climate change risks faced within their business environment but do not know how to react
- Suppliers that are not aware of the nature and climate change risks

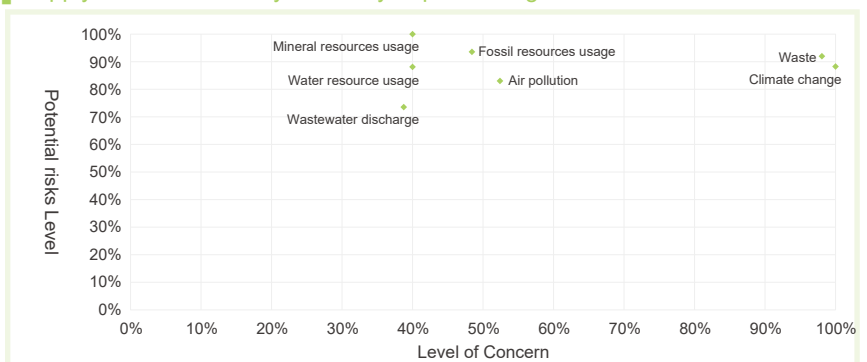
Supply Chain: Materiality Matrix of Nature Dependencies (Before Mitigation)



Supply Chain: Materiality Matrix of Nature Dependencies (After Mitigation)



Supply Chain: Materiality Matrix by Impact Categories



3.4 Nature Risks and Opportunities

Nature Dependency

Sub-category	Corresponding Natural Disasters or Changes	Metrics	Units of Measurement	Risk and Financial Impact	Opportunities and Financial Impact	Precautions
Water supply (non-biological)	Water shortage/ insufficient water supply	Water level changes	The government's water level alert signal	Suspension of clean room operations, air conditioners and water-dependent processes leads to a decrease in revenue	Reduce product water consumption and increase the amount of recycled water to enhance production stability and lower operational costs	During periods of water shortage, contingency measures such as water trucks are implemented. At each site, water storage capacity is increased and recycled water treatment systems are installed.
Global and local climate regulation	Extreme heat	Temperature	°C	Increased air conditioning loads in plants result in surging power consumption. The electricity supply in Vietnamese cities is limited and production restrictions due to power rationing policies may occur. Therefore, high temperatures may increase the risk of operational interruptions, leading to decreased revenue.	Install solar panels at each site, diversify power sources and implement energy-saving strategies to minimize the impact of power rationing on the Vietnam site, thereby reducing potential financial losses	Prepare diesel generators to respond to potential power rationing
Storm mitigation	Occurrence of storm disasters, including typhoons, hurricanes, and sandstorms	Warnings related to weather disasters	Typhoon warnings	A lack of vegetation or protective terrain around company buildings leaves them vulnerable to typhoons. Thus, outdoor equipment may be damaged during typhoon season, leading to increased capital expenditure and operational costs.	Enhance resilience against natural disasters to reduce potential financial losses	Enhance the windproof capabilities of outdoor equipment at each site to prevent damage from natural disasters and establish a pre-typhoon inspection mechanism
Biological control services: disease control services	Outbreaks of large-scale epidemics	Pandemic phases	Scope of confirmed cases	An outbreak of a large-scale epidemic prevents employees from working and results in operational disruptions, decreased revenue and increased operating costs.	Ensure business continuity and reduce financial losses resulting from operational disruptions	Continue to monitor information on large-scale epidemics at each operating site, as well as epidemic prevention levels and related measures announced by the WHO and local governments. Strengthen WNC's internal response capabilities, optimize contingency plans, encourage employees to get vaccinated and provide necessary subsidies to improve the resilience of our global production and minimize the overall impact of disruptions in any single region.
Local climate regulation	Floods or disasters caused by extreme rainfall	Precipitation forecasts	Precipitation intensity	Inadequate drainage increases the risk of flooding in plants and the resulting disasters may lead to higher operating costs.	Enhance operational stability and disaster resilience to prevent financial losses	Monitor weather forecasts and review the adequacy of emergency measures. In addition, regularly clean the drainage systems at each site and establish emergency measures for flooding.

Operational Impacts

Sub-category	Corresponding Natural Disasters or Changes	Metrics	Units of Measurement	Risk and Financial Impact	Opportunities and Financial Impact	Mitigation Measures
Resource depletion	Fossil fuels and power consumption	Amount of fossil fuels used	Kiloliter (kl)	The use of fossil fuels increases production costs. It is estimated that the cost of fossil fuels will be three times higher than that of electricity supplied by Taiwan Power Company, leading to increased operating costs.	Increase the proportion of green energy to stabilize the electricity supply and reduce operating costs	Closely monitor electricity policies in different regions, increase the use of renewable energy, and implement plans to use fossil fuels for production only in emergencies
	Use of freshwater, including rivers, lakes, groundwater, and tap water	Amount of water used	Cubic meters	For water-dependent production processes, insufficient water supply may lead to reduced or suspended operation of cleanrooms and air conditioning systems, causing higher operating costs.	Develop new production processes to reduce water usage costs and wastewater treatment expenses	Improve production process technologies to reduce water consumption and develop new processes, such as dry cleaning processes, to replace water-dependent ones. Implement dust-prevention measures to reduce the need for cleaning operations.
Pollution	Greenhouse gas emissions	GHG emissions intensity	ton-CO ₂ e	Due to stricter external regulations as well as increasing demand from customers and stakeholders, greenhouse gas emissions need to be reduced. Failure to do so may result in regulatory violations, higher compliance costs and a loss of market share or business reputation.	The installation of energy-saving equipment can significantly reduce power consumption, thereby lowering operating costs.	Replace energy-consuming equipment to reduce power consumption while improving the stability of green energy supply (I-REC and PPA)
	Waste	Amount of waste recycled Total waste generated Reuse of secondary materials	Tonnes (t)	If a company fails to report its waste as required, or if its waste treatment processes do not comply with relevant regulations, it may incur legal penalties such as fines or administrative sanctions. In addition, waste management expenses will also increase, especially for special waste that requires professional treatment, such as hazardous waste.	Conduct effective waste management, report waste as required, and comply with environmental regulations. We are also devoted to obtaining Green Marks to increase competitiveness and revenue	WNC reports waste regularly to the competent authorities as required. Based on local statutory regulations, we also regularly review and update waste management regulations and standards to ensure that our waste management system complies with the latest requirements. In addition, we only work with professional contractors who have the technical capabilities to perform environmental waste treatment.
	General air pollution	Air pollutant emissions	Tonnes (t)	Excessive air pollutant emissions result in additional pollution discharge fees. Moreover, if the government meteorological authorities issue an air pollution alert, according to the response mechanism corresponding to each alert level, companies may be required to partially suspend production equipment that generates the pollutants, resulting in increased operating costs.	New production techniques eliminate the use of chemical solvents or utilize solvents with low VOC content, thereby reducing emissions, occupational hazards and management costs (such as occupational health checkup expenses).	Conduct research on new technologies and production processes to reduce the use of chemical solvents during manufacturing. Evaluate new technologies and lower the intensity of pollutants emitted into the atmosphere.

4 Strategies and Actions

- 4.1 Net Zero Transformation
- 4.2 Green Products
- 4.4 Sustainable Supply Chain
- 4.5 Habitat Protection



4.1 Net Zero Transformation

“Become a trustworthy communications solutions partner creating positive connections and interactions between the environment and humankind” is our sustainability vision, and we will follow this vision to instill sustainability concepts into daily decision-making processes and participate in international climate-related initiatives to become a green business. The four aspects of our environmental protection strategy are: green product design, renewable energy strategies, joining the Science Based Targets initiative (SBTi), and promotion of low-carbon transformation. We will use the assessment results for climate-related risks and opportunities to continue developing our environmental protection strategy and work with partners in the value chain to establish a green supply chain.

	Compliance Short Term (2020-2023)	Low-carbon Digital Transformation Medium Term (2024-2026)	Value Chain Collaboration for Mutual Benefit Medium and Long Term (2026-2030)
Business Operations	<ul style="list-style-type: none"> Fully implemented ISO14064-1 GHG inventory Completed solar panel installation at plants Introduced external Renewable Energy Certificates (RECs) Introduced energy management platform Published independent TCFD report Signed SBTi commitment letter and joined RE100 	<ul style="list-style-type: none"> Pass SBTi target validation Implement internal carbon pricing Establish carbon data integration database Increase renewable energy use and diversification Upgrade WNC energy management platform Green Building Label for new sites Integrate and publish TCFD and TNFD reports Complete TCFD verification 	<ul style="list-style-type: none"> Integrate ESG information platform Introduce internal carbon pricing Upgrade WNC energy management platform Introduce carbon credit mechanisms Achieve net zero (by 2050)
Products	<ul style="list-style-type: none"> Audit on sustainable product design Occupational safety and health training for sustainable products 	<ul style="list-style-type: none"> Introduce a product carbon footprint platform and e-processes Establish green product design DFG indicators and targets Establish a Materials Carbon Footprint Database 	<ul style="list-style-type: none"> Enhance carbon emissions reduction effectiveness Increase the proportion of sustainable products
Supply Chain	<ul style="list-style-type: none"> Established Supplier Code of Conduct Developed supplier carbon reduction mechanisms 	<ul style="list-style-type: none"> Establish a supplier carbon management system (inventory, reduction, and audit) Organize vendor conferences on a regular basis to conduct consultations 	<ul style="list-style-type: none"> Promote supplier carbon inventory and reduction capabilities Drive for carbon reduction among suppliers



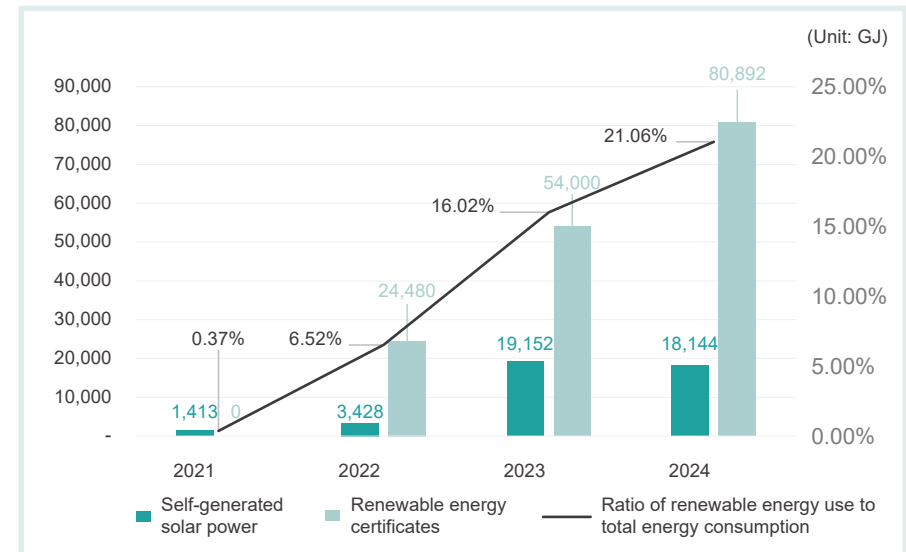
Renewable Energy Transformation

To strengthen climate resilience, WNC announced in 2023 its commitment to join the global renewable energy initiative RE100, pledging to achieve 50% renewable energy usage across all sites by 2030 and 100% by 2040. To achieve this commitment, we are progressively increasing the proportion of renewable energy use through measures such as installing self-generated solar power systems, purchasing International Renewable Energy Certificates (I-REC), and planning energy-saving initiatives.

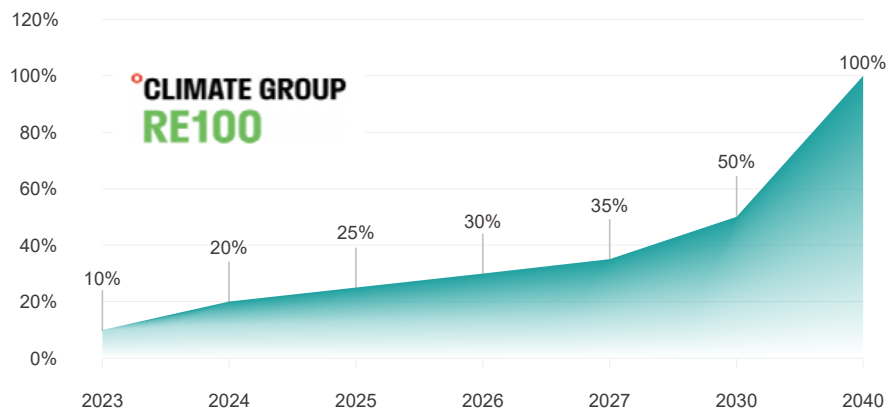
In recent years, WNC has installed additional rooftop solar panels at its primary production sites, and a further plan involving the installation of additional solar panels at plants in Kunshan and installation of solar panels at the plant in Vietnam was realized in 2022. These panels began generating power in 2023. In 2023, our new S3 plant commenced usage of solar panels. In 2024, Phase II solar panel installations were completed at the S1 and Vietnam plant.

WNC's solar farms have a total installed capacity of 10.51 MW of electricity, 5,039,892 kWh of which is for self-use. In addition, WNC has also purchased International Renewable Energy Certificates (I-REC). The ratio of renewable energy use to total energy consumption at WNC was 21.06% in 2024, meeting the goal for the year.

WNC's Renewable Energy Usage in the Most Recent Four Years



Renewable Energy Usage Goals



Short-term

- Completed solar panel installation at plants
- Implemented energy conservation plans
- Renewable energy certificate purchasing

Mid-term

- Increase renewable energy diversification
- Evaluate renewable power purchase agreements (PPAs)
- Link compensation to energy performance

Mid- and long-term

- Introduce internal carbon pricing
- Develop other innovative approaches

Energy Conservation and Carbon Reduction Actions

Through cross-departmental collaboration and discussions, we establish clear improvement plans for lighting power, ventilation, air conditioning, and air compression systems. We also conduct regular internal energy management reviews to evaluate the effectiveness of implementation, continuously refining our management procedures and improvement measures for the next fiscal year. In 2024, a total of 82 energy-saving projects were implemented, estimated to save 27,076 gigajoules (GJ) of electricity, equivalent to a reduction of 4,088 tonnes of CO₂e. We conduct annual energy-saving education at each site. At the same time, we promote energy conservation and carbon reduction in our daily operations, encouraging the use of online meetings instead of physical ones and opting for low-carbon transportation methods for commuting or business trips. These initiatives aim to continuously educate our employees on energy-saving concepts, contributing to the sustainable development of the company. In addition, regarding the implementation of internal carbon pricing, WNC referred to the results of its transition risk analysis—taking into account the potential financial impacts of carbon fees/taxes and renewable energy procurement costs. These insights serve as a key reference for future decision-making. To further enhance internal understanding and application of the carbon pricing mechanism, WNC will continue to collaborate with external experts in 2025 to conduct training programs and refine implementation strategies and practices.

2024 Carbon Reduction Effectiveness from Energy Conservation Plans^{Note 1}

System	Scopes of Carbon Reduction	No. of Plans	Electricity Saved (GJ)	Carbon Reduction (tCO ₂ e)
Manufacturing process	Scope 2 emissions	1	26	3.57
Illumination		36	3,088	470.03
Exhaust		6	2,961	406.37
Air conditioning		30	18,423	2,834.4z8
Air compression		6	2,433	353.85
Other ^{Note 2}		3	145	19.96
Annual total		82	27,076	4,088.26
2022–2024 cumulative total		189	57,577	9,150.42

Note 1: The amount of electricity saved is estimated based on the running hours of the equipment as well as the difference in power usage before and after improvements were made to the equipment. The amount of carbon emissions is calculated annually using the latest carbon emission factors. Additionally, different electricity carbon emission factors are adopted for this calculation based on the implementation region of the energy-saving program. Carbon emissions factors adopted in 2024: 0.4940 kgCO₂e/kWh for Taiwan, 0.5366 kgCO₂e/kWh for China, and 0.6592 kgCO₂e/kWh for Vietnam.

Note 2: Other energy-saving measures mainly include replacing old equipment with energy-efficient models and virtualizing machinery.

S3 Facility Awarded Taiwan Green Building Label

In accordance with the Taiwan Green Building Label (EEWH) specifications, planning and design are carried out with consideration of four major aspects: ecology, energy conservation, waste reduction, and health, to create a building with minimal consumption of the Earth's resources, minimal waste generation, and ecological, energy conservation, and health characteristics. In 2021, it received the Candidate Green Building Certificate (Bronze Level). In June 2024, we further completed the on-site inspection and review for green building certification and obtained a Green Building Certificate in the same year.

Vietnam Site Obtains LEED Gold Certification

Our Phase II plant in Vietnam was planned in accordance with LEED evaluation criteria, taking into account categories such as location and transportation, sustainable sites, water efficiency, and energy and atmosphere. The site's solar power generation capacity has reached 5,475 kW, which amounts to approximately 5 million kWh of power generated annually and brings the ratio of renewable energy use to total electricity consumption at the site to 8%. In 2024, our Vietnam Phase II plant was awarded LEED Gold Certification by the U.S. Green Building Council (USGBC), with nearly perfect marks in the water efficiency and energy and atmosphere categories.

Installation of Energy Management Platform and Related Modules Development and Application

S3 and our Vietnam plant were planned as smart factory areas, aiming to enhance the efficiency of energy data collection and optimize energy allocation through comprehensive infrastructure construction. The plants have installed multiple circuit meters, and have set up energy management platforms along with the development of related modules and applications. Currently, the main applications focus on energy-saving measure management and tracking of abnormal power consumption, effectively reducing unnecessary energy losses. In addition, the S3 Plant has established a power consumption structure tree. Supported by comprehensive infrastructure, it enables timely and accurate collection of electricity usage data across facility systems, individual floors, and key production lines. This data is applied to manage HVAC electricity usage on the facility side, implement energy-saving measures on the production side, and track abnormal energy consumption, effectively reducing unnecessary energy waste.

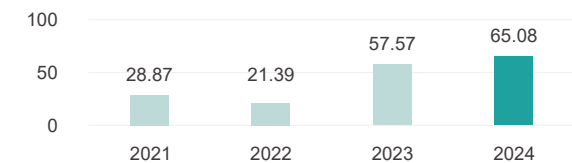
Environmental Protection and Management

Air Pollution Control

Currently, the main emission sources of air pollutants are volatile organic compounds (VOCs), such as flux and cleaning agents, used in production processes. From 2021 to 2023, although WNC was not subject to air pollution control regulations, the company voluntarily disclosed emissions from stationary sources subject to regulatory oversight, based on regular testing results and by referencing the air pollution fee calculation method. In response to increased production capacity in 2024, the S1 Plant installed air pollution control equipment to effectively manage volatile organic compounds generated during the manufacturing process. In September 2024, the plant obtained a stationary pollution source operating permit. Moving forward, we will continue to implement reduction measures focused on minimizing VOC usage at the source to lessen the environmental impact of our production processes.

VOCs Emissions for the Most Recent Four Years

(Unit: tonnes)

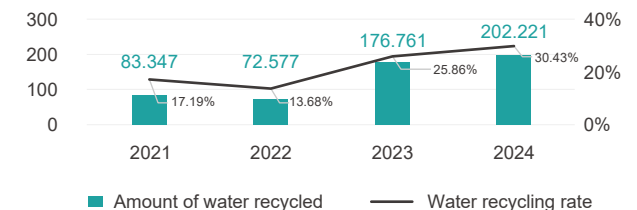


Water Conservation Projects and Water Pollution Prevention

In terms of water resource management, WNC not only develops water balance diagrams and inventories water resource uses but also regularly monitors and identifies improvement plans to enhance water resource utilization. In terms of wastewater management, WNC has installed water discharge monitoring instruments in plants to ensure that wastewater complies with the water quality management regulations of the Hsinchu Science Park's sewage system. Every six months, WNC contracts an inspection agency approved by the National Environmental Research Academy to test the water discharged by WNC to ensure that said discharge meets wastewater discharge standards. Furthermore, regular wastewater education and training courses are conducted within plants to ensure that equipment operators and new employees are well-versed in wastewater management practices.

Amount of Water Recycled at WNC in the Most Recent Four Years

(Unit: megaliters)

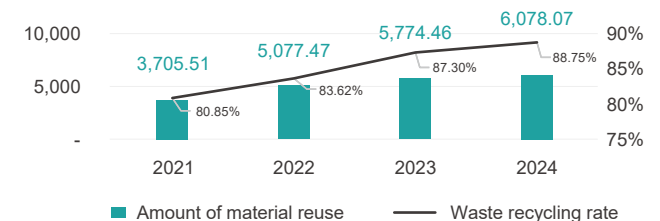


Zero Waste to Landfill

In 2024, the total amount of waste recycled reached 6,078.07 tonnes, with the recycling rate increasing to 88.75%, surpassing the annual target of 87%. In addition, WNC tracks and manages the waste output structure and improves waste raw material removal methods to promote resource recycling. In the given year, the total recycling volume for resource circulation projects was 3,224.80 tonnes, which is estimated to reduce emissions by 1,169.93 tonnes of CO₂e across the value chain. To prevent environmental damage caused by waste incineration or landfilling, the Kunshan and Vietnam factories began implementing the UL 2799 Zero Waste to Landfill certification program in 2024. The program aims to increase the waste conversion rate and reduce resource waste and disposal costs. Employees also underwent training to enhance their knowledge regarding waste classification, reduction and reuse. By 2025, the factories obtained a platinum rating, with a 100% waste conversion rate, including 7% energy recovery through incineration.

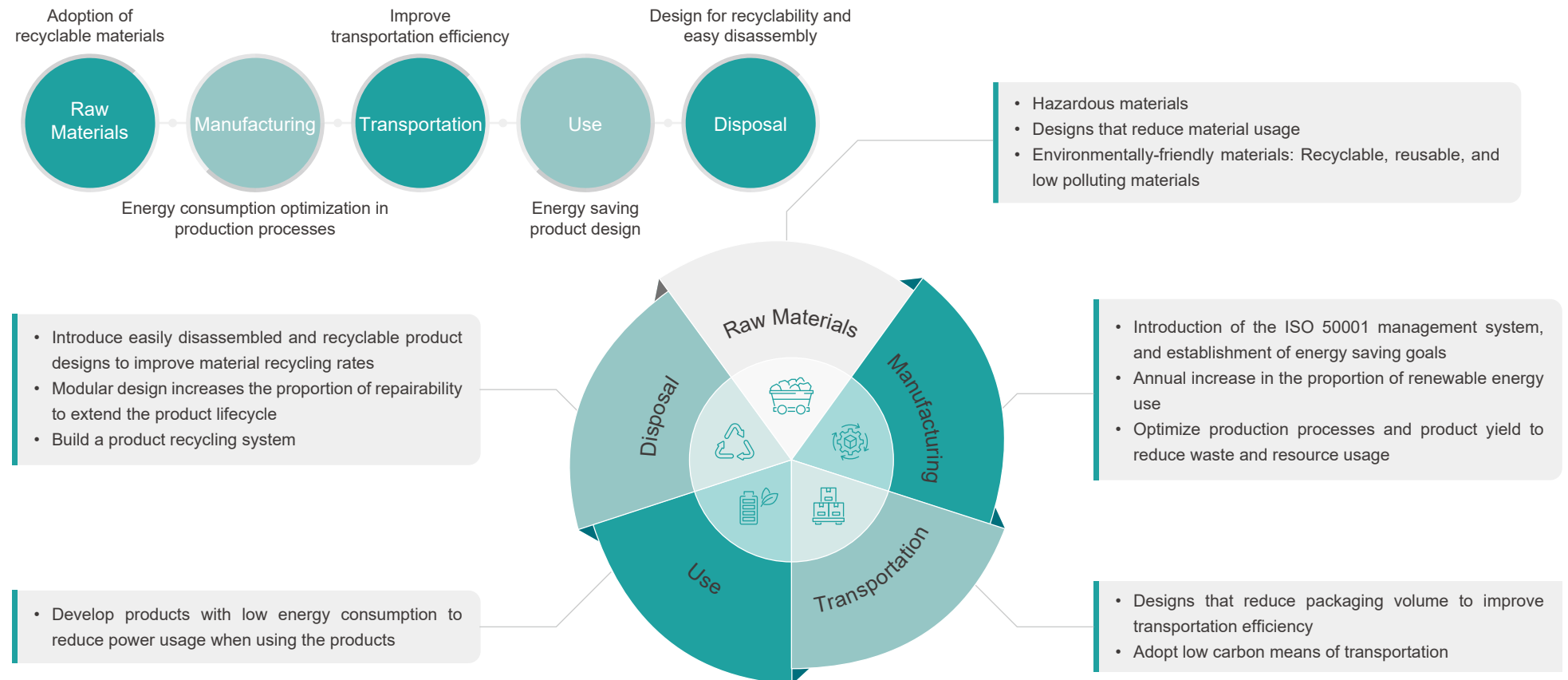
Waste Recycling Volume for the Most Recent Four Years

(Unit: tonnes)



4.2 Green Products

WNC is dedicated to the development of communications technologies and green products. We define green products as those that meet the two major requirements of being safe and having low carbon emissions. In terms of safety, we require our products to be free from environmentally harmful substances and to comply with regulations on prohibited and restricted substances management, so as to ensure they are harmless to human health and the environment. In terms of carbon reduction, we are committed to reducing carbon emissions throughout the five major stages of the product lifecycle: from raw material procurement, manufacturing, transportation, consumption, to waste disposal and recycling, thereby reducing our impact on climate change. Through adoption of environmentally-friendly materials and packaging materials use, optimizing low-carbon manufacturing processes, developing energy conservation technologies for products, and designing products for easy disassembly and recycling, we aim to reduce the negative environmental impact of products during each stage of their lifecycle, providing customers with energy efficient products and manufacturing services.



4.3 Sustainable Supply Chain

Project Objectives and Background

WNC promotes climate- and environment-related initiatives in its supply chain management, aiming to enhance supply chain sustainability and reduce negative environmental impacts. With growing global emphasis on environmental protection, companies are facing increasing demand in supply chain management, particularly in responsible sourcing and resource management. Therefore, WNC has strengthened its environmental management of suppliers, aiming to achieve the following goals:

▶ Supply chain transparency improvement: Through the implementation of the CMRT (Conflict Minerals Reporting Template) and associated evaluations, we aim to gain clear insights into the sources of minerals within our supply chain and ensure their adherence to environmental and social responsibility criteria.

▶ Reduce environmental impact: Reduce the environmental burden of the supply chain, particularly by minimizing the impact on ecosystems during the procurement and use of raw materials.

▶ Partner with the supply chain to drive green influence: We aim to play an active role in addressing climate and environmental issues by leading our supply chain toward sustainable development and jointly building a low-carbon supply chain.

Management Actions

WNC's ESG Commitment and Requirements

WNC requires all suppliers to sign a Supplier Commitment to Sustainability Declaration and Supplier Integrity Commitment Letter, affirming their compliance with the Supplier Code of Conduct. As of the end of 2024, 479 Tier-1 Suppliers and 328 Critical Suppliers have signed the Supplier Commitment to Sustainability Declaration and the Supplier Integrity Commitment Letter, accounting for 97.5% and 66.8% of all Tier-1 and Critical Suppliers respectively.

Supplier Sustainability Risk Assessment

Since 2023, WNC has utilized EcoVadis to assess the sustainability risks of suppliers (alternatively, results from RBA, S&P Global CSA, Sustainalytics, and other ratings may be used). Initially, this sustainability risk assessment mechanism was implemented for 100 key suppliers, incorporating their EcoVadis ratings or equivalent evaluation results into supplier performance assessments. In 2024, the program expanded to first-tier suppliers, with a total of 349 suppliers completing the sustainability risk assessment.

Key Materials Management

In response to the growing global emphasis on sustainable materials, WNC released a WNC Sustainable Raw Materials Policy in June, 2024, following approval and signing by the President & CEO. This policy further strengthens our commitment and actions in material management. Through this policy framework, we aim to minimize the sustainability-related impact of raw materials and to set an example for other businesses in their sustainable development commitments.

Responsible Mineral Sourcing

WNC has formulated a Responsible Minerals Policy Statement, committed to banning the use of conflict minerals that contribute to significant human rights violations such as armed conflict and forced labor in conflict-affected and high-risk areas (CAHRAs). Suppliers are required to avoid using conflict minerals, and disclose their sources of tin (Sn), tungsten (W), tantalum (Ta) and gold (Au).

Partnership

In 2024, WNC held two supplier conferences, inviting a total of 155 potential high-carbon-impact suppliers and key suppliers at home and abroad. Besides sharing WNC's sustainable development strategies and supplier carbon management requirements, the events also featured industry experts delivering training sessions on Global Sustainability Trends, Carbon Inventory, and Biodiversity.



4.4 Habitat Protection

Project Objectives and Background

WNC has continued to increase its commitment to ecological conservation. Drawing on the insights gained over the past year, we have initiated the WNC Forest Park 2.0 project, aiming at fostering employee participation and improving ecosystem resilience and health. The core of this project lies in caring for the land of Taiwan and giving back to society through meaningful actions.

The Xitou Nature Education Area, an important ecological research site, is facing challenges of ecological imbalance. Due to squirrels gnawing on the bark of Japanese cedar trees, the trees' water transport has been disrupted, resulting in damage to one-quarter of over 200 hectares of plantation forest, thereby affecting the stability of the ecosystem. We have partnered with the National Taiwan University Experimental Forest Management Office to help restore the health of the food chain and promote environmental education, encouraging employees and the public to actively participate in ecological conservation.



Management Actions

On April 13, 2024, over a hundred WNC managers planted one hectare of Taiwanese native tree seedlings in the Xitou Nature Education Area. This initiative supports the three main goals of the United Nations Convention on Biological Diversity (CBD): To protect biodiversity, promote its sustainable use, and ensure the fair and equitable sharing of benefits arising from genetic resources. The tree planting project primarily features native Taiwan trees such as Taiwan red cypress, Cyclobalanopsis glauca, and incense cedar. Continuous monitoring of ecological development in Xitou will be conducted to help restore local biodiversity.

Since 2023, WNC has collaborated with National Taiwan University. While encouraging employees to participate in tree planting, the project also conducts field surveys of mammals, amphibians, reptiles, birds, and butterflies during forest restoration, establishing a biodiversity database. Through collaboration between industry, government and research institutions, WNC's Forest Park provides value for a wider range of stakeholders, both internal and external.

Looking ahead to 2025, WNC will launch the long-term WNC Forest Park adoption project, calculating carbon sink benefits and applying for voluntary emission reduction projects to obtain carbon credits—further reinforcing our commitment to ecological protection and sustainable development.



Project Spotlight: Building Homes for Owls—Employees join hands to create an eco-friendly environment and protect biodiversity

Owls, as indicator species at the top of the food chain, reflect habitat health and the integrity of biodiversity through their population changes. However, urban development and forest fragmentation have led to a significant reduction in natural tree cavities, severely impacting the habitat and reproduction of the spotted owls that rely on these cavities for breeding. To support conservation efforts and respond to global biodiversity issues, employees at WNC's Mechanical and Industrial Design Div. independently initiated the Creating Homes for Owls ESG campaign in 2024. Leveraging the institution's professional expertise combined with local actions, employees and their families worked together to build ecologically-friendly alternative habitats.

In 2024, two ESG events were held in Shaotanwo, Hsinchu, with a total of 56 participants. Through an ecological lecture on the collared scops owl, a gypsum mold DIY activity, and a nest box workshop, participants gained a deeper understanding of the behavior of wild animals and the threats they face, thereby boosting their awareness and commitment to environmental conservation.

As part of the event, a total of ten nest boxes were created, of which seven were donated to schools and conservation organizations in the Hsinchu area, including Xinfeng Junior High School, Taiping Elementary School in Guanxi Township, Pinglin Elementary School in Guanxi Township, Dadu Elementary School in Hengshan Township, Little Tree Food, and the Society of Wilderness. This initiative aims to foster ecological education from an early age, expand community impact, and fulfill our ESG sustainability goals by integrating biodiversity conservation into our corporate culture. By connecting education, communities, and nature, we demonstrate our commitment to sustainable development.



Building Homes for Owls—Nest Box Installation



A Collared Scops Owl Inspecting the Nest Box



WNC employees feedback: By understanding the biological habits of owls, we gained deeper insight into the threats posed to the environment and biodiversity. Additionally, by building nest boxes, we participate in conservation efforts, making it a highly meaningful ecological education experience.



5 Metrics and Targets

5.1 Management Performance Goals

5.2 Organization GHG Emissions



5.1 Management Performance Goals

Topic	Accounting Performance Metric	2024 Results		Future Goals		
		Goal	Result	Short term (2025)	Medium term (2026)	Long term (2030)
Climate Strategy	Renewable energy use rate	20%	21.06%	25%	30%	50%
	Absolute reduction of Scope 1 and Scope 2 GHG emissions, taking 2022 as the base year	-10.50%	-13.19%	-15.75%	-21.00%	-42.00%
	Absolute reduction of Scope 3 GHG emissions, taking 2023 as the base year	-3.57%	-5.78%	-7.14%	-10.71%	-25.00%
	Carbon sink and carbon sequestration accumulation ^{Note 1}	(New indicator)	Completed the first one hectare of planting at Xitou Forest Park, with a measured carbon sequestration of 231 kilograms.	460 kilograms	690 kilograms	1,610 kilograms
	Establishment of a Taiwan native species natural database ^{Note 1}	(New indicator)	Completed the first survey and recording of 5 native species at Xitou Forest Park	Add annual change record	Establish annual data comparison module	Release publicly searchable database platform
Green products	Establish low carbon materials selection mechanism	Established a Materials Carbon Footprint Database	Complete and activate a Materials Carbon Footprint Database	Link material selection system to material carbon emissions database	Initiate material carbon reduction plan	Reduce carbon materials selection design, evaluate product carbon emissions
	100% compliance with green products hazardous materials control and customer specifications ^{Note 2}	(New indicator)	100%	100%	100%	100%
Environmental management ^{Note 3}	Energy use intensity has dropped compared to previous year ^{Note 4}	-3%	+2.65%	-2%	-2%	-1%
	Water withdrawal intensity reduction compared to 2020 ^{Note 5}	-12.5%	-31.86%	-13%	-13%	-18%
	Current year waste recycling rate	87%	88.75%	90%	90%	90%
	Waste generation intensity reduction compared to 2021 ^{Note 6}	-45%	-46.46%	-50%	-50%	56%
Resource management	Weight ratio of recycled plastics used in routers ^{Note 7}	(New indicator)	(New indicator)	35%	40%	60%

Note 1: The original biodiversity project performance indicators are subdivided into two indicators based on project content and generated benefits: carbon sink and carbon sequestration accumulation and establishment of a Taiwan native species natural database.

Note 2: The original product carbon footprint inventory performance indicator mainly considered effectiveness and relevance to customer schedules. It has now been adjusted to an internal management objective and replaced with a new performance indicator: 100% compliance with green products hazardous materials control and customer specifications.

Note 3: The environmental management goals listed here do not apply to WNC subsidiaries in the US, UK, Germany, Japan and Mexico.

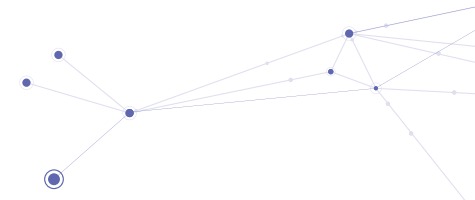
Note 4: Energy usage intensity (MWh/million NT\$) is obtained by dividing energy consumption by consolidated revenue.

Note 5: Water withdrawal intensity (cubic meters/million NT\$) is obtained by dividing water usage by consolidated revenue.

Note 6: Waste generation intensity (tonnes/million NT\$) is obtained by dividing waste disposal volume by consolidated revenue.

Note 7: This indicator aims to increase the proportion of recycled plastics used in product plastic components without violating customer requirements. The calculation method is defined as:

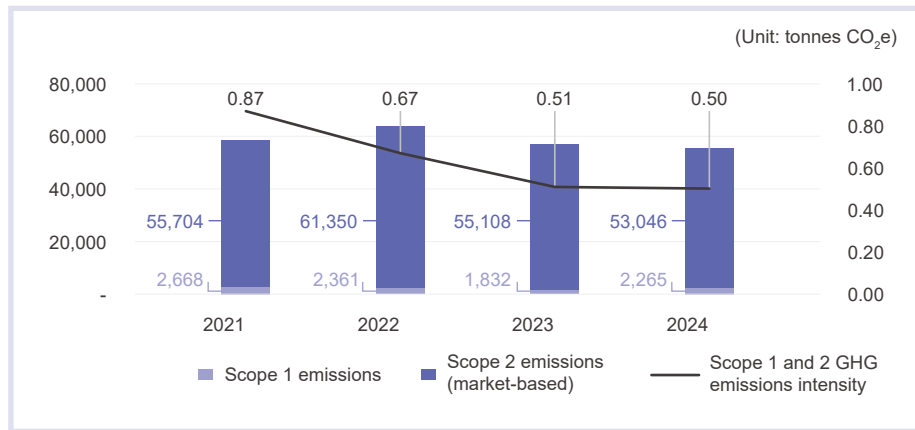
Weight ratio of recycled plastic used = weight of recycled plastic used (tonnes) / total weight of thermoplastics in structural components (tonnes).



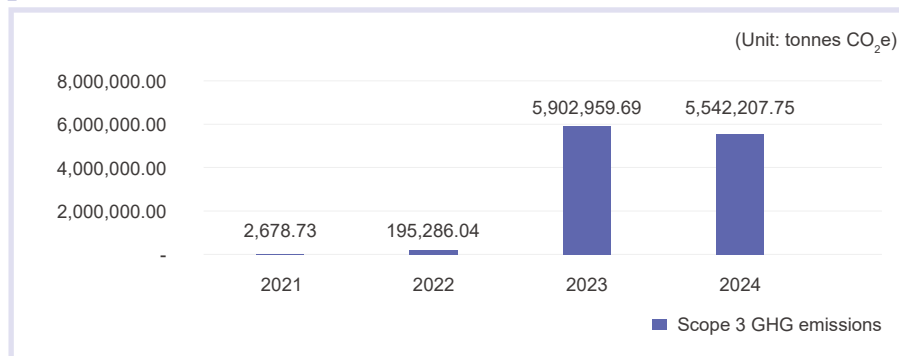
5.2 Organization GHG Emissions

WNC has referenced ISO 14064-1: 2018 and the GHG Protocol to set organizational boundaries^{Note 1} according to operational control laws. We established 2022 as the base year to calculate our greenhouse gas emissions and for verification purposes. In 2023, WNC formulated goals superior to those initiated by the Financial Supervisory Commission in 2022 in the TWSE Listed and TPEX Listed Companies Sustainable Development Roadmap. By the end of 2024, greenhouse gas inventory operations and verification for 16 WNC sites had been completed.

WNC's Scope 1 and 2 Greenhouse Gas Emissions for the Most Recent Four Years^{Note 2}



WNC's Scope 3 Greenhouse Gas Emissions for the Most Recent Four Years^{Note 3}



WNC's Scope 3 Greenhouse Gas Emissions in 2024 (Unit: tonnes CO ₂ e)		
GHG Protocol	Data Source	2024 Emissions
Upstream transportation and distribution	Ecoinvent 3.10	4,638.70
Downstream transportation and distribution	Ecoinvent 3.10	45,128.85
Business travel	Ecoinvent 3.10 (air transportation)	1,744.35
Employee commuting	Carbon Footprint Information Platform (land transportation)	39,611.47
Purchased goods and services	Carbon Footprint Information Platform	3,244,361.25
Capital goods	EF database 3.1	44,666.51
Fuel- and energy-related activities (not included in Scope 1 and Scope 2)	EF database 3.1	11,905.93
Waste generated during operations	Carbon Footprint Information Platform	1,238.96
Upstream lease assets	Ecoinvent 3.10 (overseas sites)	5.71
Processing of sold products	Carbon Footprint Information Platform (Taiwan sites)	3,318.14
Use of sold products	Electricity carbon emission factors announced by various countries	2,133,005.15
End-of-life treatment of sold products	EF database 3.1	1,853.05
Downstream lease assets	Electricity carbon emission factors announced by various countries	8,059.41
Franchise operations	Ecoinvent 3.10 (overseas sites)	-
Investment franchise	Carbon Footprint Information Platform (Taiwan sites)	2,670.28
Total Scope 3 emissions		5,542,207.75

Note 1: In 2024, the scope of the GHG emissions calculations covered WNC headquarters, the Taipei office, S1, S3, WNC (Kunshan), Wistron NeWeb (Kunshan), WebCom Communication (Kunshan), WebCom Communication (Kunshan) - Nanjing Branch, Vietnam plant, and WNC subsidiaries in the US, Germany, UK and Japan.

Note 2: In 2024, the emission factors for Scope 1 were sourced from the Environmental Protection Agency's announced Greenhouse Gas Emission Factor Table (6.0.4), with the latest AR6 values selected for all greenhouse gases' Global Warming Potential (GWP) values. The carbon emission factors for Scope 2 were derived from the latest values announced by the local government.

Note 3: In 2021, only Categories 3, 5, and 6 were inventoried. In 2022, Categories 1, 2, 4, 7, and 8 were added. Starting from 2023, emission calculations for all Scope 3 categories have been completed annually, with the organizational boundary covering all sites (excluding the Mexico site and the US subsidiary located in Austin). Additionally, regarding the 2023 Scope 3 emissions for Category 1 and Category 11, since the SBTi target validation was approved in February 2025, the disclosure of emissions data has been aligned with the reduction pathway committed to SBTi. Therefore, the emissions for these two categories were estimated using the extrapolation method based on actual operational activities.

6 Appendix

6.1 Environment Performance Indicators

6.2 TCFD Recommended Disclosures

6.3 TNFD Recommended Disclosures

6.4 Third-Party Performance Evaluation Declaration



6.1 Environment Performance Indicators

Item	Accounting Metric	Unit	2021	2022	2023	2024
Energy	Energy usage	Gigajoule	384,996	427,858	456,692	470,243
	Electricity	Gigajoule	373,511	420,312	451,155	463,538
	Diesel	Gigajoule	9,704	5,613	3,138	4,201
	Natural gas	Gigajoule	1,103	1,220	1,350	1,394
	Gasoline	Gigajoule	678	713	1,049	1,111
	Power usage intensity	Gigajoule/NT\$ million	5.56	4.41	4.07	4.18
	Power usage intensity	MWh/NT\$ million	1.54	1.23	1.13	1.16
	Total non- renewable energy consumption (non-renewable electricity + fossil fuel consumption)	MWh	106,551	111,097	106,539	103,113
	Total renewable energy consumption (renewable electricity + self-consumption renewable energy)	MWh	392	7,752	20,320	27,510
Renewable energy	Solar power generation	Gigajoule	7,685	9,273	25,202	29,248
	Solar power generation/Total electricity consumption	%	2.06	2.21	5.59	6.31
	Self-consumption of renewable energy	Gigajoule	1,413	3,428	19,152	18,144
	Purchased renewable energy	Gigajoule	0	24,480	54,000	80,892
	Ratio of renewable energy use to total energy consumption	%	0.38	6.64	16.02	21.06



Item	Accounting Metric	Unit	2021	2022	2023	2024
Water resources	Water withdrawal	Million liters	484.728	530.711	683.568	664.577
	Water discharge	Million liters	387.782	424.569	546.854	531.662
	Water consumption	Million liters	96.946	106.142	136.714	132.915
	Water usage intensity (excluding recycled water)	Cubic meters/NT\$ million	6.75	5.27	5.28	4.92
Greenhouse gases	Scope 1 + Scope 2 emissions (market-based)	Tonnes CO ₂ e	58,372.15	63,711.74	56,939.59	55,310.88
	Scope 1 emissions	Tonnes CO ₂ e	2,668.02	2,361.30	1,831.52	2,265.36
	Scope 2 emissions (market-based)	Tonnes CO ₂ e	55,704.14	61,350.44	55,108.07	53,045.52
	Scope 2 emissions (location-based)	Tonnes CO ₂ e	55,704.14	65,301.24	65,257.07	67,857.75
	Scope 3 emissions	Tonnes CO ₂ e	2,678.73	195,385.10	5,902,959.69	5,542,207.75
	Scope 1 + Scope 2 emissions (market-based)	Tonnes CO ₂ e/NT\$ million	0.87	0.67	0.51	0.50
Waste	Waste yield	Tonnes (t)	4,583.20	6,072.01	6,614.81	6,848.43
	Waste recycling rate	%	80.85	83.62	87.30	88.75
	Waste output intensity	Tonnes/NT\$ million	0.013	0.010	0.008	0.007



6.2 TCFD Recommended Disclosures

	Recommended Disclosures	Chapter	Page
Governance	a) Describe the board's oversight of climate-related risks and opportunities.	1.2 Governance Structure and Mechanism	p.9-11
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	1.2 Governance Structure and Mechanism	p.9-11
Strategy	a) Describe the climate-related risks and opportunities the company has identified over the short, medium, and long term.	2.1 Identification of Climate-related Risks and Opportunities	p.13-17
	b) Describe the impact of climate-related risks and opportunities on the company's businesses, strategies, and financial planning.	2.1 Identification of Climate-related Risks and Opportunities	p.13-17
	c) Describe the resilience of the company's climate strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	2.2 Scenario Analysis of Transition Risks 2.3 Scenario Analysis of Physical Risks	p.18-29
Risk management	a) Describe the company's processes for identifying and assessing climate-related risks.	2.1 Identification of Climate-related Risks and Opportunities	p.13
	b) Describe the company's processes for managing climate-related risks.	2.1 Identification of Climate-related Risks and Opportunities	p.13
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management.	2.1 Identification of Climate-related Risks and Opportunities	p.13
Metrics and targets	a) Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its climate strategy and risk management process.	5.1 Management Performance Goals	p.51
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	5.2 Organization GHG Emissions	p.52
	c) Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets.	5.1 Management Performance Goals	p.51



6.3 TNFD Recommended Disclosures

Recommended Disclosures		Chapter	Page
Governance	a) Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.	1.2 Governance Structure and Mechanism	p.9-11
	b) Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities	1.2 Governance Structure and Mechanism	p.9-11
	c) Describe the company's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.	n/a	n/a
Strategy	a) Describe the nature-related dependencies, impacts, risks and opportunities the company has identified over the short, medium and long term.	3.3 Dependency and Impact Assessment 3.4 Natural Risks and Opportunities	p.37-40
	b) Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the company's businesses, strategies, and financial planning.	3.4 Natural Risks and Opportunities	p.39-40
	c) Describe the resilience of the company's strategy to nature-related risks and opportunities, taking into consideration different scenarios.	3.2 Sites Location Analysis	p.32-36
	d) Disclose the locations of assets and/or activities in the company's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.	3.2 Sites Location Analysis	p.32-36
Risk management	a) Describe the company's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations as well as upstream and downstream value chain(s).	3.3 Dependency and Impact Assessment	p.37-40
	b) Describe the company's processes for managing nature-related dependencies, impacts, risks and opportunities	3.3 Dependency and Impact Assessment	p.37-40
	c) Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the company's overall risk management processes.	3.1 Introduction of LEAP Methodology	p.31
Metrics and targets	a) Disclose the metrics used by the company to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process.	3.4 Natural Risks and Opportunities 5.1 Management Performance Goals	p.39-40 p.51
	b) Disclose the metrics used by the company to assess and manage dependencies and impacts on nature.	3.3 Dependency and Impact Assessment	p.38-39
	c) Describe the targets and goals used by the company to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.	5.1 Management Performance Goals	p.51

6.4 Third-Party Performance Evaluation Declaration



TCFD Performance Assessment Statement

The process and procedures of

WNC Corporation

20 Park Avenue II, Hsinchu Science Park,
Hsinchu 300, Taiwan

have been assessed from 05 June 2025 to 30 June 2025 and demonstrated the implementation status against the

Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures (29 June 2017)

The organization has incorporated climate-related governance. The actual and potential impacts of climate-related risks and opportunities have been considered and identified over the relevant short-, medium-, and long-term time horizons. The resilience of the organization's strategy was taking into consideration with different climate-related scenarios, including NDCs, IPCC's SSPs, SBT-NZ 1.5°C, WRI Aqueduct's BAU, OPT, PES scenarios.

The methodology of organization's climate-related risk management process has been adequately implemented as well as integrated into organization's overall risk management. The scope 1 and scope 2 greenhouse gas emissions inventory has been conducted and verified annually in Taiwan. Certain metrics and targets have been used by the WNC to manage climate-related risks and opportunities and performance against targets under SBT-1.5°C.

For the following activities

Governance, Strategy, Risk Management, Metrics and Targets

And cover the following operational locations:
Headquarter of WNC Corporation.
WNC meets SGS TCFD performance assessment at management level of "Pioneer"

Authorised by




Stephen Pao
Business Assurance Director
Issue Date: 09 July 2025
Valid Date: 08 July 2026

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Disclaimer
The findings recorded herein demonstrated a level of performance against the Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) (29 June 2017) and are only valid at the time of the intervention and only as stated above. This document is not intended to be used for certification purposes or regulatory or contractual use and does not relieve the Client from compliance with any bylaws, federal, national or regional acts and regulations issued pursuant to TCFD.
SGS Services are governed by and subject to the General Conditions of Customized Audit Services.



NATURE AND SCOPE OF THE ASSESSMENT

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by WNC Corporation. (hereinafter referred to as WNC) to conduct an independent performance assessment of the Task Force on Climate-related Financial Disclosures, (hereinafter referred to as TCFD).

The information in the WNC's TCFD disclosure framework and its presentation are the responsibility of the management of WNC. SGS has not been involved in the preparation of any of the material included in WNC's TCFD disclosure framework.

Our responsibility is to express an opinion on the report content within the scope of performance assessment with the intention to inform all WNC's stakeholders.

The SGS protocols are based upon the Fundamental Principles for Effective Disclosure contained within the TCFD and SGS Management System Manual and Global System procedures.

The performance assessment comprised a combination of pre-assessment research, interviews with relevant employees, superintendents, ESG committee members and the senior management in WNC's Headquarter; documentation and record review and validation with external bodies and/or stakeholders where relevant.

SCOPE OF PERFORMANCE ASSESSMENT AND DISCLOSURE CRITERIA

The scope of the performance assessment included evaluation of quality, reliability of TCFD disclosure and performance information as detailed below and evaluation of adherence to the four core elements for the management process as well as seven principle for effective disclosures for the information to be disclosed.

PERFORMANCE ASSESSMENT METHODOLOGY

The assurance comprised a combination of pre-assurance research, interviews with relevant employees; documentation and record review and validation with external bodies and/or stakeholders where relevant.

STATEMENT OF INDEPENDENCE AND COMPETENCE

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from WNC, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assessment team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 28000, ISO 20121, SRA, EMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the TCFD performance assessment service provisions.

ASSESSMENT OPINION

On the basis of the methodology described and the verification work performed, we are satisfied that the management process and information demonstrated by WNC within the TCFD performance assessment evaluated is reasonable, reliable and provides a sufficient and balanced representation of WNC climate related risks and opportunities management activities and meets SGS TCFD performance assessment at management level of "Pioneer".

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