NANYA
Technology Corporation



2025
Nature and Climate Report

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Chapter 0. Introduction

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About This Report

As global sustainable development trends evolve from clidmate decarbonization toward integrated governance of climate and nature, there is advocacy for *nature-positive* growth as a long-term goal to mitigate biodiversity loss and promote ecosystem restoration. Nanya Technology recognizes the semiconductor value chain's dependence and impact on natural resources. Therefore, while pursuing technological leadership, the Company is also committed to strengthening the protection and management of natural capital through responsible operations management and resource use.

As the first DRAM company to be an early adopter of the Taskforce on Nature-related Financial Disclosures (TNFD), Nanya Technology continued to advance its application of the LEAP approach (Locate, Evaluate, Assess, Prepare) in 2025. By aligning with International Financial Reporting Standards S2—Climate-related Disclosures (IFRS S2) and integrating the TNFD framework, the Company not only assesses climate-related risks but also proactively identifies the dependencies and impacts its operations have on the natural environment and biodiversity. Through these efforts, the Company aims to enhance corporate resilience while contributing to the sustainable development of natural ecosystems.

Nanya Technology's operational sites coexist with mountainous environments, reflecting the close interdependence between its business development and natural ecosystems. We are committed to zero deforestation and zero harm to nature, recognizing rivers as vital lifelines connecting mountains, forests, land, and oceans. From headwaters to watersheds, we implement rigorous water resource management and environmental monitoring throughout our operations, striving to ensure that every drop of water returned to nature embodies our respect for the environment and our responsibility to protect it.

The scope of this report covers Nanya Technology's major operating sites in Taiwan, as well as the operational activities of relevant subsidiaries. If the disclosure scope of any specific indicator differs from the reporting boundary, such differences are noted alongside the respective indicators.

Data Disclosure Timeframe	January 1, 2025–December 31, 2025
Data Scope	The operations of Nanya Technology Corporation Co., Ltd. and its subsidiaries
Data Quality Management	Financial Data: KPMG Taiwan Organizational GHG Inventory ISO 14064-1: SGS Sustainability Information (AA1000AS V3): BSI
Management System Certifications	Quality Management (ISO 9001, IATF 16949): LRQA Environmental Management ISO 14001: LRQA Information Security Management ISO 27001: SGS Energy Management ISO 50001: LRQA Occupational Health and Safety (ISO 45001/TOSHMS): LRQA Responsible Business Alliance (RBA) Validated Assessment Program (VAP): SGS
Guidelines and Standards Referenced	TCFD TNFD GRI 101: Biodiversity 2024 GRI 102: Climate Change 2025 GRI 103: Energy 2025
Contact Point	Sustainability and Risk Management Division, President Office Email: NTCESG@ntc.com.tw

1 Nature and Climate Sustainability Governance

Nanya Technology has established a comprehensive governance framework in which the Board of Directors and the management jointly participate in nature- and climate-related governance to ensure the implementation of sustainable development strategies. Through stakeholder engagement, the Company has incorporated external perspectives and adopted the TNFD framework while responding to regulatory requirements from the Financial Supervisory Commission. Building on the recommendations of the TCFD framework, disclosures have been further enhanced in alignment with IFRS S2 guidance. Materiality identifications for both nature- and climate-related issues have been conducted to ensure the Company's resilience amid environmental change. In adopting IFRS S2, Nanya Technology not only continues its existing climate governance and risk management framework, but also strengthens the integration of climate-related issues with financial performance, while enhancing transparency and verifiability. Furthermore, the Company has incorporated just transition into its climate strategy, enhancing the evaluation of how human capital and supply chain stability may impact financial performance during the transition process. Going forward, the Company will continue to follow the latest guidance from the International Financial Reporting Standards Foundation to progressively improve the depth and quality of its disclosures.

1-1 Governance Structure and Responsibilities

Board of Directors' Participation and Oversight

The operations of Nanya Technology's Board of Directors are carried out in accordance with applicable regulations and shareholder resolutions as well as in adherence with the principle of sustainability in order to maximize value for stakeholders. The Board of Directors' primary responsibilities include ensuring the transparency and accuracy of the Company's information, compliance with laws and regulations, appointment of senior executives, formulation of profit distribution proposals, and overall supervision and guidance of company operations. In addition, with respect to nature- and climate-related issues, the Board of Directors is responsible for approving and overseeing the objectives and management plans for nature initiatives as well as climate change adaptation and mitigation. The Sustainable Development Committee is responsible for coordinating cross-departmental resources, transformation and adaptation plans, as well as public policy and communication. In 2025, Nanya Technology convened a total of six Board meetings, with agenda items including the Sustainability Report, the Nature and Climate Report, greenhouse gas inventory progress and planning, the continued promotion of Life Cycle Assessment (LCA) inventory mechanisms and post-assessment hotspot improvements, the IFRS Sustainability Disclosure Standards implementation plan, and the carbon fee self-initiated reduction plan. Major resolutions included the renewable energy procurement plan for 2027–2030 and the initiative to enhance guidance programs to promote a green supply chain.

To fulfill its responsibilities, Nanya Technology's Board of Directors has established three functional committees, each playing its role in addressing nature- and climate-related issues.



Audit Committee

Monitors the execution of the Company's operations and its finances, assists the Board in fulfilling its duties in oversight, and performs tasks mandated by applicable laws and international standards (e.g., the Renewable Energy Development Act and the Greenhouse Gas Reduction and Management Act).



Remuneration Committee

Formulates and regularly reviews policies, systems, standards, and structures for evaluating the performance and remuneration of directors and executives. Adjustments to the salaries, bonuses, and other compensation of the Company's senior executives take into account their contributions and performance across economic, environmental, and social aspects.



Sustainable Development Committee

Reviews policies, strategies, and management guidelines related to sustainable development and risk management; oversees the implementation of initiatives related to sustainable development and risk management, such as nature and biodiversity, climate change adaptation and mitigation management, as well as transition plans; and reviews disclosures of material information concerning sustainable development, such as the Sustainability Report and the Nature and Climate Report, with results reported to the Board of Directors.

The Sustainable Development Committee is composed of the Chairman of the Board, four independent directors, and two executive directors, with 100% of members serving as directors. The committee members designate the President as the convener. The committee convenes at least twice annually to further efforts across three key areas: Work-planning for sustainable development, risk management assessment, and regulatory compliance. It presents reports to the Board of Directors and conducts discussions to elevate sustainability governance, strengthen internal organizational reform, and have the Company advance toward sustainable development. In addition to establishing the Sustainable Development Steering Center to manage and promote items related to sustainability, a Risk Management Steering Center was also created by Nanya Technology to identify physical and transitional risks associated with nature and climate. The Center also formulates strategies and targets to integrate manageable risks into daily operations while continuously monitoring uncontrollable risks, allowing the Company to build resilience and minimize overall operational risk.



2025 Key Nature and Climate Change-Related Initiatives of the Sustainable Development Committee in 2025

- Published the Nature and Climate Report to systematically identify nature- and climate-related risks, and to generate positive impacts across the corporate value chain through resilience and adaptation strategies, mitigation and transition strategies, just transition initiatives, and stakeholder engagement.
- Regularly reviewed the achievement of annual targets and key performance indicators (KPIs).
- Promoted climate change management, strengthened greenhouse gas inventory and reduction initiatives, and aligned with TCFD and IFRS S2 disclosure requirements.
- Introduced financial quantification analysis of climate-related risks and opportunities, and progressively established mechanisms linking scenario analysis with internal decision-making.
- Strengthened corporate governance and risk management mechanisms by integrating enterprise risk management (ERM) with sustainability issues, thereby enhancing the Board of Directors' oversight function.
- Applied for self-initiated reduction plans, strengthened the Carbon Reduction Task Force's functions, and implemented carbon reduction action plans in response to the Ministry of Environment's carbon fee policy.
- Drafted an implementation plan aligned with the Financial Supervisory Commission's Plan for Introducing IFRS Sustainability Disclosure Standards, completing Phase II action plans and declarations.
- Advanced the development of the Sustainable Supply Chain Co-Prosperity Initiative (including Scope 3, product carbon footprints, and low-carbon transition programs pairing large companies with smaller ones)
- Developed a renewable energy procurement roadmap for 2027–2030.

Responsibilities of the Management

In order to address the challenges and capitalize on the opportunities presented by international trends, Nanya Technology has organized two major management platforms, led by senior executives who review performance and progress through regular meetings to ensure the implementation of nature and climate governance.

Sustainable Development Steering Center

The Chief Sustainability Officer (CSO) reports on related affairs. Meetings are held every quarter, and the outcomes of its operations are reported to the Board of Directors twice a year through the Sustainable Development Committee. The Sustainability and Risk Management Division, under the jurisdiction of the President Office, was established as a dedicated unit responsible for planning and managing action plans related to sustainability assessments, trends and initiatives. It also sets natural and climate-related strategies and targets, coordinates and monitors the progress and effectiveness of related programs (such as the ISO 14001 and ISO 50001 management systems), and ensures smooth and effective horizontal and vertical communication within the organization.

2025 Achievements

- Implemented **30** energy-saving projects (achieving energy savings of 4,695 MWh).
- Earned double "**A**" ratings for climate change and water security from CDP.



Risk Management Steering Center

Responsible for promoting and monitoring the work execution of various risk management teams and ensuring overall risk control. The director of the Center is the Executive Vice President, and meetings are held quarterly. The outcomes of its operations are reported to the Board of Directors twice a year through the Sustainable Development Committee. Sustainability and Risk Management Division, a dedicated unit under the President Office, reviews the performance of risk management teams and Business Continuity Plans (BCP) to ensure their continued applicability, appropriateness, and effectiveness. The Risk Management Steering Center consolidates and integrates all of the Company's risks. In accordance with the risk management systems, the Center evaluates potential risks across areas such as operations, technology, customers, finance, environmental, safety and hygiene (ESH), information security, legal compliance, climate, nature, and biodiversity. Then it identifies the most relevant risk factors, conducts assessments on each, sets management indicators, and conducts target management.

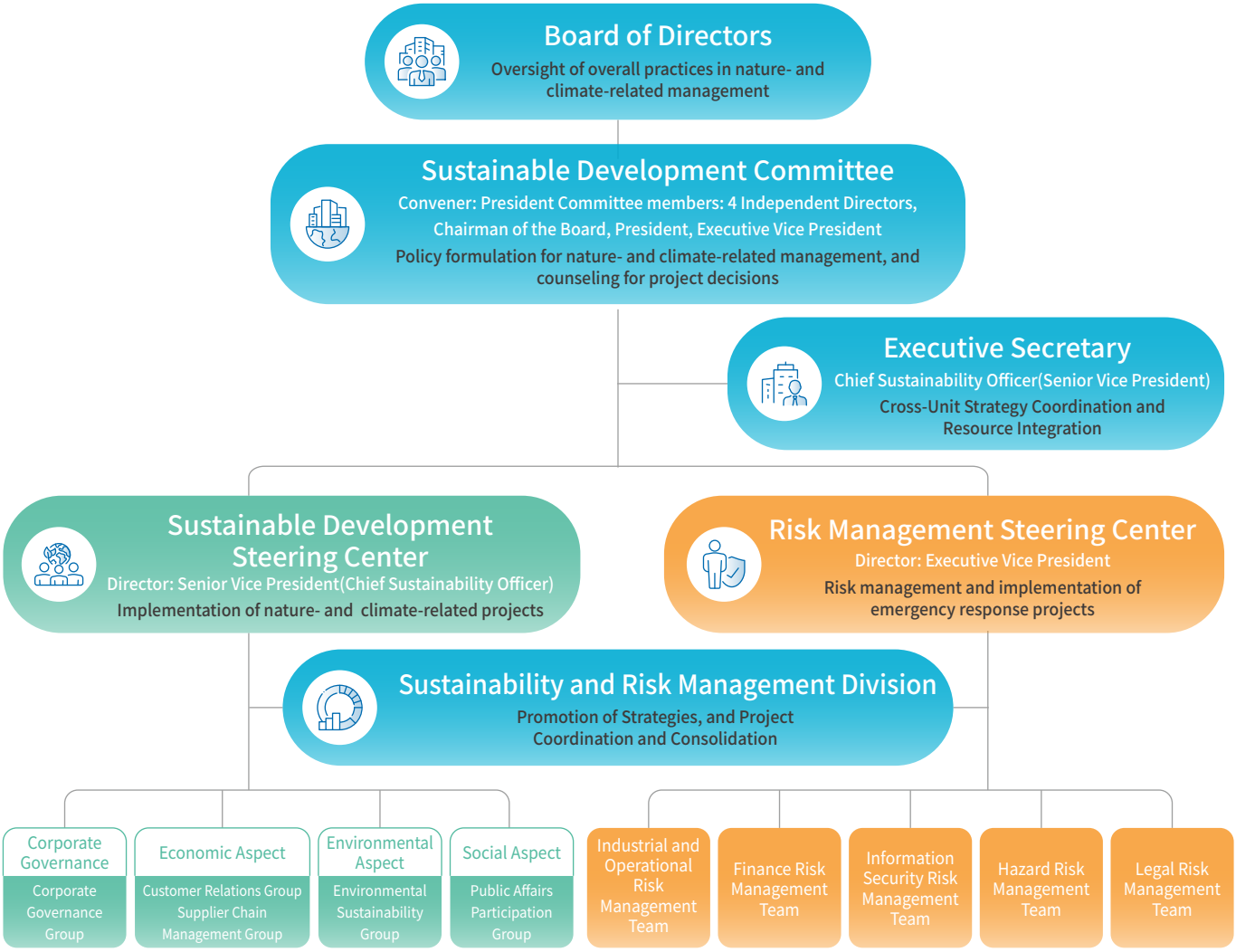
2025 Outcomes

183 risks were assessed.

- **0** required immediate improvement
- **5** required improvement plans
- **69** were assigned monitoring indicators
- **109** were under observation



■ Structure of Nanya Technology's Sustainability Governance Organization



In addition to monitoring our progress in sustainability initiatives through the Sustainable Development Committee, we strengthen the committee's awareness of sustainability governance by offering a variety of training courses; topics include economics, corporate governance, risk management, corporate transformation, mergers and acquisitions, ESG regulatory compliance, sustainable finance, climate change, power systems, and carbon pricing mechanisms. In 2025, the Board completed a total of 111 training hours. Board members not only come from diverse professional backgrounds, but also include individuals with experience as senior executives, government officials, or elected representatives, equipping them with the multifaceted competencies required to fulfill their duties. We will continue to plan courses focused on sustainability, corporate governance, and risk management for Board members to keep pace with evolving trends in sustainability and corporate governance.

Nanya Technology stays informed of key indicator trends by participating in international initiatives and assessments, continuously enhancing its climate governance capabilities and literacy. In 2025, the Company was selected for the Dow Jones Sustainability World Index for the fourth consecutive year and earned double "A" ratings for both climate change and water security from CDP. Nanya Technology has long recognized the significance of climate change and risk management. Since 2018, the Company has integrated climate change considerations into its employee performance evaluation (compensation) system.

Through this mechanism, the Company aims for all employees to continuously implement sustainability principles into their daily work, thereby enhancing corporate resilience.

Frontline employees and managers at the second level or above: Climate change indicators account for approximately 7% of the weighting in performance evaluation items, including electricity savings under ISO 50001, greenhouse gas emissions reductions, and the proportion of renewable energy usage.

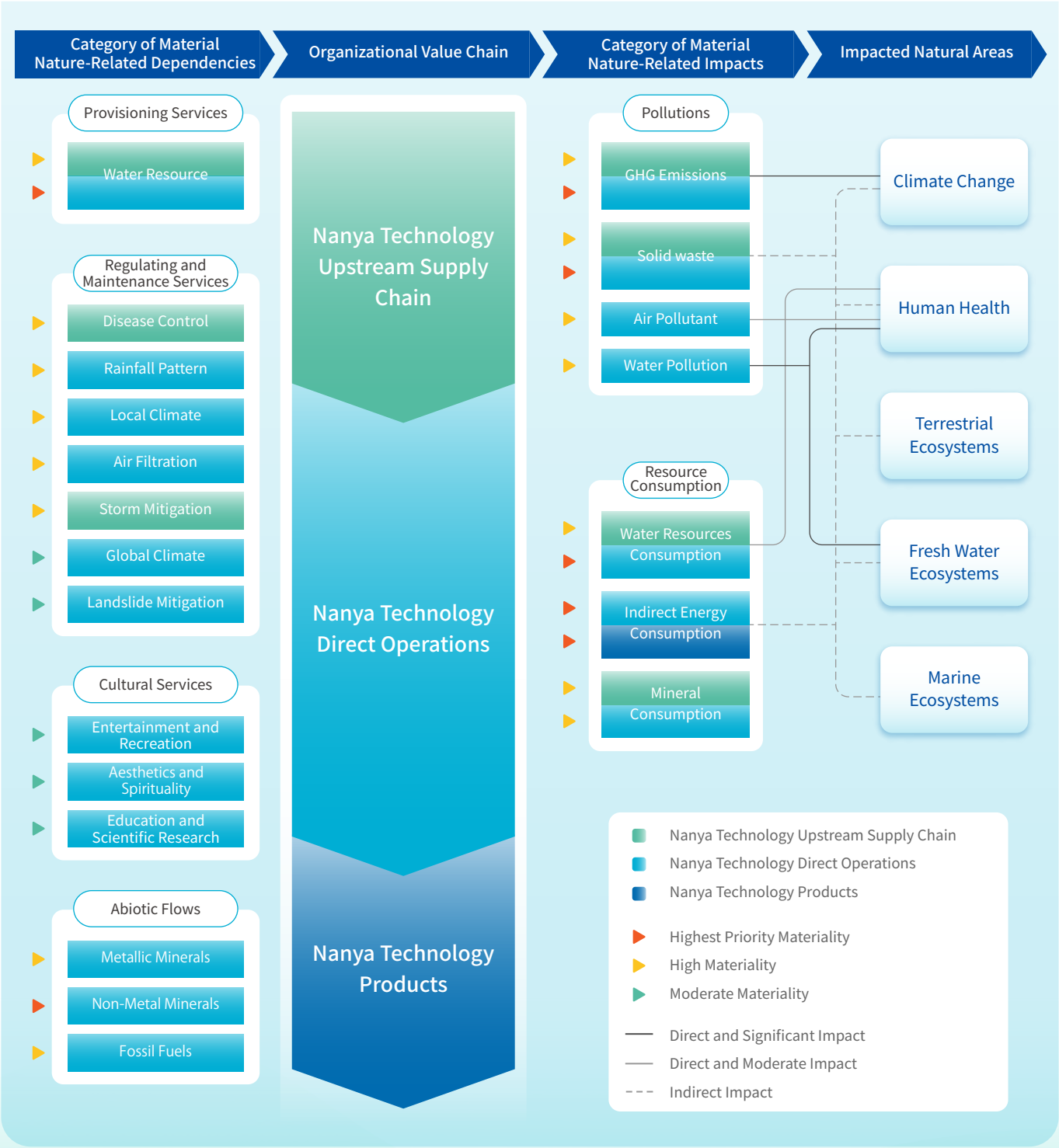
Chief Executive Officer (CEO): In light of the significant impact of the CEO's decision-making on climate change, the weighting of climate change in related review items is increased to 10%.

1-2 Nature and Climate Strategy

Nanya Technology's Strategic Approach to Nature and Climate

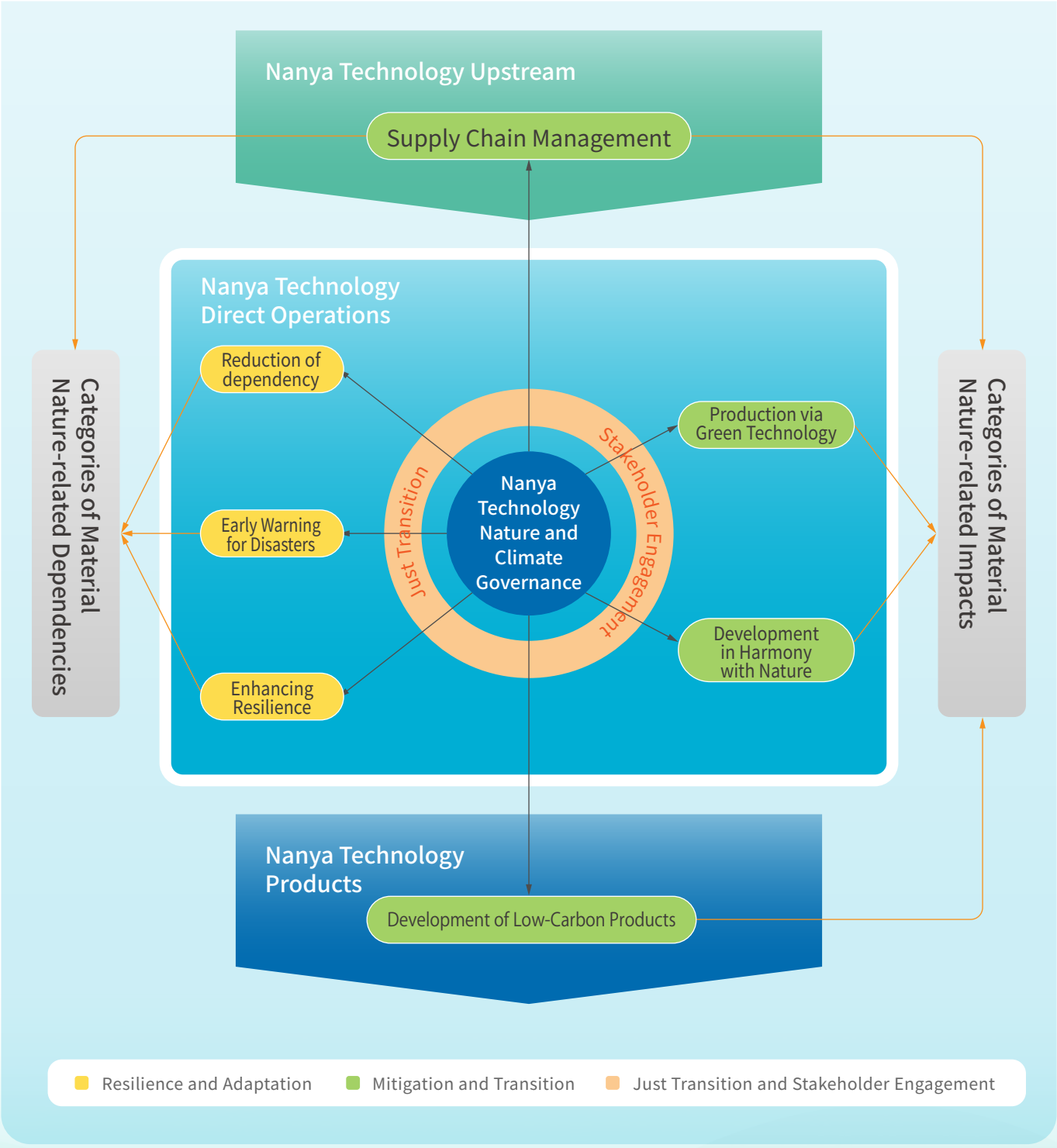
Nanya Technology began adopting the TNFD framework in 2023 and has established a framework to assess nature- and climate-related dependencies and impacts across its operational value chain. The Company's primary natural dependencies are water supply and non-metal minerals, while its most significant natural impacts include greenhouse gas emissions, waste generation, water usage, and indirect energy consumption. These trends did not change significantly in 2025.

■ Relation Diagram: Identification of Material Nature-Related Issues



In response to climate change and shifts in the natural environment globally, Nanya Technology places corporate sustainability governance at the heart of its efforts in overseeing the implementation of its strategies. Our response strategy comprises two main areas of action: Resilience and adaptation, and mitigation and transition. As actions across the value chain cannot be driven by Nanya Technology's operations alone, the Company collaborates with relevant stakeholders through just transition and stakeholder engagement platforms.
For Nanya Technology, resilience and adaptation, along with mitigation and transition, are important actions that effectively address nature- and climate-related issues. Just transition and stakeholder engagement enable the Company to consider the diverse perspectives of different stakeholders, implement a just transition, and avoid compromising stakeholder interests during the adaptation and transition process.

■ Network of Nature Strategies Utilized Within Nanya Technology's Value Chain



Resilience and Adaptation Strategies

Resilience and adaptation are the first and foremost of Nanya Technology's strategies to respond to climate change and global environmental shifts, and consist of three areas: Reducing dependency, early warning for disasters, and enhancing resilience.

Reducing dependency	Reducing Nanya Technology's dependency on critical ecosystem services to prevent short-, medium-, and long-term physical risks associated with the disappearance of these services due to changes in the external environment.
Early Warning for Disasters	Mitigating Nanya Technology's supply risk for materials and energy by establishing robust early warning systems for natural disasters, thereby enhancing sustainability resilience.
Enhancing resilience	Improving the overall resilience of Nanya Technology's facilities, both in their ability to withstand natural disasters and in their capacity for rapid recovery afterward, thereby enhancing sustainability resilience.

Mitigation and Transition Strategy

Mitigation and transition are Nanya Technology's strategy to reduce its impact on nature and the climate. This strategy focuses on four areas: R&D of low-carbon products, production via green technology, sustainable supply chain management, and development in harmony with nature.

Development of Low-Carbon Products	Offering customers high-performance, energy-efficient products with low embodied carbon and reduced environmental impact.
Production via Green Technology	Implementing carbon pricing to help Nanya Technology reduce GHG emissions, which improves group-wide production and energy efficiency, and reduces emissions of various pollutants at the same time.
Development in Harmony with Nature	Focus on ecological monitoring and restoration in areas surrounding Nanya Technology's facilities. As we continue to expand our operations, we aim to avoid causing damage to critical local ecosystems and to utilize ecological restoration as a means of environmental compensation.
Supply Chain Management	Closely tied to emission reduction and the R&D of low-carbon products along Nanya Technology's value chain, this strategy will also strengthen Nanya Technology's collaboration with suppliers through joint projects to manage nature- and climate-related issues.

Just Transition and Stakeholder Engagement

Nanya Technology takes into full account the perspectives of external stakeholders in its strategies to address nature-related issues and climate change. This is done to ensure harmonious development with nearby communities and society, and encompasses three areas: just transition, community collaboration and environmental education, and environmental compensation.

Just Transition	Just transition has been incorporated into the Company's sustainability strategy and risk management mechanism. As Nanya Technology advances on its path toward net-zero transition, it is committed to safeguarding the rights and interests of all stakeholders. The Company places strong emphasis on employee well-being and stakeholder considerations, ensuring that potential impacts arising during the transition are reduced, thereby achieving sustainable development that balances low-carbon goals with social responsibility.
Community Collaboration and Environmental Education	We actively collaborate with Ming Chi University of Technology, with which we share the surrounding environment, to jointly organize activities related to environmental education for local communities, environmental public welfare, and cultural preservation. The aim of these efforts is to build closer ties with local residents and educate stakeholders on sustainability through such initiatives.
Environmental Compensation	We are actively planning and discussing potential approaches to environmental compensation. In the future, Nanya Technology aims to protect and restore natural habitats near its facilities. We hope to build a better community environment with local residents.

Science Based Targets Network (SBTN)

Nanya Technology follows the TNFD framework to identify nature-related dependencies, impacts, risks, and opportunities, and has incorporated the guidance of the Science Based Targets Network (SBTN) as the core of its response strategy.
The Science Based Targets Network (SBTN) provides a scientific framework that is even more comprehensive and rigorous. Based on the scientific targets set by the Science Based Targets initiative (SBTi) for climate change, the Company has expanded its scope to include other nature-related topics—freshwater, land, oceans, and biodiversity, establishing science-based targets for nature that are measurable, actionable, and time-bound. The targets help companies align their actions with science and reverse nature loss. Ultimately, the goal is to define how humanity can continue to develop while protecting the environment and ensuring equity in society, outlining a way toward equity and sustainability.

Based on the results of Nanya Technology's materiality assessment, climate change and water resources were identified as the two most significant nature-related material topics. In response to climate change, we have already formulated corresponding science-based targets (SBT) and received approval. Nanya Technology is currently studying the SBTN framework for setting science-based targets related to water resources, and is leveraging historical hydrological data to define its SBTN targets. Using fair and science-based methodologies, thresholds are scaled down so that they can be applied to Nanya Technology's operational sites in order to ensure such targets align with real-world conditions.

1-3 Just Transition and Stakeholder Engagement

In the application of nature transition planning, an engagement strategy proposed by TNFD, Nanya Technology has strengthened its involvement in landscapes, river basins, and marine areas during the implementation of its transition plans. We have also established communication mechanisms with various stakeholders to ensure that just transition, environmental protection, social responsibility, and economic growth are all considered in the process of sustainable development. Through engagement platforms, we work to build consensus and jointly drive the sustainable transition of the value chain.

■ Engagement Strategies for Nanya Technology's Nature Transition Planning and Outcomes

Engagement Strategies	Outcomes of Nanya Technology's Interaction with Stakeholders
Participation of landscape, river basin, and marine governance	Nanya Technology joined the "River Waste Survey and Training Program" co-organized by Ming Chi University of Technology and the Society of Wilderness, and launched environmental monitoring activities at Dake River in Taishan. Through site visits and surveys, we have documented the types and quantities of river waste. By harnessing the power of citizen scientists, we aim to develop collaborative solutions to river waste issues through public-private partnerships.
Engagement with the Value Chain	**Suppliers** Nanya Technology communicates with suppliers through multiple channels. In addition to requiring the signing of a Supplier Code of Conduct and conducting sustainability risk assessments, the Company regularly hosts training sessions and Sustainable Supply Chain Seminars. Such events provide a platform to exchange insights into ESG trends and identify areas for project-based collaboration, enabling carbon reduction actions to be jointly implemented along the value chain. In 2025, Nanya Technology further strengthened its assessment of suppliers' nature-related dependencies and impacts. Through a more rigorous questionnaire design, the Company surveyed key suppliers to build a more comprehensive identification framework for nature-related dependencies and impacts. **Customers** Nanya Technology actively responds to customers' requests for information related to climate change issues. Through online meetings, in-person visits, or surveys, the Company engages with customers on topics such as science-based carbon reduction targets, use of renewable energy, and availability of low-carbon products. We also review customers' sustainability reports and other public disclosures to identify customer demands and incorporate them into the Company's low-carbon strategies.
Interactions with Industry Peers	Through participation in international sustainability ratings and conducting annual materiality assessments for the annual sustainability reports, Nanya Technology tracks investor concerns related to ESG issues. We strive to enhance the quality of our disclosures in sustainability reports to make them a more effective communication tool. As a member of the global semiconductor industry, Nanya Technology not only pursues excellence in its core business but also actively participates in exchanges with external entities to promote shared progress in the industry. Under our Sustainable Development Steering Center, we have established the Public Affairs Participation Group to evaluate and deliberate decisions related to participating in public affairs. In accordance with the Company's Guidelines on Public Affairs Participation, we review annually whether our participation in industry associations aligns with the goals of the Paris Agreement. The Company is committed to controlling global warming to well below 2°C through collaborations with industry peers. Through international advocacy and organizational partnerships, we hope to work with partners to expand our influence and accelerate the industry's sustainable transition.

Engagement Strategies

Outcomes of Nanya Technology's Interaction with Stakeholders

1. The public and private sectors are working together on nature- and climate-related issues. Nanya Technology has established an engagement platform for external stakeholders at Nanlin Technology Park, holding quarterly meetings to give routine reports on the results of our environmental and ecological monitoring. The members of the platform include a diverse group of stakeholders, such as senior executives of Nanya Technology, relevant department heads, local community representatives, and academics. This enables multi-faceted communication and effective stakeholder engagement. In addition, in accordance with Nanya Technology's Guidelines for Participation in Public Affairs, the Company conducts annual assessments to ensure that the climate-related associations in which we participate remain aligned with the Paris Agreement.

2. In response to the development of new products and new processes as well as capacity expansion driven by its low-carbon transition, Nanya Technology provides education and training programs, as well as reskilling courses, for newly hired and reassigned employees to mitigate transition-related impacts:



Just Transition

Item	Male	Female	Total	Description
Number of newly recruited full-time employees	7	6	13	Employees recruited for low-carbon product development, new processes, and capacity expansion. 100% of new hires receive salaries above the minimum wage.
Number of newly recruited non-full-time employees	0	0	0	
Number of full-time employees dismissed	0	0	0	Employees whose employment was terminated due to enterprise mitigation and adaptation initiatives.
Number of non-full-time employees dismissed	0	0	0	
Number of employees reassigned	15	10	25	Employees transferred from legacy products and processes to new product development and new processes.
Number of employees receiving upskilling and reskilling	15	10	25	Education, training, and reskilling programs for new product development, new processes, and capacity expansion.

3. Based on the results of the external sustainable development impact assessment, Nanya Technology identified both positive and negative sustainability impact items related to the external economic, environmental, and social factors (including human rights), and after evaluation, determined that there are no significant impact effects.

Positive impacts

Support of industrial technological development, contribution to public infrastructure through tax payments, increase in investors' financial returns, promotion of environmental benefits through green product design, and utilization of renewable energy and water resources in the Company's operations.

Negative impacts

Consumption of energy resources and generation of pollutant emissions that lead to impacts on human health and ecosystems; and greenhouse gas emissions that lead to extreme climates.

1-4 Materiality Identification Methodology for Nature- and Climate-Related Issues

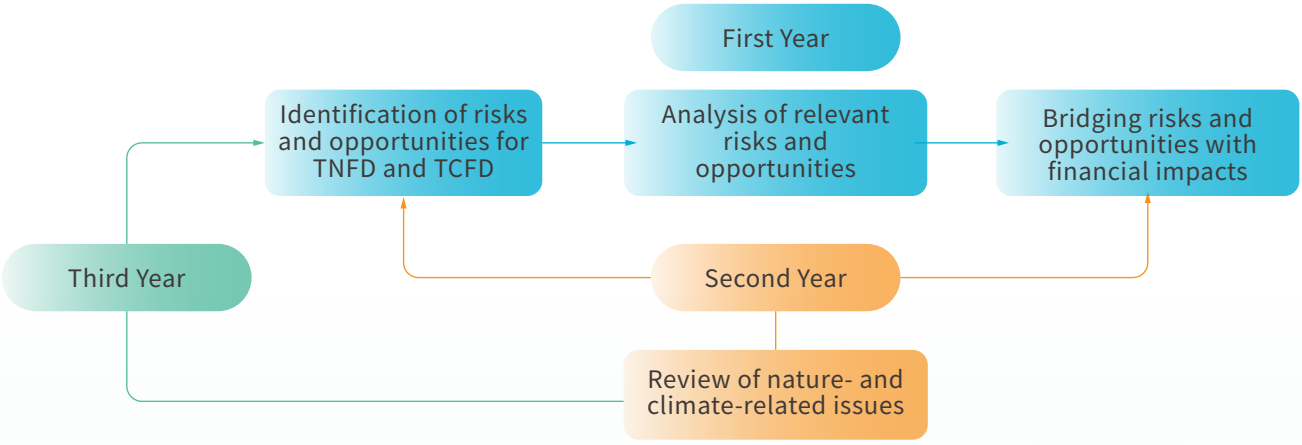
Nanya Technology conducts its materiality analysis of nature- and climate-related issues by leveraging the LEAP framework developed by TNFD. In 2023, the Company initiated the Locate and Evaluate phases for significant upstream suppliers in the value chain, and conducted the Locate phase for downstream activities. In 2024, we went further and took into consideration the risks and opportunities connected to nature-related dependencies and impacts, completing the Assess phase for materiality in these categories. At the same time, the Company also began to explore the integration of the Science Based Target Network (SBTN) framework into nature-related issues beyond climate change in 2024 to eventually implement a comprehensive LEAP analysis.

■ Nanya Technology's LEAP Implementation

Step	Locate	Evaluate	Assess	Prepare
Description	Analyzing the relationship between operational sites and key ecological areas	Evaluating nature-related dependencies and impacts	Assessing related risks and opportunities	Developing strategies and set targets based on identified issues, and disclose them
Implementation Details	We have conducted the identification of biologically sensitive areas based on the locations of Nanya Technology and its suppliers within the value chain, while also compiling information via surveys on suppliers' nature-related dependencies and impacts.	We have analyzed how each category of nature-related dependencies and impacts leads to Nanya Technology, and determined the associated risks and opportunities.	We have conducted materiality analyses for each category of nature-related dependencies and impacts, and used scenario analysis to examine potential changes in each risk and opportunity.	We have developed management indicators for each category of nature-related dependencies and impacts, and explored the feasibility of applying Science Based Targets Network (SBTN) targets.

Nature- and climate-related issues are long-term issues. Nanya Technology plans to carry out the LEAP process every two years. In the first year, we will formulate related strategies and indicators based on the integration of nature- and climate-related material topics and the results of the risk and opportunity analysis. In the second year, we will reassess whether new risk issues have emerged and review progress on existing targets to determine if strategy adjustments are necessary.

■ Nanya Technology's Framework for Assessing Nature- and Climate-related Risks and Opportunities



Identifying Biologically Sensitive Areas in the Value Chain

Nanya Technology used GIS data layers published by the Taiwanese government to conduct an environmental analysis within a 2-kilometer radius around the sites directly operated by the Company and its significant suppliers, and shipping locations.

- Table of Figures and Data Used

Category	Unit	Item
Regulatory	Ministry of the Interior	Marine reserves
		National parks
		Important wetlands
	Ministry of Agriculture	Important wildlife habitats
		Wildlife reserves
		Nature reserves
		Forest reserves
Non-regulatory	Ministry of Agriculture	Conservation corridors
		Key biodiversity areas



Materiality Analysis of Nature- and Climate-related Financial Risks in Direct Operations and the Supply Chain

Operations

In 2023, Nanya Technology integrated climate- and nature-related issues for the first time, guided by the TNFD's LEAP framework. Through training sessions and workshops, the Company initiated analyses from nature-related dependencies and impacts. With cross-departmental brainstorming sessions, we gathered insights and awareness gained from operations, and nature-related issues that may emerge during operational processes were explored. The result was the Company's first materiality assessment of nature-related dependencies and impacts. In 2024, the Company reviewed these material issues, and updated the results on the materiality of nature-related dependencies and impacts accordingly. We also conducted an in-depth analysis into specific dependency and impact pathways.

Value chain

Through meetings and workshops, we worked to raise awareness of nature- and climate-related issues among suppliers. We developed surveys with detailed explanations to foster a shared understanding of the issues and ultimately collected responses from our suppliers. In 2024, Nanya Technology strengthened the identification of nature-related dependencies and impacts as well as climate change considerations. In 2025, the Company optimized its questionnaire design and adopted the ENCORE database, gradually transitioning from qualitative to semi-quantitative assessments of nature-related dependencies and impacts. At the same time, scenarios reflecting changes in nature-related trends were incorporated into Nanya Technology's existing assessment framework to ensure that the Company's assessment of nature-related dependencies and impacts fully aligns with all TNFD requirements.

■ Nanya Technology's Process for Analyzing Nature Scenarios

Identification of nature-related dependencies and impacts → **Scenario analysis of nature-related dependencies and impacts**

- Supplier-specific questionnaires
- Encore database
- → Identification of suppliers' material nature-related dependencies and impacts
- Scenarios of changes in ecosystem services in academic literature
- → Scenario analysis of suppliers' material nature-related dependencies and impacts
- → Projected changes in nature-related dependencies and risks under future scenarios

■ Key Evaluation Indicators for Suppliers' Self-Evaluation of Nature and Climate

Degree of Concern Regarding Dependencies and Impacts

The proportion of a supplier's concern for a particular nature-related dependency or impact. A higher value indicates greater concern from the supplier and a higher likelihood of the issue being present in their operational environment.

Risk Level of Nature-Related Dependencies

Suppliers conduct self-assessments of the nature-related dependencies that concern them. They assess the potential impact to their operations should a dependency disappear while their disaster preparedness is also surveyed. After an integrated analysis, the result is the supplier's level of risk for the given dependency. A higher value indicates greater potential impact and less disaster preparedness.

Risk Level of Nature-Related Impacts

Suppliers conduct self-assessments on the nature-related impacts that concern them. A lower value indicates a lower degree of impact faced by the supplier. Evaluations also consider the presence of management measures and their effectiveness in mitigating impacts.



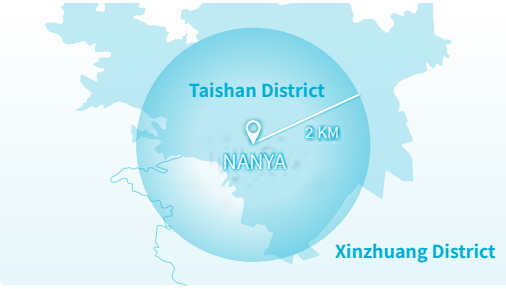
2 Nanya Technology's Nature and Climate Actions

Nanya Technology assesses its nature-related dependencies and impacts. It also identifies related risks and opportunities. Through both transition and adaptation measures covering water resource management, energy management, and biodiversity conservation, we have strengthened our operational resilience, raised employee's climate awareness, and ensured sustainable development in the face of nature- and climate-related challenges.

2-1 Nature-related Dependencies and Impacts

Identification Results of Biologically Sensitive Areas Near Operational Sites

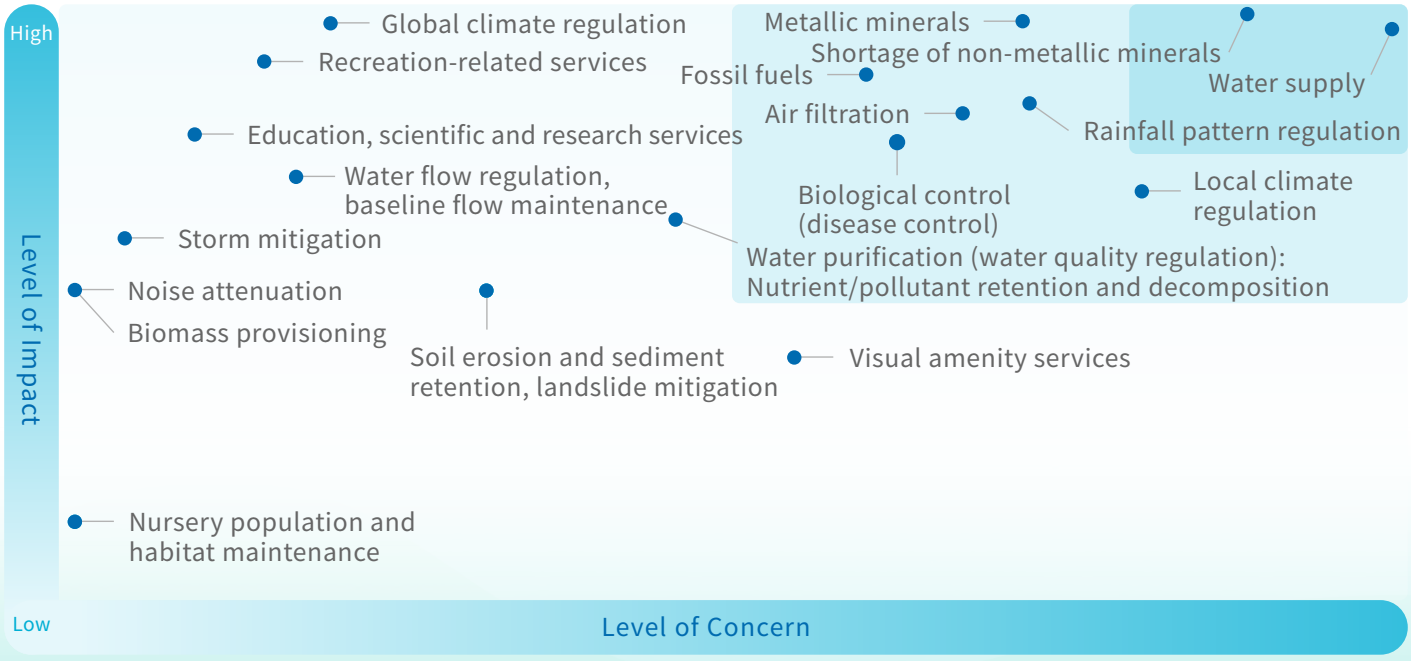
Nanya Technology's operational sites remain the same as in 2024, with no significant changes. Based on a comparative analysis using 9 types of high-sensitivity biodiversity GIS datasets, no highly sensitive areas fall within a 2-kilometer radius of Nanya Technology's operational sites.



Materiality Identification Results of Nature-related Dependencies

In 2025, there were no significant changes, thus the identification results are consistent with those of 2024. Ultimately, we identified 2 nature-related dependency issues as the highest in priority: Water Supply and Non-metallic Minerals. Additionally, 6 nature-related dependency issues were determined to be of high materiality: Metallic Minerals, Fossil Fuels, Rainfall Pattern Regulation, Local Climate Regulation, Disease Control, and Air Filtration.

■ Materiality Identification Results of Nanya Technology's Nature-related Dependencies



We use dependency pathways based on Natural Capital and TNFD recommendations to conduct in-depth analyses of how each nature-related dependency affects Nanya Technology and identify potential driving factors outside of the Company.

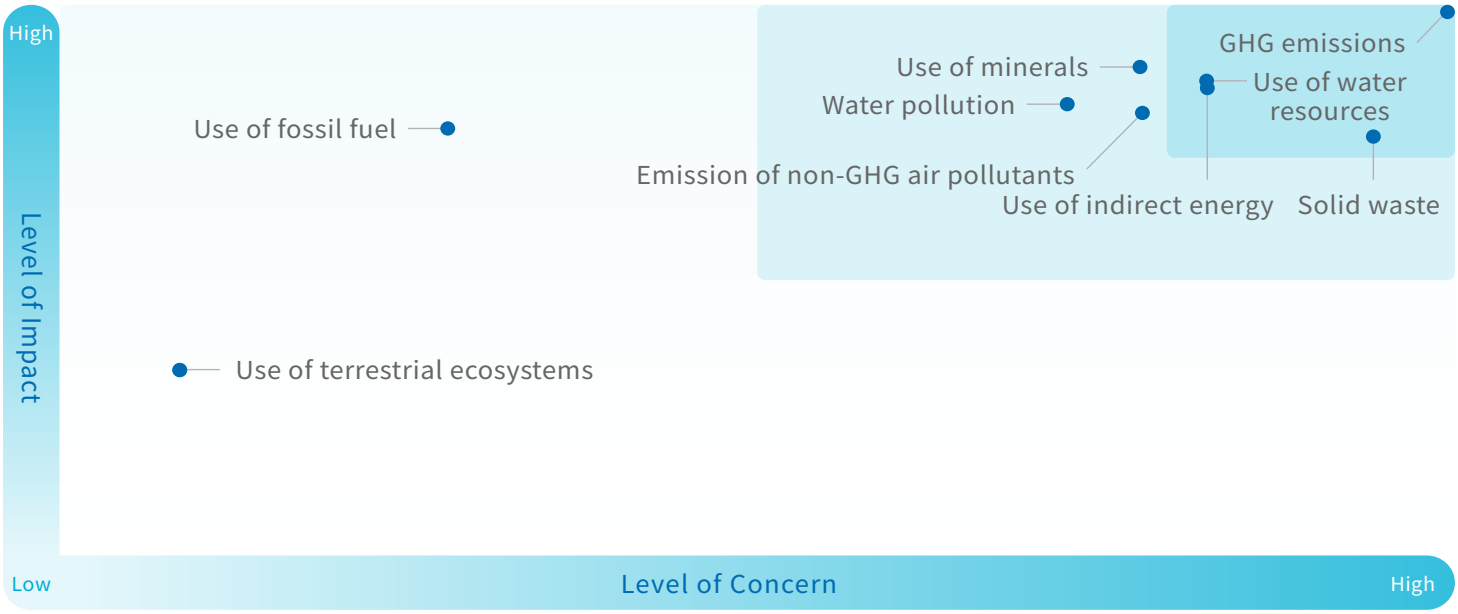
Main Service	Subcategory (SEEA/TNFD)	Materiality	Relevance to Nanya Technology (Dependency Pathway Analyses)	Associated Risk	External Driver Analysis			
					Climate Change	Industry Policy	Society & Environment	Other Factors
Provisioning services	Water supply	Highest priority	Inadequate water supply caused by drought, high turbidity from typhoons, or government-imposed restrictions can affect production processes, ultimately delaying product delivery and impacting revenue.	Brainstorming sessions among dedicated personnel from relevant units	●	●	●	
Regulating & maintenance services	Global climate regulation	Medium	Climate change has led to extreme weather events that have disrupted operations along sea and air freight lanes, impacting delivery schedules. Additionally, a warming atmosphere may trigger Arctic oscillation, resulting in colder cold waves in winter.	Disrupted air freight	●			
	Rainfall pattern regulation (subcontinental scale)	High	Reduced rainfall, extended droughts, or heavy rainfall can lead to inadequate water supply from source areas or flooding around operational sites, ultimately disrupting operations.	Heavy rain and flooding	●			
	Local climate regulation	High	Driven by climate change, temperatures are reaching record highs every year, which increases Nanya Technology's electricity and water demands. Prolonged periods of extreme heat may lead to droughts, wildfires near operational sites, negative impacts on employee productivity, and hazards to employee health.	Heavy rain and floods	●			
	Air filtration	High	If air quality worsens, clean room consumables will need to be replaced more frequently, raising the Company's costs. It can also pose negative impacts to employee health, especially those who need to work outdoors for prolonged periods during expansion projects.	Air quality deterioration	●	●	●	
	Soilerosion and sediment retention: landslide mitigation	Medium	Nanya Technology's facility is located on hilly terrain in Taishan District, New Taipei City, where debris flows are possible. Should an extreme weather event occur, it may lead to an increased risk of slope failure.	Risk of debris flows	●	●	●	
	Water purification (water quality regulation): Nutrient/pollutant retention and decomposition	Medium	Water quality is essential in semiconductor production. High turbidity or pollution in raw water increases the load on Nanya Technology's water purification equipment, raising the Company's costs.	Poor water quality caused by typhoons	●	●	●	

Main Service	Subcategory (SEEA/TNFD)	Materiality	Relevance to Nanya Technology (Dependency Pathway Analyses)	Associated Risk	External Driver Analysis			
					Climate Change	Industry Policy	Society & Environment	Other Factors
Regulating & maintenance services	Water flow regulation: Ba seline flow maintenance	Medium	River flow is a key indicator of whether a location can provide a stable water supply. Inability to keep base flow at a stable level indicates the possibility of water supply disruptions during droughts, impacting local agriculture and residential water use.	Seasonal water shortages	●	●	●	
	Biological control (disease control)	High	Studies indicate that climate change may increase the risk of zoonotic diseases, potentially triggering pandemics similar to COVID-19. Such outbreaks pose significant risks to the Company's operations.	Outbreak of epidemic	●		●	
Cultural services	Recreation-related services	Medium	The greenery and landscaped environment surrounding Nanya Technology's facility provides an important recreational space for local residents (e.g., hiking and flower viewing).	Community perception and employees' work environment		●	●	
	Visual amenity services	Medium	Greenery in the facility supports the physical and mental well-being of employees.			●	●	
	Education, scientific and research services	Medium	The ecosystem surrounding Nanya Technology's facility serves as a valuable setting for environmental education and family-oriented learning activities hosted by the Company.			●	●	
Abiotic Flows	Metallic minerals	High	Shortages or disruptions in the supply of metallic materials will impact production. It may also raise equipment maintenance and product manufacturing costs, and even halt production.	Supply chain shortages		●		●
	Non-metallic minerals	Highest priority	Geopolitical conflicts may lead to supply shortages or price increases. Nanya Technology relies heavily on specialty gases as key production materials. A lack of supply would impact the production process or raise procurement costs, increasing operational costs.			●		●
	Fossil fuels	High	Fossil fuels remain a major energy source for Nanya Technology's operations and are also the primary energy source for Taiwan's power grid. Geopolitical risks can drive up the cost of fossil fuels, in turn increasing electricity costs.			●	●	●

Materiality Identification Results of Nature-related Impacts

Nanya Technology identified a total of 9 nature-related impacts. Following internal analysis and discussion, four were classified as the highest priority: Greenhouse Gas (GHG) Emissions, Water Use, Indirect Energy Use, and Solid Waste. Three impacts were determined to be of high materiality: Water Pollution, Non-GHG Air Pollutant Emissions, and Mineral Use.

■ Materiality Identification Results of Nanya Technology's Nature-related Impacts



Nanya Technology conducted impact pathway analyses for different high-materiality nature-related impacts based on the suggestions of the Natural Capital Protocol and TNFD. This allows us to better understand how each type of impact is linked to the Company, the natural environment, and biodiversity.

Categories of Nature-related Impacts	Subcategory	Materiality Identification	Impact Pathway	Corresponding Transition Risk
Use of resources	Use of water resources	Highest priority	Water is a critical ecosystem service on which Nanya Technology depends. The substantial water use required for semiconductor manufacturing can also lead to additional impacts—from the competition for water with nearby communities or businesses to possible ecological degradation from overconsumption.	● Risks and opportunities related to climate change
	Use of minerals	High	Use of minerals may lead to reduced supply in the future. Shortages will lead to rising prices, increasing the Company's procurement costs. In addition, it may also indirectly lead to biodiversity loss at mining sites.	● Shortages of supply chain
	Use of indirect energy	Highest priority	Our facilities require substantial electricity to operate, which may strain regional power supply, increase GHG and air pollutant emissions, and cause biodiversity loss associated with development around power stations.	● Risks and opportunities related to climate change
Pollution	Non-GHG air pollutant emissions	High	The Company's operations release air pollutants such as volatile organic compounds (VOCs), which can impact human health and draw attention from stakeholders (e.g., local communities), potentially damaging our corporate reputation.	● Air pollution regulations ● Odor ● Stricter emission control technology

Categories of Nature-related Impacts	Subcategory	Materiality Identification	Impact Pathway	Corresponding Transition Risk
Pollution	Water pollution	High	Nanya Technology discharges wastewater during its operations. Even if the wastewater discharged is compliant with regulations, it may still exceed the local environmental capacity, leading to biodiversity loss.	• Water pollution regulations • Poor river water quality • Stricter emission control technology
	Solid waste	Highest priority	Our operations generate large volumes of industrial and general solid waste. Not only must qualified vendors be selected to handle waste, but improper handling can result in various negative environmental impacts.	• Waste regulations

In accordance with the third phase of the Global Life Cycle Impact Assessment Method (GLAM)—published by the UN Life Cycle Initiative—impact categories are organized into the following table by analyzing the pathways through which they contribute to potential damages across different environments.

▪ Impacts of Business Activities on Climate, People, and Biodiversity

Categories of Nature-related Impacts	Subcategory	Identification of Potential Damage				
		Climate Change	Human health	Biodiversity (ecosystem quality)		
		Atmosphere	None	Land	Freshwater	Ocean
Ecosystem change	Use of terrestrial ecosystems	●	○	●	○	○
Use of resources	Use of water resources	○	●	○	●	○
	Use of minerals	○	○	○	○	○
	Use of fossil fuel	●	○	○	○	○
	Use of indirect energy	●	●	●	●	●
Climate Change	GHG emissions	●	○	○	○	○
	Non-GHG air pollutant emissions	●	●	●	●	●
Pollution	Water pollution	○	○	●	●	●
	Solid waste	●	●	●	●	●

● Studies found that the impact pathway would directly lead to significant effects.
● Studies found that the impact pathway would directly lead to effects.
● The impact does not originate from Nanya Technology directly, but from suppliers or electricity providers.
○ According to current scientific evidence, no impact or very minimal impact has been observed, and exposure risk is deemed to be very low.

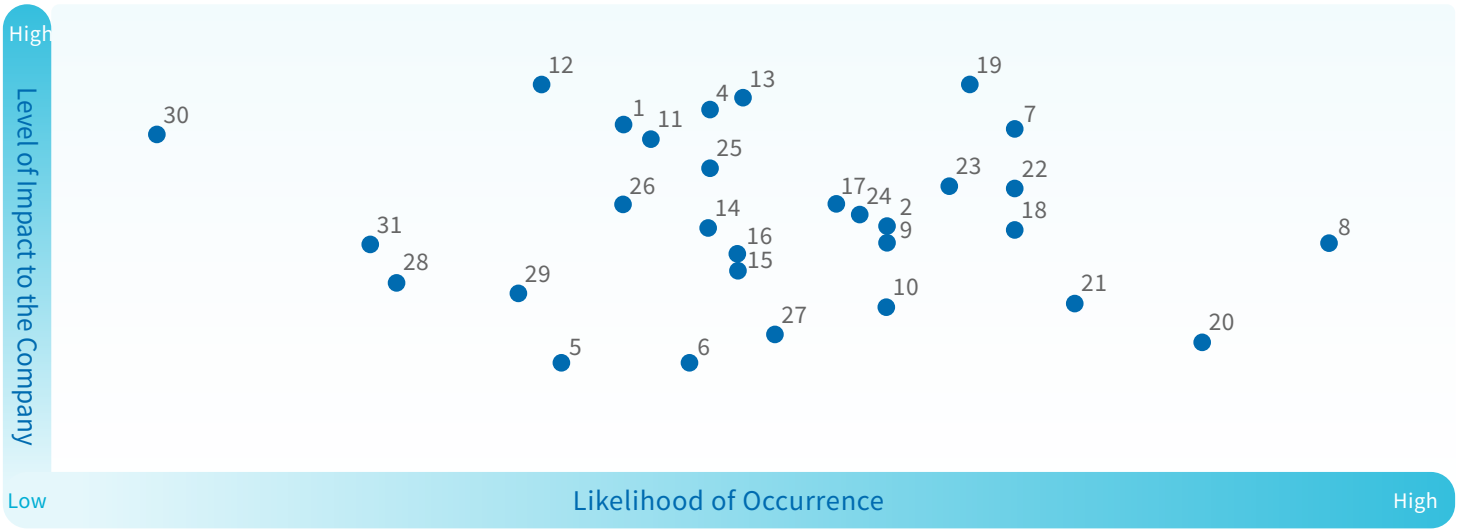
Nanya Technology has long implemented a value chain sustainability impact review, identifying GHG emissions as the material topic with the highest negative externality, followed by water use, process gas emissions, and waste. These findings closely align with the results from the identification of material nature-related issues presented in this report, providing dual verification. The monetization of the costs of externalities in corporate sustainability perfectly matches the material topics identified through the Company's operations.

In summary, the identification results of nature-related dependencies and impacts show that Nanya Technology has a high level of dependency on water resources, climate regulation, and mineral and non-mineral raw materials. Also, impacts arising from GHG emissions are identified as priority issues. In response, the Company has launched relevant management strategies and measures, and established indicators for monitoring and tracking.

Materiality Identification Results of Climate Change-related Risk Factors

Nanya Technology reexamined the climate-related regulatory, reputational, market, technological, and physical risks previously identified . Based on the likelihood of occurrence and the degree of impact on operations, the Company conducted an internal materiality analysis. The results indicated that the most material risk was the carbon fee to be implemented in Taiwan, which would increase operating costs. The second was carbon pricing, which was tied to internal budget allocation. The third to fifth were associated with potential power supply instability due to the development of renewable energy in recent years, customer requirements for product decarbonization, and growing market demand for low-carbon products. These risks are linked to the Company's low-carbon transition and market demand for products. Nanya Technology will develop financial impact analyses, identify opportunities, and formulate response strategies for the top ten climate-related risk factors identified.

■ Materiality Identification Results of Climate Change-related Risk Factors



No.	Risk Factor	Ranking	Materiality
1	Regulatory risk—2050 net zero target	15	Medium
2	Regulatory risk—carbon tariffs at borders	14	Medium
3	Regulatory risk—carbon fee imposition and regulations on carbon inventory	**1**	High
4	Reputational risk—net-zero targets	**10**	High
5	Reputational risk—building climate awareness among employees	30	Low
6	Reputational risk—building climate awareness among executives	26	Low
7	Market risk—demand for product decarbonization	**4**	High
8	Technological risk—internal carbon pricing	**2**	High
9	Technological risk—high-quality carbon credits	15	Medium
10	Regulatory risk—imposition of water conservation charges	20	Medium
11	Reputational risk—water shortage affecting stock performance	15	Medium
12	Market risk—water shortage affecting revenue	15	Medium
13	Technological risk—investment in water recycling systems	**8**	High
14	Regulatory risk—regulations and standards related to energy	21	Low
15	Regulatory risk—regulations related to environmental impact assessments and construction	24	Low

No.	Risk Factor	Ranking	Materiality
16	Reputational risk—stakeholder/investor concerns	22	Low
17	Market risk—customer requirements for higher percentage of renewable energy use	13	Medium
18	Technological risk—demand for energy conservation	**6**	High
19	Technological risk—stability of power supply	**3**	High
20	Reputational risk—sustainability ratings and disclosures	**9**	High
21	Reputational risk—collaboration on sustainability issues across the industry chain	11	Medium
22	Market risk—market expansion for products	**5**	High
23	Technological risk—emerging technologies and innovative R&D	**6**	High
24	Technological risk—strategies for green patents	12	Medium
25	Long-term—water shortage	15	Medium
26	Long-term—long-term changes in rainfall patterns	23	Low
27	Long-term—extreme heat	25	Low
28	Immediate—heavy rain and floods	30	Low
29	Immediate—excessive turbidity in raw water due to landslides or typhoons	27	Low
30	Immediate—landslides/debris flow	28	Low
31	Immediate—extreme weather events	29	Low

2-2 Nature- and Climate-related Risks and Opportunities

Risks, Opportunities, and Response Strategies Concerning Nature-related Dependencies

Nanya Technology assesses eight major risk categories, including current regulations, emerging standards, technology, market, reputation, short- and long-term physical risks, as well as legal risks, while considering the upstream, midstream, and downstream semiconductor value chain across short-, medium-, and long-term time horizons. In accordance with the Company's operational risk management procedures, Nanya Technology evaluates the significance of risks and opportunities arising from various nature- and climate-related change scenarios, establishes corresponding response measures, incorporates them into the Enterprise Risk Management (ERM) framework, and undergoes regular verification by senior management.

By identifying categories of natural dependencies that may be subject to varying degrees of physical risk due to external factors based on ecosystem services relied upon, the Company compiled a list of various potential long-term and immediate physical risks. For example, climate change may result in insufficient water supply, upon which the Company depends, leading to water scarcity, a long-term physical risk. Through workshops involving brainstorming sessions among dedicated personnel from relevant units, the Company consolidated various physical risks, developed risk response and management measures, and explored potential opportunities embedded within these risks, with the goal of achieving sustainable operations through risk mitigation.

Risk Type	Risk Item	Responsible Unit	Nature-related Dependency (Ecosystem Service)	Materiality	Financial Impact Analysis	Potential Opportunity	Response Strategy
Long-term physcal risks	Seasonal water shortages.	Facility Division Plant Director's Office	Water supply	Highest priority	Revenue Seasonal water shortages driven by climate change impact on production capacity and revenue.	Corporate performance Improvement of water conservation performance, sustainable. Resource use Enhancement of the Company's drought resilience and water recycling capabilities.	Production via green technology, reduction of dependency.
	Extreme heat	Facility Division Plant Director's Office Human Resources Division	Local climate regulation	High	Operational costs Summer heat would increase the load on ACs and electricity demand.	Corporate performance Improvement of the Company's energy efficiency.	Early warning systems
Immediate physical risks	Heavy rain and floods	Facility Division Plant Director's Office Sustainability and Risk Management Division	Rainfall pattern regulation (subcontinental scale)	High	Capital expenditure Heavy rainfall may cause flooding near facilities and impact production. Operational costs: Heavy rainfall would delay construction projects. Operational costs Heavy rainfall would delay construction projects.	Corporate performance Reduction of short-term risks during operations and disaster-related losses.	Early warning systems, enhancing resilience
	Disrupted air freight	Materials & Assets Division Product Transportation Department	Global climate[1] regulation	Medium	Procurement costs Droughts or reduced water levels in key routes due to climate change would drive up shipping costs.	Corporate performance Improvement of organizational responsiveness.	Early warning systems
	Outbreak of epidemic	Human Resources Division Safety & Hygiene Department	Biological control (disease control)	High	Operational costs Disruptions from pandemics would increase overall operational costs.	Corporate performance eduction of medium- to short-term risks.	Early warning systems

Risk Type	Risk Item	Responsible Unit	Nature-related Dependency (Ecosystem Service)	Materiality	Financial Impact Analysis	Potential Opportunity	Response Strategy
Immediate physical risks	Air quality deterioration	Safety & Hygiene Department Plant Director's Office Facility Division	Air filtration	High	Capital expenditure Increased cost to filter air for clean rooms.	Corporate performance Reduction of medium- to short-term risks.	Early warning systems
	Risk of debris flows	Engineering Affairs Division	Soil erosion and sediment retention—landslide mitigation [2]	Medium	Capital expenditure Occurrence of debris flows would damage capital equipment. Operational costs Operational disruptions from debris flows would increase operational costs.	Corporate performance Improvement of organizational responsiveness. Reputation Slope stabilization helps to reduce rockfall risks for nearby residents, improving corporate reputation.	Early warning systems
Long-term/ immediate physical risks	Poor water quality caused by typhoons	Facility Division	Water purification (water quality regulation): Nutrient/pollutant retention and decomposition	Medium	Operational costs Additional chemicals would be required to treat high-turbidity raw water. Capital expenditure Investment in new treatment equipment will be required.	Corporate performance Improvement of organizational responsiveness. Sustainable resource use Use of water resources.	Early warning systems
	Supply chain shortages	Materials & Assets Division	● Shortage of non-metallic minerals ● Metallic minerals ● Fossil fuels	Highest priority	Procurement costs Geopolitical conflicts would cause shortages or price hikes in specific minerals and fuels.	Corporate performance Resource efficiency.	Early warning systems
Long-term physical risks	Community perception and employees' work environment	Human Resources Division Engineering Affairs Division	Visual amenity services	Medium	Operational costs Poor working conditions may lead to a higher turnover rate. Reputational risk Inadequate greening around facilities may lead to complaints from local residents.	Reduction in turnover rate Ecological conservation Improvement of corporate reputation	Enhancing resilience

Note 1: Although "global climate regulation" is categorized as a nature-related dependency of medium materiality for Nanya Technology, climate change is a global concern and a key sustainability issue for the Company. Therefore, all related risks are subject to management oversight.

Note 2: "Soil erosion and sediment retention—landslide mitigation" is also a nature-related dependency of medium materiality, but debris flow is considered a priority in risk management because the Company is located in a hilly area and is currently undergoing expansion.

Risks, Opportunities, and Response Strategies Related to Nature-related Impacts

Nanya Technology's nature-related risks are categorized into four groups: regulatory, reputational, market, and technological. Regulatory risks arise from government requirements for sustainability disclosures. Market risks relate to growing investment in environmental governance by various countries and customers' expectations regarding Nanya Technology's performance in environmental governance. Technological risks stem from the possibility that industry peers may develop products and services with greater environmental benefits, thereby generating associated risks. Last but not least, reputational risks concern the emphasis that stakeholders—such as investors, local residents, and employees—place on corporate reputation.

Risk Category	Risk Subcategory	Description	Financial Impact	Opportunity for Organization	Impact Scope	Time of Occurrence	Response Strategy
Regulatory risks	Demand for information disclosure	Meeting sustainability disclosure requirements increases labor costs.	Operational costs	Alignment with sustainability ratings.	Internal operations	Short-term	Sustainability governance.
	Air pollution regulations	Costs to comply with air quality regulations.	Operational costs	Reduction of expenditures on air pollution control fees.	Internal operations	Medium-term	Production via green technology.
	Water pollution regulations	Costs to comply with air quality regulations.	Operational costs	Prevention from water pollution penalties.	Internal operations	Medium-term	Production via green technology.
	Waste regulations	Costs to comply with air quality regulations.	Operational costs	Reduction of expenditure on outsourcing waste disposal.	Internal operations	Medium-term	Production via green technology.
Reputational risk	Poor performance in sustainability ratings	Poor sustainability ratings reduce the chance to be included in specific indices.	Enhancement of corporate image and social capital	Opportunities to be considered for specific sustainability investments.	Internal operations	Medium- to long-term	Sustainability governance.
	Odor	Residents near facilities may perceive odors as pollution caused by the Company.	Corporate reputation	Installment of monitoring equipment around facilities.	Internal operations	Immediate	Production via green technology Actions beyond the value chain.
	Poor river water quality	Deterioration of river water quality may provoke protests from nearby residents.	Corporate reputation	Development of new treatment technologies to improve pollutant removal efficiency or recover water resources.	Internal operations	Immediate	Production via green technology Actions beyond the value chain.
	Just transition	Damage to corporate reputation resulting from impacts on stakeholder rights and interests during the transition process.	Corporate reputation Operational costs Social capital	Focus on stakeholder feedback.	Internal operations	Long-term	Just transition
Market risks	rocurement costs for key materials increase	External procurement of key minerals may increase procurement costs due to climate change and geopolitical conflicts.	Procurement costs	Reduction of supply chain volatility.	Internal operations Upstream suppliers	Short-term	R&D of low-carbon products Supply chain management.
Technology risks	Emerging technologies and innovative R&D	Procurement of new process equipment. R&D costs	Capital expenditure Operational costs	Maintaining relationships with customers.	Internal operations	Short-term	R&D of low-carbon products.
	Stricter emission control technology	Procurement of new pollution control equipment. Treatment costs	Capital expenditure Operational costs	1.Alignment with sustainability ratings. 2.Market development for new.	Internal operations	Medium-term	Production via green technology.

Risks, Opportunities, and Response Strategies Related to Climate-related Impacts

Nanya Technology has analyzed the financial impacts of highly material risk factors related to climate change and developed corresponding response strategies while exploring opportunities arising from these risks.

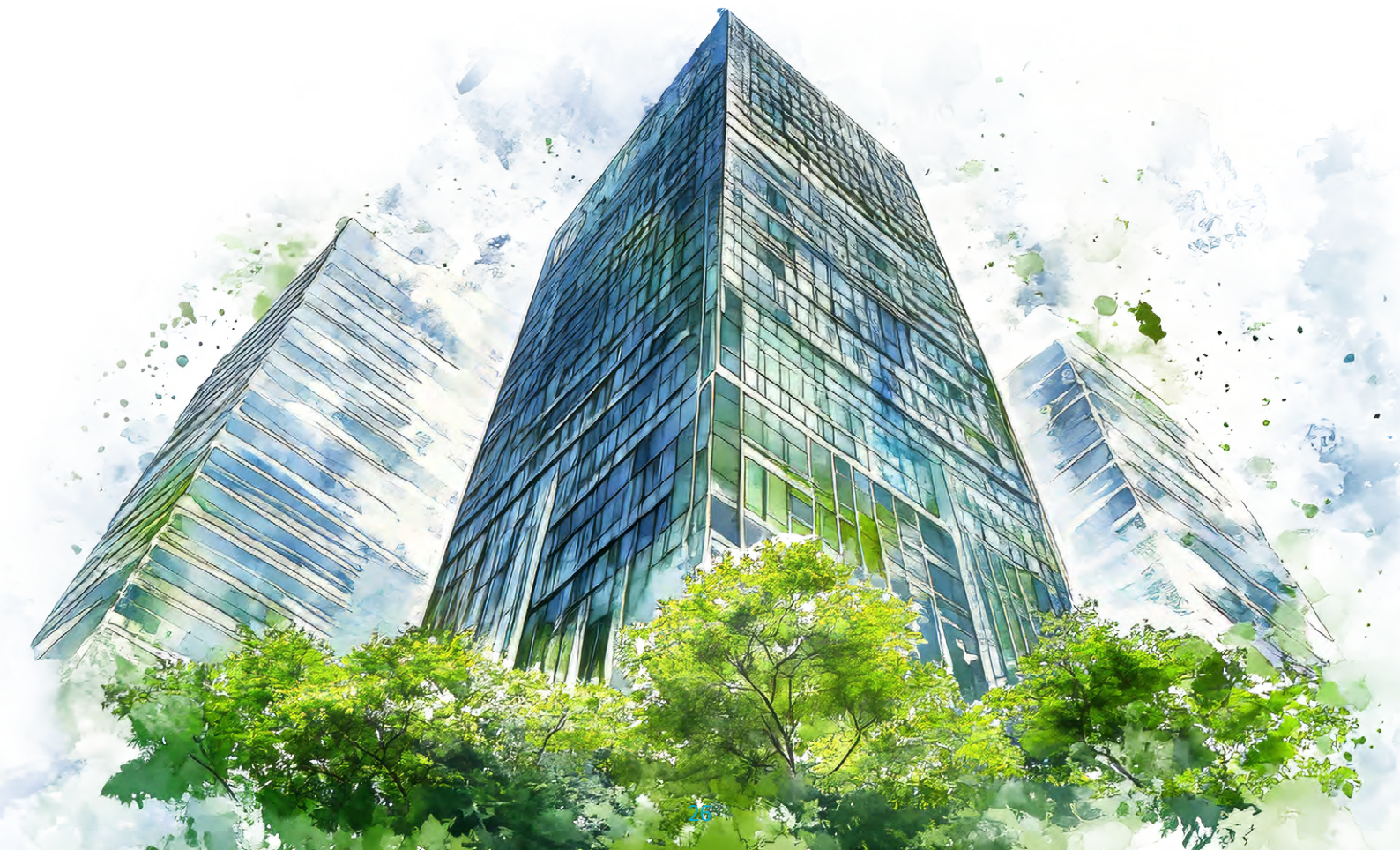
These risk categories include short-term risks such as energy regulations and carbon fees, which are expected to occur within one year. Other short-term risks, such as increased sustainability disclosure requirements, imposition of water conservation charges, and customer requirement for decarbonization, have already occurred. As global sustainability trends evolve and stakeholders increase their focus on environmental issues, carbon credit systems—still under development internationally—have been identified as a long-term risk. Different nature- and climate-related risks may pose varying levels of impact on sustainable operations. In response to sustainability trends, Nanya Technology has identified both transition risks and opportunities associated with nature- and climate-related impacts.

Risk Category	Risk Subcategory	Description	Climate Change Risk Factors	Financial Impact	Opportunity for Organization	Impact Scope	Time of Occurrence	Response Strategy
Regulatory risks	Imposition of carbon fees	✓ Imposition of carbon fees would increase operational costs of facilities. ✓ Suppliers' operational costs are passed on to Nanya Technology.	Carbon fee imposition and regulations on carbon inventory.	Operational costs. Procurement costs.	1. Carbon fee reduction. 2. Alignment with sustainability ratings. 3. Fulfillment of customer requirements.	Internal operations Upstream suppliers	Short-term	Production via green technology Supply chain management
	Rising water costs	✓ Imposition of water conservation charges would increase operational costs of facilities.	Imposition of water conservation charges.	Operational costs.	1. Reduction of expenditures on water conservation charges. 2. Alignment with sustainability ratings.	Internal operations	Short-term	Production via green technology
	Energy regulations	✓ Regulatory demand for obligatory capacity and installation of renewable energy equipment. ✓ Expense of renewable energy procurement.	Demand for energy conservation Stability of power supply.	Capital expenditure Procurement costs.	1. Carbon fee reduction. 2. Alignment with sustainability ratings. 3. Fulfillment of customer requirements.	Internal operations	Short-term	Production via green technology
Reputational risks	Carbon reduction targets	✓ To achieve Nanya Technology's near-term SBTs, additional investments in renewable energy and carbon reduction equipment is required.	Net-zero targets.	Corporate reputation Operational costs.	1. Carbon fee reduction. 2. Alignment with sustainability ratings. 3. Fulfillment of customer requirements.	Internal operations	Medium-term	Production via green technology
	Lack of collaboration across the industry chain and industry	✓ Insufficient emission reductions by suppliers would harm corporate image. ✓ Disruptions across the supply chain would increase operational costs. ✓ Lack of collaboration with industry peers would increase operational costs.	Collaboration across the industry chain.	Corporate reputation Operational costs.	1. Building a supply chain that is more resilient and with lower risk. 2. Working with industry peers to advocate for a reduction in audit costs.	Upstream suppliers	Medium-term	Supply chain management
	Insufficient climate awareness among stakeholders	✓ Lack of climate awareness may hinder the implementation of internal carbon pricing. ✓ The Company faces challenges with external communication.	Internal carbon pricing.	Increase in operational costs.	1. Build solid relationships with employees. 2. Build robust capability in corporate governance.	Internal operations	Long-term	Actions beyond the value chain

Risk Category	Risk Subcategory	Description	Climate Change Risk Factors	Financial Impact	Opportunity for Organization	Impact Scope	Time of Occurrence	Response Strategy
Reputational risks	Just transition	✓ The climate transition process impacts stakeholder rights and interests	Just transition	Operational costs	1. Strengthen focus on stakeholder rights and interests, and enhance communication	Internal operations Suppliers	Long-term	Just transition and cultivation of climate change awareness
Market risks	Demand for products/services that are low-carbon and use renewable energy	✓ Cost of investments in R&D ✓ Cost of renewable energy procurement ✓ Low-carbon products may lack competitiveness, or the market may not be mature yet	Market expansion for products Demand for product decarbonization	Increase in operational costs Reduced revenue	1. Develop market for low-carbon products 2. Build stronger relationships with customers	Internal operations Downstream customers	Short-term	R&D of low-carbon products
Technology risks	Electricity supply and management	✓ Instability in power supply requires investment in electricity-saving equipment and electricity management measures	Demand for energy conservation Stability of power supply	Capital expenditure Operational costs	1. Carbon fee reduction 2. Alignment with sustainability ratings 3. Fulfillment of customer requirements	Internal operations	Short-term	Production via green technology
	Investment in water reclamation systems	✓ Water shortages arising from climate change require installation of new water reclamation systems	Investment in water recycling systems	Capital expenditure Operational costs	1. Alignment with sustainability ratings 2. Reduction of expenditures on water conservation charges	Internal operations	Short-term	Production via green technology
	Stricter PFC emission reduction technologies	✓ Procuring new pollution control equipment aids in reaching PFC reduction targets and lowers carbon fee rates	Imposition of carbon fees	Capital expenditure Operational costs	1. Alignment with sustainability ratings 2. Market development for new technologies 3. Carbon fee rates reduction	Internal operations	Medium-term	Production via green technology
	Carbon credit issues	✓ New carbon credit regulations and related technological developments require further research	Carbon credit issues	Operational costs	1. Opportunities in carbon credit applications and carbon finance participation	Internal operations	Long-term	Actions beyond the value chain

Nanya Technology's Climate Change-Related Capital Expenditure (CapEx) and Operating Expenditure (OpEx) Plan for 2026–2027:

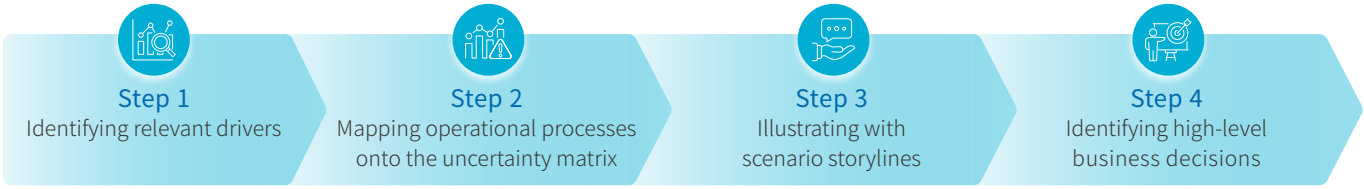
Item \ Year	2026	2027
Renewable Energy Investment (100 million)	5.0	14.6
Power Backup System (100 million)	3.3	13.9
Process Gas Reduction Equipment (100 million)	14.7	13.8
Enhancing Water Resource Resilience (100 million)	0.31	0.52



2-3 Nature and Climate Scenario Analysis

Nature Scenario Analysis (Storyline)

Nanya Technology continues to apply the nature scenario approach established in 2024, integrating it into organizational operations while strengthening the assessment of future changes in natural dependencies through scientific literature. In Chapter 2-1, key drivers were identified (Step 1), and the TNFD guidelines were used to build storylines within scenarios (Steps 2 and 3). Based on these storylines, future assumptions were used to analyze potential changes in risks related to Nanya Technology's natural dependencies and impacts (Step 4).



Integrating Climate Scenarios into Nature Scenarios

Building on the three scenarios established in 2024, a natural-related scenario analysis was conducted, as shown in the table below:

Scenario Description	SSP1-1.9 — Ahead of the Game	SSP1-1.9 — Back of the List	SSP3-7.0 — Sand in the Gears
Narrative Storyline	Countries work closely together while governments implement extensive regulations on climate mitigation and pollution reduction. As climate change gradually slows down, the rate of ecosystem degradation caused by climate change also decreases. In this scenario, companies face high transition risks but low physical risks.	Countries collaborate closely while governments invest substantial resources in climate mitigation but neglect regulations on pollution reduction. As climate change gradually slows down, the rate of ecosystem degradation caused by climate change also decreases. In this scenario, companies face high climate transition risks but lower non-climate transition risks. However, due to the slowed rate of ecosystem degradation caused by climate change, the physical risks faced by companies are also low.	The international system is fragmented due to trade barriers and the rise of nationalism. Although Taiwanese government implements regulations on climate mitigation and pollution reduction, the lack of international cooperation results in a global failure to curb climate change. Consequently, climate change intensifies, ecosystem functions gradually degrade, and natural disasters increase. Due to the failure of the global cooperative system, a large number of infrastructures lack the capacity to respond to extreme weather events, thereby increasing the physical risks faced by enterprises.

Based on the above narrative analyses, the potential transition and physical risks faced by enterprises under the three scenario storylines can be described to facilitate the analysis of Nanya Technology's risk profile changes under these scenarios.

Climate Scenarios		SSP1-1.9	SSP1-1.9	SSP3-7.0
Nature Scenarios		Ahead of the Game	Back of the List	Sand in the Gears
Transition risks	Climate change mitigation	Companies need to achieve Science-Based Targets (SBT), facing significant transition pressures related to climate change.	Companies need to achieve Science-Based Targets (SBT), facing significant transition pressures related to climate change.	Although global decoupling is gradually taking place, local regulations in Taiwan continue to move toward transition, so companies will still experience a slight increase in transition risk.
	Mitigation of other environmental issues	Stricter regulations on water resources and air pollution emissions require companies to take proactive measures.	Companies do not need to face stricter non-greenhouse gas emission reduction requirements.	Companies face tightened regulations on water resources and air pollution emissions, resulting in a slight increase in their transition risks.
Physical risks	Natural disasters	Climate change-induced disasters will not show significant changes, resulting in fewer issues that the company needs to address.	Climate change-induced disasters will not show significant changes, resulting in fewer issues that the company needs to address.	The accelerated pace of climate change leads to faster ecosystem degradation and an increase in natural disasters, requiring the company to allocate substantial resources for adapting to these natural hazards.
	Changes in material supply	Due to strong international cooperation, the material risks caused by trade barriers are also relatively low.	Due to strong international cooperation, the material risks caused by trade barriers are also relatively low.	Lack of international cooperation causes significant increases in material costs due to trade barriers.

Analysis of Risk Variations in Nanya Technology's Nature-related Dependencies and Impacts under Nature Scenarios

To enhance the scientific rigor of the nature scenarios, the Company referenced a paper published in 2024 in the journal *Science*: "Global trends and scenarios for terrestrial biodiversity and ecosystem services from 1900 to 2050" (Pereira et al., 2024). This study examines changes in various ecosystem services under different scenarios through 2050. The Company converted these findings into degrees of change relative to 2015, using them as a basis for assessing the rate of change for each type of natural risk.

Under the SSP3-7.0 "Sand in the Gears" scenario, intensified geopolitical tensions lead to increased global fragmentation. As a result, all risks related to overseas imports faced by Nanya Technology are exacerbated, making supply chain shortages and rising procurement costs for critical materials the most significant risks under SSP3-7.0. Under the SSP1-1.9 "Ahead of the Game" scenario, transition-related regulations increase, including those related to broader environmental issues beyond climate. Among these, risks associated with information disclosure requirements are expected to increase in the future. Under the SSP1-1.9 "Back of the List" scenario, only climate change-related risks continue to increase, while other non-climate transition risks remain consistent with those under the SSP3-7.0 scenario.

	Climate Scenarios	SSP1-1.9	SSP1-1.9	SSP3-7.0
	Nature Scenarios	Ahead of the Game	Back of the List	Sand in the Gears
Risk Types		Risk Variability		
Long-term physical risks	Seasonal water shortages	→	→	↗
	Extreme heat	↘	↘	↗↗
Immediate physical risks	Heavy rain and flooding	→	→	↗
	Shipping disruption	→	→	↗
	Outbreak of epidemic	→	→	↗
	Reduced air quality	↘	↘	↗↗
	Risk of debris flows	→	→	↗
Other physical risks	Poor water quality caused by typhoons	→	→	↗
	Shortages of supply chain	↘	↘	↗↗↗
Regulatory risks	Demand for information disclosure	↗↗↗	↗↗	↗
	Air pollution regulations	↗↗	→	↗
	Water pollution regulations	↗↗	→	↗
	Waste regulations	↗↗	→	↗
Reputational risks	Poor performance in sustainability ratings	↗↗	→	↗
	Odor	↗↗	→	↗
	Poor river water quality	↗↗	→	↗
	Procurement costs for key materials increase	→	→	↗↗↗
Technology risks	Emerging technologies and innovative R&D	↗↗	↗	↗
	Stricter emission control technology	↗↗	↗	↗

↘↘ Risk is significantly reduced
↘ Risk is slightly reduced
→ Risk remains at the same level
↗ Risk is slightly increased
↗↗ Risk is significantly increased
↗↗↗ Risk is increased very significantly

Financial Impact Analysis of Nature- and Climate-related Risks

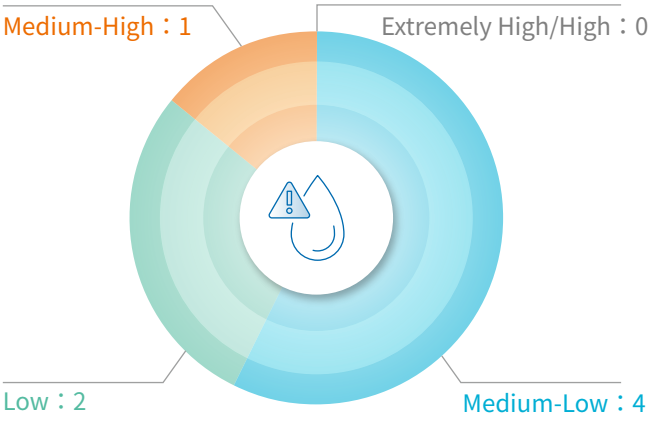
Nanya Technology referenced the World Energy Outlook (WEO) 2025 published by the International Energy Agency (IEA) and adopted the Net Zero Emissions by 2050 Scenario (NZE) to estimate future carbon prices and assess potential financial impacts. In addition, Nanya Technology examined its GHG reduction plans, and identified an approach that increases the use of low-carbon energy as the one with the greatest carbon reduction potential. By referencing Taiwan's Nationally Determined Contribution 3.0 (NDC 3.0) and SBT targets, the Company developed 3 scenarios assuming both national and international carbon reduction goals are to be achieved by 2030, and estimates the maximum financial impact associated with renewable energy procurement costs required to meet various carbon reduction targets. However, if we further compare the impact of the carbon tax (fee) with the impact of renewable energy, we can find that under the assumption of a high carbon tax (fee), early deployment of renewable energy and other low-carbon power use can create cost-saving benefits and relatively reduce the operational burden.

■ Scenario Analysis of Transition Risks in Nanya Technology's Operations

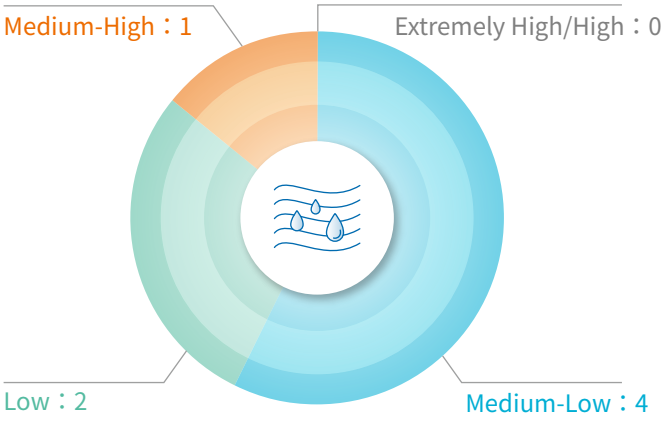
Financial Parameter	Scenario	2035 Cost Impact (NT$ million)	2040 Cost Impact (NT$ million)	Related Managemen Costs (NT$ million)	Assessment Methodology
Carbon pricing	NZE	1,261	1,532	460	Cost impacts were estimated based on IEA WEO 2025, NZE; with carbon prices ranging from US$90–140 per ton.
Use of low-carbon energy	Nationally Determined Target (NDC 3.0 Beta Version)	233	-	171	The Nationally Determined Target (NDC 3.0) aims to reduce GHG emissions by 38±2% from the 2020 baseline. The required proportion of clean energy investment is estimated to be 0.35% by 2035.
	SBT 2 °C target	799	1,132		The SBT 2 °C target aims to reduce GHG emissions by 25% from the 2020 baseline. The required proportion of clean energy investment is estimated to be 1.2% by 2035 and 1.7% by 2040.
	SBT 1.5 °C target	1,065	1,398		The SBT 1.5 °C target aims to reduce GHG emissions by 42.5% from the 2020 baseline. The required proportion of clean energy investment is estimated to be 1.6% by 2035 and 2.1% by 2040.

Nanya Technology uses the World Resources Institute (WRI)'s water risk assessment tool—Aqueduct 4.0—to analyze water-related risk indicators across its seven operating sites, including Taiwan (2), China (1), the United States (2), Germany (1), and Japan (1), in order to assess the impact of physical risks on each of its operating sites.

■ Integrated Water Resource Risk Analysis for Self-owned Operating Sites



■ Water Stress Analysis for Self-owned Operating Sites



■ Water Stress Levels Across Different Periods Under Various Climate Scenarios for Self-owned Operating Sites

Base Period	PES			BAU			OPT		
	Short-term	Medium-term	Long-term	Short-term	Medium-term	Long-term	Short-term	Medium-term	Long-term
Extremely High	0	0	0	0	0	0	0	0	0
High	0	0	0	0	0	0	0	0	0
Medium-High	2	2	2	1	1	1	2	2	2
Medium-Low	3	3	3	4	4	4	3	3	3
Low	2	2	2	2	2	2	2	2	2

Note: The three-time horizons are defined as follows: short term covers 2015–2045, medium term covers 2035–2065, and long term covers 2065–2085. The three scenarios are as follows: Pessimistic (PES) corresponds to the SSP5-RCP8.5 scenario, representing a high forcing pathway characterized by continued heavy reliance on fossil fuels. Business as Usual (BAU) corresponds to the SSP3-RCP7.0 scenario, assuming insufficient climate policy intervention and representing a medium-high forcing pathway. Optimistic (OPT) corresponds to the SSP1-RCP2.6 scenario, representing a low forcing pathway with global warming limited to below 2° C by the end of the century.



Among Nanya Technology's operating sites, only those in Taiwan are manufacturing facilities while all other sites serve business and service functions. Therefore, to understand the physical risks of climate change in Taiwan, Nanya Technology conducted an analysis based on future climate modeling data from the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP). Using climate data of scenarios from RCP2.6 to RCP8.5, the analysis evaluates operational risks for Nanya Technology's facilities and northern Taiwan's catchment areas during the mid-century period (2040–2060). Risks include the impacts of rising temperatures, increased rainfall, and longer dry spells (see Section 2.5 for adaptation measures in response to physical risks).

■ Scenario Analysis of Physical Risks

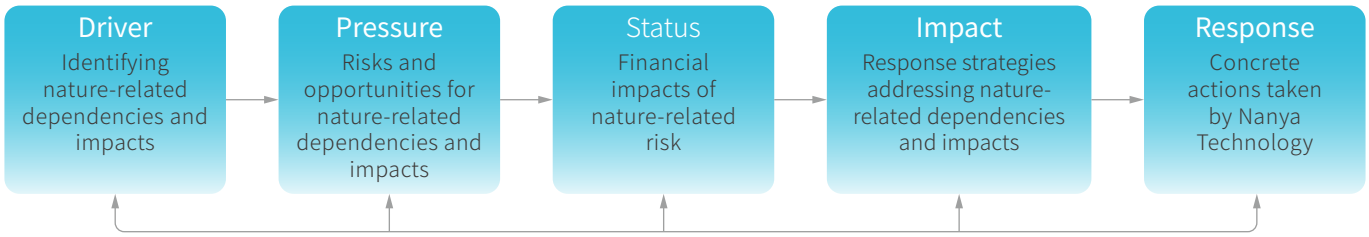
Scenario[1]	Mid-Century Risk	Potential Impacts (Including Financial Impacts)	Operational and Financial Impacts
RCP2.6	• Dry days increase by an average of 1.2 days • Dry season streamflow decreases by 6%	• Water shortages and restrictions impact operations	Our facilities currently have a comprehensive framework for water resource management and a contingency plan in place to address water restrictions.
	• Temperatures increase by an average of 1.2° C • Heatwave days increase by an average of 2.7 times	• Electricity used for air conditioning increases by 3% • Facilities and Taipower's grid experience increased strain	1. Increased electricity cost leads to an added cost of NT$29.3 million (<0.1% of revenue); an AI-controlled chilled water system has been installed to optimize air conditioning and conserve energy by up to 18%. 2. UPS systems and diesel generators have been installed to ensure normal production.
	• Maximum rainfall increases by an average of 15% • Days with heavy rainfall increase by an average of 0.09 days	• Occurrence of floods increases • Heavy rainfall causes delays in construction projects	1. Our facilities are located on higher ground, so heavy rainfall is unlikely to result in large-scale flooding that would affect operations or production. 2. Construction guidelines have been formulated for our facilities, and weather conditions are taken into account in schedules, so delays are unlikely.
RCP8.5	• Dry days increase by an average of 2 days • Dry season streamflow decreases by 4%	• Water shortages and restrictions impact operations	Our facilities currently have a comprehensive framework for water resource management and a contingency plan in place to address water restrictions.
	• Temperatures increase by an average of 1.9° C • Heatwave days increase by an average of 3.9 times	• Electricity used for air conditioning increases by 5% • Facilities and Taipower's grid experience increased strain	1. Increased electricity cost leads to an added cost of NT$29.9 million (<0.1% of revenue). 2. UPS systems and diesel generators have been installed to ensure normal production.
	• Maximum rainfall increases by an average of 19% • Days with heavy rainfall increase by an average of 0.12 days	• Occurrence of floods increases • Heavy rainfall causes delays in construction projects	1. Our facilities are located on higher ground, so heavy rainfall is unlikely to result in large-scale flooding that would affect operations or production. 2. Construction guidelines have been formulated for our facilities, and weather conditions are taken into account in schedules, so delays are unlikely.

Note1: RCP stands for "Representative Concentration Pathway." Identified by number, RCP represents distinct GHG concentration trajectories driven by different socioeconomic scenarios: RCP2.6 corresponds to a low emission mitigation scenario, while RCP8.5 represents a very high emission scenario.

2-4 Transition Actions

Nanya Technology applies the Driver-Pressure-Status-Impact-Response (DPSIR) framework to analyze the potential financial impacts of all identified material nature-related dependencies and impacts. Corresponding strategies are developed for each item and then translated into actions that implement nature-related transition.

Nanya Technology's strategy for mitigation and transition consists of R&D of low-carbon products in preparation for future opportunities in low-carbon markets; production via green technology; development in harmony with nature surrounding our facilities; and sustainable management of the value chain. Nanya Technology aims not only to drive its own transition, but also to guide the broader value chain toward a low-carbon, low-impact sustainability vision.



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Response Strategy	Strategy Description	Concrete Actions
R&D of low-carbon products	Nanya Technology has introduced Life Cycle Assessments (LCA) and Design for Environment principles to support the development of advanced, high-efficiency, and environmentally friendly products. These efforts help customers develop designs that consume less energy and generate lower environmental impact.	● Product contributions to nature and climate
Production via green technology	Our strategy to produce via green technology aims to transform the Company into a low-carbon, low-pollution, and resource-efficient green enterprise. Specific actions include water and energy management, climate change mitigation, pollution reduction, and development in harmony with nature. Water and energy management can effectively reduce unnecessary waste and improve operational efficiency. Climate change mitigation focuses on concrete actions to reduce Scope 1 and Scope 2 emissions, including direct abatement of PFC gases and long-term planning for renewable energy use. The reduction and management of pollutant emission emphasize active waste reduction and the adoption of stricter standards that go beyond regulatory demands. Since 2013, we have conducted continuous monitoring of the areas surrounding our facilities using scientific instruments to track changes in the ecosystem.	● Response actions to mitigate climate change ● Water resource management—water pollution reduction ● Air pollutant reduction ● Waste management
Actions beyond the value chain	Since 2013, Nanya Technology has conducted ongoing annual ecological monitoring surveys, gathering long-term data on species in the Nanlin Technology Park. By observing the number of dominant species, Nanya Technology assesses whether construction activities may have caused disturbances. As attention to biodiversity grows, Nanya Technology has broadened its focus of nature from flora and fauna to include ecosystem services. Nanya Technology not only uses monitoring data in our communication with stakeholders but also partners with Ming Chi University of Technology to investigate and inventory waste in surrounding watersheds. Together with our partner, we aim to develop nature sustainability policies and strategies that also benefit communities.	● Development in Harmony with Nature ● Beyond Value Chain Mitigation (BVCM) ● Community inclusion, and services to nature and culture
Sustainable management of value chain	To manage nature- and climate-related risks in the value chain, Nanya Technology requires suppliers to sign a "Supplier Corporate Social Responsibility Commitment" and undergo nature- and climate-related risk assessments. Nanya Technology distributed a survey on nature-related dependencies and impacts on significant suppliers.	● Identification of nature- and climate-related risks and opportunities in the supply chain ● Supply chain management ● Customer and investor engagement

Response Actions to Mitigate Climate Change

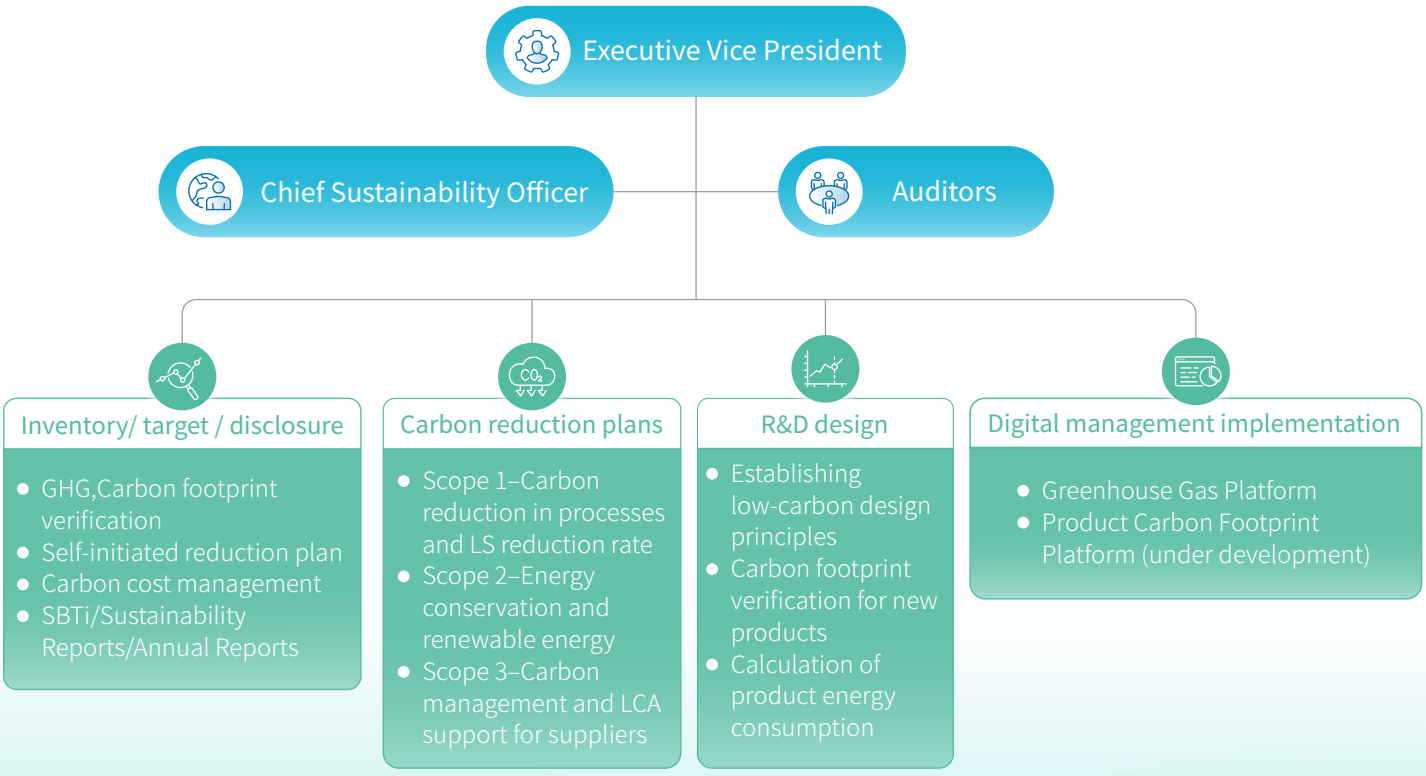
The complex challenges that have arisen from climate change require not only reducing GHG emissions but also many actions to address nature-related dependencies and impacts. Therefore, Nanya Technology has adopted a series of actions to meet these challenges. These actions include establishing a Climate and Carbon Reduction Task Force; conducting value chain GHG inventories and setting mitigation targets; advancing renewable energy strategies; implementing internal carbon pricing; executing energy management actions; enhancing resilience to energy transition risks; improving processes; and optimizing reduction-related equipment.

Climate and Carbon Reduction Taskforce

Nanya Technology's cross-departmental Climate and Carbon Reduction Task Force continues to integrate the Ministry of Environment's self-initiated carbon fee reduction plan and the Financial Supervisory Commission's annual reporting requirements into its management processes. Shifting from retrospective inventories to proactive advance planning, the task force focuses on inventorying, target setting, disclosure, carbon reduction initiatives, R&D design, and implementation of digital management. These efforts strengthen the Company's climate change adaptation and mitigation measures while integrating information from financial impact assessments. The highlights of the task force's work in 2025 include:

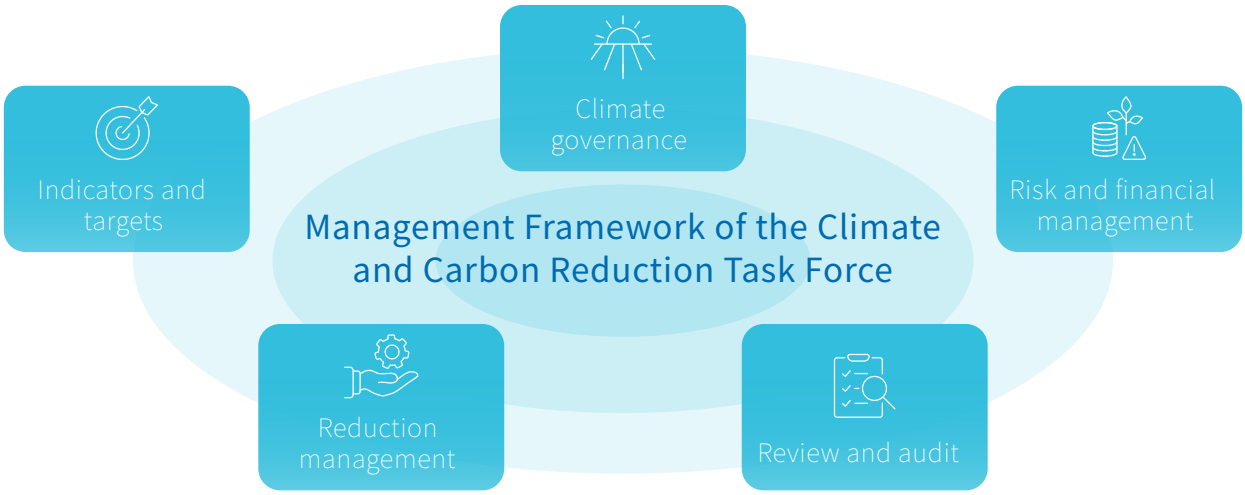
1. Developing a renewable energy roadmap for 2027–2030 in response to the self-initiated carbon fee reduction plan.
2. Developing a 2025–2030 reduction roadmap and strategy based on the Ministry of Environment's self-initiated carbon fee reduction plan under Technical Benchmark B and submit it for review.
3. Completing the development of a sustainable carbon management platform.
4. Adopting climate-related disclosures under the International Financial Reporting Standards S2 (IFRS S2) framework, integrating them with enterprise risk management (ERM), and conducting financial scenario analyses for various risks.
5. Holding monthly meetings to review GHG emissions and the roadmap for the self-initiated reduction plan.
6. Preparing for GHG inventories and verification for both parent and subsidiary companies as part of their 2025 consolidated financial statements.

■ Functions of the Climate and Carbon Reduction Task Force



The Climate and Carbon Reduction Task Force has adopted the ISO Management System—such as ISO 14001 and ISO 50001—the PDCA (Plan-Do-Check-Act) framework, and life cycle perspectives to keep improving environmental and energy management. Progress is regularly reported at the quarterly Sustainable Development Committee meetings. Disclosure is based on the International Financial Reporting Standards S2 industry-specific guidelines for semiconductors and includes identification of material nature- and climate-related risks for Nanya Technology's direct operations and supply chain. Based on ISO 14064 and ISO 14067 standards, Nanya Technology inventories organizational GHG emissions and produce carbon footprints. We continue to refine our methodologies for inventorying Scope 3 and product carbon footprint and to build our Sustainable Carbon Management Platform. We identify emission hotspots across Scopes 1, 2, and 3 as well as product carbon footprints. Reduction plans are formulated for all stages, beginning with R&D, to meet regulatory and initiative-based requirements.

■ Management Framework of the Climate and Carbon Reduction Task Force



GHG Inventory of the Value Chain and Formulation of Mitigation Targets

Nanya Technology conducts its GHG inventory with reference to ISO 14064-1, Ministry of Environment's Climate Change Response Act and Regulations on Greenhouse Gas Emissions Inventory, Greenhouse Gas Inspection Guidelines, Greenhouse Gas Registration Guidelines, and the WBCSD/WRI GHG Protocol. Organizational boundaries are defined using the 100% operational control approach. All Scope 1, Scope 2, and Scope 3 emissions are verified by a third-party certification body (SGS Taiwan Ltd.) in accordance with international standards.Potential risks arising from increased greenhouse gas emissions include higher operating costs and equipment replacement needs (Scope 1), rising electricity costs, and greater pressure to procure renewable energy (Scope 2), as well as impacts on customer collaboration and sustainability-linked loan interest rates (Scope 3). To mitigate climate transition risks and enhance operational resilience, Nanya Technology continues to promote energy conservation and carbon reduction initiatives, increase the use of renewable energy, and strengthen supply chain carbon management.

The inventory covers all of the Company's operational sites, representing 100% of the Company's revenue. The parent company's GHG emissions in 2025 amounted to 417,308t CO_2e. Scope 1 emissions were 51,088t CO_2e, with no emissions resulting from combustion of biomass fuel. Scope 2 emissions were 366,220t CO_2e.

The subsidiaries included in the consolidated financial statements reported GHG emissions of 88t CO_2e in 2025. Scope 1 emissions amounted to 17.2t CO_2e with no GHG emissions resulting from combustion of biomass fuel. Scope 2 emissions amounted to 70.8t CO_2e.

The GHG emission factors adopted by the parent company were based on those announced by Taiwan's Ministry of Environment in February 2024, as well as Taiwan's Energy Administration of the Ministry of Economic Affairs and Nan Ya Plastics' own emission factors for steam at their own facilities. Global Warming Potential (GWP) values were drawn from the IPCC Fifth Assessment Report. Compared to 2020, GHG emissions in 2025 decreased by 11.2% and the number of wafers produced decreased by approximately 22%. In terms of emissions per unit wafer, the 2025 emissions intensity was 0.89 kg CO_2e/ wafer area (cm^2), which is slightly higher than that of 2024, which was 0.88 kg CO_2e/wafer area (cm^2). In terms of emissions intensity per unit of wafer output, the 2025 GHG emissions per unit of production capacity were 381 (kg CO_2e/kpcs), representing a 9.1% decrease compared to 420 kg CO_2e/kpcs in 2020.

Note 1: GHG emissions per unit area of wafer output.

Note 2: This inventory was conducted in accordance with the Ministry of Environment's 2024 Greenhouse Gas Emissions Inventory Guidelines.

▪ Parent Company's Scope 1 and 2 Emissions from 2022 to 2025

		2022	2023	2024	2025
Scope 1 (tCO_2e)		59,788	56,654	39,063	51,088
Scope 2 (tCO_2e)	Location-based	385,177	385,700	386,774	403,575
	Market-based	381,166	373,670	370,075	366,220
Scope 1+2 (location-based emissions) (tCO_2e)		444,965	442,354	425,837	454,663
Scope 1+2 (market-based emissions) (tCO_2e)		440,954	430,324	409,138	417,308
Scope 3 (tCO_2e)		940,525	816,878	817,588	1,290,161

Note 1: There are 9 types of PFC emissions in total, including the process gases from carbon tetrafluoride (CF_4), perfluoro-propane (C_3F_8), hexafluoro-butadiene (C_4F_6), octafluorocyclobutane (C_4F_8), trifluoro-methane (CHF_3), difluoromethane (CH_2F_2), fluoromethane (CH3F), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3).

Note 2: Other direct emissions include process gases like CO_2, CH_4, N_2O, as well as HFCs and SF_6, which are used in non-process applications such as fire equipment, refrigerators, freezers, and high-voltage switchboards.

Note 3: Energy indirect emissions include electricity and steam consumption. The carbon emission factor for electricity is based on the Energy Administration of the Ministry of Economic Affairs' published value of 0.466 kg CO_2e/kWh, as of June 2, 2026.

Note 4: In accordance with the GHG Protocol Scope 2 Guidance (2015), GHG emissions are calculated and disclosed using both location-based and market-based methods respectively since we purchased renewable energy. In the above table, the location-based Scope 2 GHG emissions are calculated by multiplying the total electricity used in each area by the average emission factor for that area. On the other hand, market-based emissions are calculated by multiplying contracted renewable energy by their corresponding emission factors.

▪ Scope 1+2 Greenhouse Gas Emission Intensity

Scope	Emission Intensity	2022	2023	2024	2025
Scope 1	GHG emissions per unit of product area ($kgCO_2e$/wafer area(cm^2))	0.10	0.12	0.08	0.11
	GHG emissions per unit ($kgCO_2e$/kpcs)	55	57	40	47
	GHG emissions per unit of revenue ($kgCO_2e$/NT$ million)	1,050	1,895	1,145	767
Scope 2	GHG emissions per unit of product area ($kgCO_2e$/wafer area (cm^2))	0.65	0.78	0.80	0.78
	GHG emissions per unit of production capacity ($kgCO_2e$/kpcs)	350	373	376	335
	GHG emissions per unit of revenue ($kgCO_2e$/NT$ million)	6,693	12,501	10,843	5,499

To make value chain GHG inventories more comprehensive, Nanya Technology conducts Scope 3 inventories of other indirect GHG emissions under the Greenhouse Gas Protocol. Based on a materiality assessment results of Scope 3 emission sources, ten categories were selected for inventory. In 2025, total Scope 3 emissions amounted to 1,290,161 tCO_2e. The top three contributors were: emissions from the use of sold products (898,627 tCO_2e, 69.7%), emissions from purchased goods and services (240,753 tCO_2e, 18.7%), and emissions from fuel- and energy-related activities not included in Scope 1 or 2 (89,203 tCO_2e, 6.9%). Emissions from seven of the categories—namely purchased goods and services; fuel- and energy-related activities not included in Scope 1 or 2; upstream transportation and distribution; employee commuting; business travel; waste generated during operations; and use of sold products—were verified, totaling 1,235,284 tCO_2e, 96%. Innovation and R&D of products, along with supply chain management, will be the key to continuously reducing Scope 3 emissions. The Company is also actively collaborating with external experts to refine calculation methodologies and establish digital platforms to improve the quality of Scope 3 data.

■ Scope 3 Emissions in 2025

Scope 3 Category	Description of Calculation Basis or Exclusion	Scope 3 Emissions(tCO_2e)
Purchased goods and services*	Carbon emissions from purchased primary materials and auxiliary materials used in the production process[Note3]	240,753
Fuel- and energy-related activities not included in Scope 1 or 2*	Upstream GHG emissions from purchased fuels and energy, covering extraction through delivery (B2B)	89,203
Upstream transportation and distribution*	Carbon emissions from transport of main and auxiliary materials from suppliers and packaging plants to the Company's facilities, calculated by ton-kilometers	2,426
Downstream transportation and distribution	Carbon emissions from product delivery from the Company's facilities to its customers, calculated by ton-kilometer	3,386
Investment	Carbon emissions from the investment associate company, Formosa Advanced Technologies, calculated based on equity ownership	35,280
Employee commuting*	Carbon emissions from company shuttles and employee commuting	2,766
Business travel*	Emissions from international flights for business trips	60
Waste generated during operations*	Carbon emissions from waste generated during production, including transportation and treatment of waste	1,449
Use of sold products*	Carbon emissions from electricity consumed during customers' use of products	898,627
Capital equipment	Investments in purchased equipment and buildings	16,211
Total		1,290,161

Note 1: Those marked with * indicate verified items.

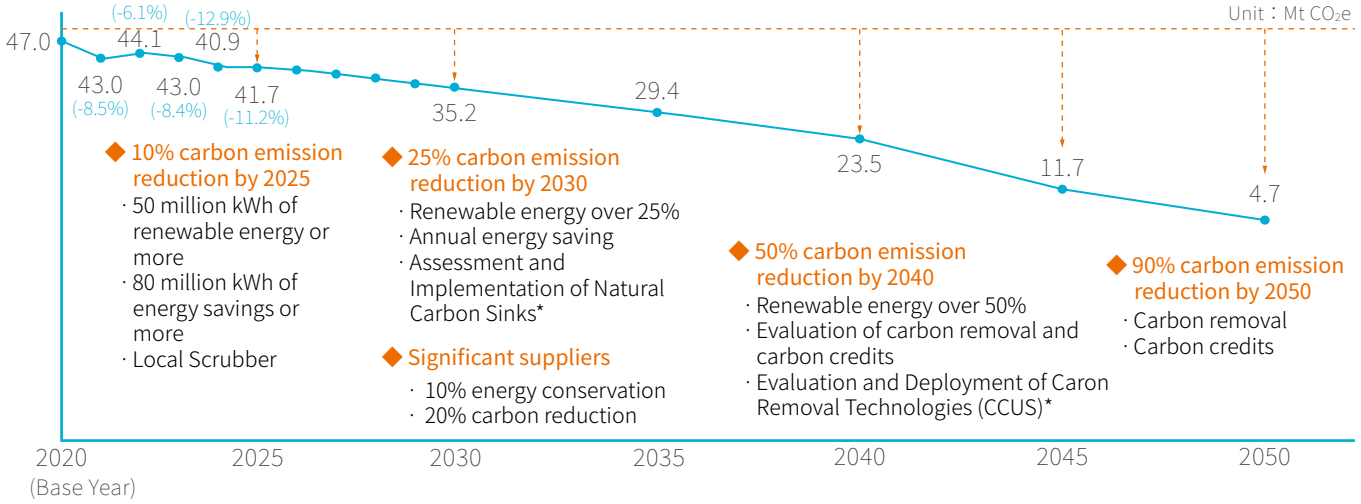
Note 2: The main emissions factor sources for each Scope 3 category are as follows: For purchased goods and services: SimaPro 9.4.0.2 database (IPCC 2021 GWP 100). For fuel- and energy-related activities, upstream and downstream transportation and distribution, employee commuting, operational waste, and use of sold products: Product Carbon Footprint Platform. For business travel: ICAO Carbon Emissions Calculator. For investments: GHG emissions allocated based on equity share in investees.

Note 3: The calculation methodology was revised by reclassifying emissions from outsourced packaging services, previously accounted for under "Processing of Sold Products," into the "Purchased Goods and Services" category.

Nanya Technology's near-term target is to align with the goals of the Paris Agreement, which are to limit global warming below 2°C and to pursue efforts to cap it at 1.5°C by the end of the century. The Company has formulated its climate strategy with reference to international reports, such as the IPCC Sixth Assessment Report (AR6) and the IEA World Energy Outlook (WEO). We have also adopted the net-zero guidelines of the Science Based Targets Initiative (SBTi).

Item	Base year (emissions)	Target year (emissions)	Total reduction rate
SBTi Pathway	2020 (470,000 tCO_2e)	2030 (353,000 tCO_2e)	25%
Net Zero Roadmap	2020 (470,000 tCO_2e)	2050 (47,000 tCO_2e)	90%

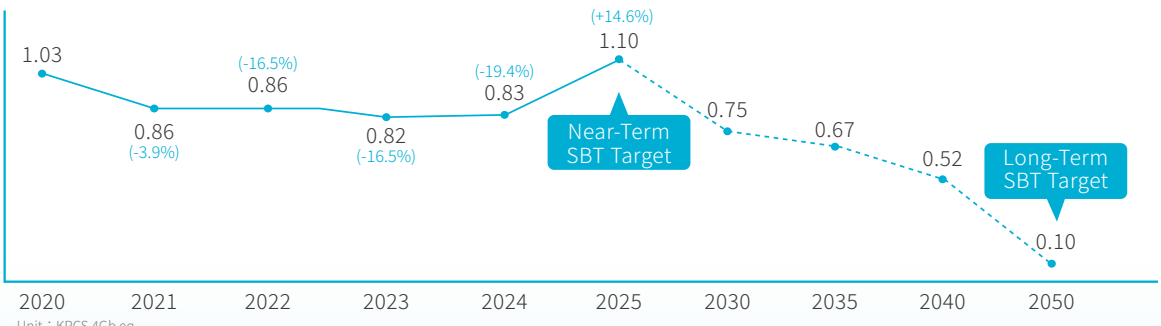
▪ Nanya Technology's Net Zero Roadmap—Scope 1 and 2



Note: Items marked with "*" in the figure are new additions for 2025.

▪ Nanya Technology's Net Zero Roadmap—Scope 3

Scope 3 emissions cover the product and supply chain, so the Company set the goal of low-carbon innovative products and invested in the research and development of 10nm-class products and process technology. In 2024, the Company will successfully complete the verification and mass production of the second-generation 10nm-class DRAM 8Gb DDR4 and 16Gb DDR5 products, and plan to launch the second-generation 10nm-class, more energy-saving and low-carbon LP 16Gb DDR4 and LP 16Gb DDR5 products in 2025. Currently, we are simultaneously developing third and fourth generation 10nm processes and products to provide more efficient and lower power consumption DRAM products. In supply chain management, we continue to work with supplier partners, setting targets of a 20% reduction in carbon emissions and a 10% reduction in energy consumption by 2030 compared to 2020. At the same time, Nanya Technology continues to prioritize uninterrupted operations and zero workplace injuries, strengthening facility infrastructure to enhance resilience to natural disasters, and setting adaptation targets accordingly. We also actively participate in DJBIC, CDP, Climate Advocacy and Education programs to raise the visibility of climate issues and meet stakeholder expectations.



- Counseling significant suppliers inventory GHG and product carbon footprint
- Comprehensive inspection scope 3 and passed the verification
- Develop high-efficiency and low-energy consumption products
- Green logistics

- 50% significant suppliers engagement
  - Energy saving target:10%
  - Carbon reduction:20%
- Counseling significant suppliers on GHG reduction
- Third generation 10nm products reached standards for shipment and develop Furth generation 10nm product

- 100% significant suppliers engagement
  - Energy saving target:10%
  - Carbon reduction:20%
- EUV and HKMG technology introduction
- Increased proportion of sustainable materials

- Carbon removal
- Carbon credits

Nanya Technology continues to advance toward net zero by strengthening the effectiveness of five key strategies: development of low-carbon products, production via green technology, supply chain management, development in harmony with nature, and awareness building and communication. The Company is also evaluating feasible alternatives for process-related greenhouse gases, increasing both the share and diversity of renewable energy (e.g., offshore wind power Phase 3-3, small-scale hydropower), and implemented an internal carbon pricing mechanism in 2022. In addition, a digital carbon management platform has been established, along with a cross-departmental Climate and Carbon Reduction Task Force. By 2050, we aim to achieve a 90% reduction in GHG emissions (compared to the base year). In alignment with the Beyond Value Chain Mitigation (BVCM) mechanism of the Science Based Targets Initiative (SBTi) and the ISO 14068-1 carbon neutrality standards,the Company will assess the feasibility of implementing carbon removal technologies (CCUS) and nature-based solutions projects to address the reduction of the remaining 10% of emissions, with the long-term goal of achieving net zero by 2050.

Internal Carbon Pricing

Based on the identified interlinkages among nature, climate, and financial performance, and drawing from the three aforementioned nature and climate scenario models, we conducted an impact assessment on future business operations and financial outcomes. The analysis indicates that under Taiwan's carbon fee scenario, potential costs could amount to 1.2% of annual revenue, while scenarios aligned with the World Energy Outlook for 2° C and 1.5° C pathways could lead to revenue impacts of approximately 4.9% to 5.1% (for more details, please refer to Section 2-3 of this report for details). As carbon pricing emerges as a key differentiating factor, we have formulated corresponding response strategies and targets (for more details, please refer to Sections 2-1 and 2-2), and integrated carbon management costs into our internal profit and loss tracking systems.

Furthermore, as countries progressively implement carbon taxes or carbon fees to accelerate the transition toward net-zero emissions, corporate carbon emissions are becoming monetized and subject to explicit pricing.

Nanya Technology has implemented the internal carbon pricing mechanism since 2022 with reference to information published by the World Bank and the International Energy Agency. The Company adopts the shadow pricing approach and establishes the internal carbon price based on the historical investment costs of carbon reduction projects. The internal carbon price is set at NT$100 per metric ton of greenhouse gas emissions (Scope 1 and Scope 2), with the aim of enhancing employees' awareness of carbon reduction and achieving energy conservation and carbon reduction goals. In 2025, carbon emissions totaled 417,308 metric tons of CO_2e. The carbon emissions cost for the year was NT$41,730,800, representing 0.06% of revenue. This pricing serves as the calculation basis for Nanya Technology's internal carbon pricing and is applied across 100% of its operational sites. The relevant management practices are outlined as follows:

1. Establishing management guidelines and tracking mechanisms

In line with its Sustainable Development Policy, Nanya Technology is committed to advancing environmental sustainability, green manufacturing, and a green supply chain. The Company has set a target to reduce Scope 1 and Scope 2 GHG emissions by 25% in 2030 compared to its 2020 baseline, and to reduce Scope 3 product unit emissions by 27% over the same period. Internal carbon pricing has been adopted to accelerate the Company's net zero transition, supported by clearly stipulated management regulations for the carbon pricing system. Carbon emission costs are compiled monthly and quarterly into GHG carbon cost reports for monitoring and control. Any anomaly (e.g., a shift from profit to loss after inclusion of carbon emission costs, carbon costs exceeding 10% of total costs, or excessive carbon emissions) will be escalated and explained in time through the internal management platform before the 25th of the month for further decisions and adjustments.

2. Continuing advancement of low-carbon transformation projects

Apart from management measures, two response strategies have been established for the production side: low-carbon products and production via green technology. In 2025, implemented projects include product life cycle assessments to identify carbon emission sources and seek transformation opportunities, and the completion of 30 energy-saving initiatives through the ISO 50001 management system, achieving a total energy saving of 4,695 MWh/year. In addition, the proportion of renewable energy increased to 10% in 2025 (for more details, please refer to Sections 2-4 and 2-5 of this report).

3. Evaluation of operational investment transformation

Nanya Technology applies the internal carbon pricing mechanism to all operational investment evaluations and leads related corporations for low-carbon transitions. Take Formosa Advanced Technologies for example, this is a corporation which Nanya Technology holds a 32% ownership stake. We referenced Formosa Advanced Technologies' low-carbon transition scenario—specifically the 2030 electricity cost projection—2024 Sustainability Report: Transition Analysis – Energy Cost and assessed their potential impacts on Nanya Technology by conducting a stress test on increased investment costs

Scenario	Increase in Investment Cost (%)
Taiwan Net-Zero Transition	3.87-4.39
Taiwan Net-Zero Transition+WB2°C	4.15-4.70
Taiwan Net-Zero Transition+WB1.5°C	4.34-4.92

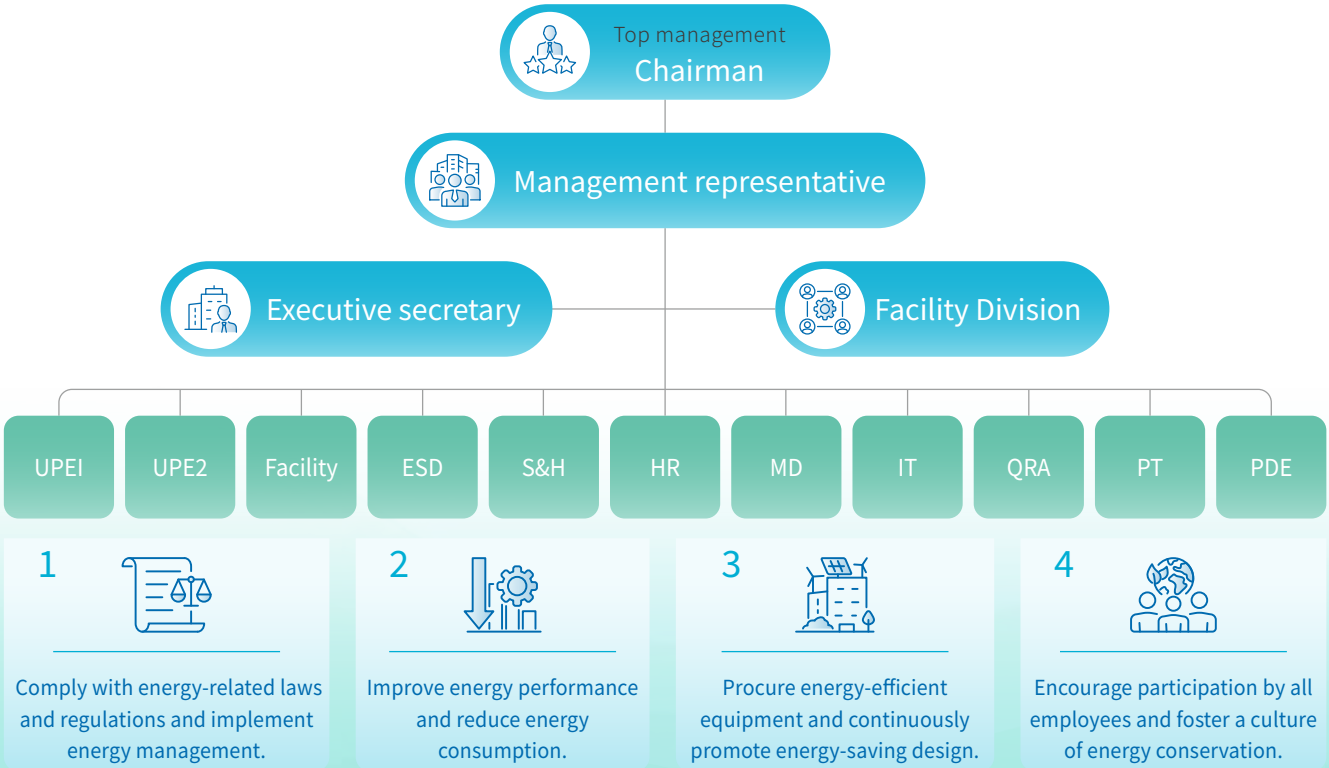
4. Value chain engagement (reduction of value chain emissions)

Given that energy consumption during the use phase of electronic products is one of the most significant indicators of environmental impact, Nanya Technology incorporates considerations for the environmental impact throughout the entire product life cycle into new product development. The Company continues to invest in innovation across three areas: manufacturing process shrinkage, product specification enhancement, and 3D stacked technology development. These efforts help customers reduce energy consumption while they are using electronic products. In 2025, Nanya Technology helped customers save over 1.20485 billion kWh of electricity and reduce GHG emissions by 571,101 tons of CO_2e (for more details, please refer to Section 3-3 of this report).
Within the supply chain, Nanya Technology has not only established its own net-zero transition pathway, but also promotes supplier engagement in net-zero initiatives through training, seminars, and guidance programs every year (for more details, please refer to Sections 3-2 and 3-4 of this report).

Energy Management Actions

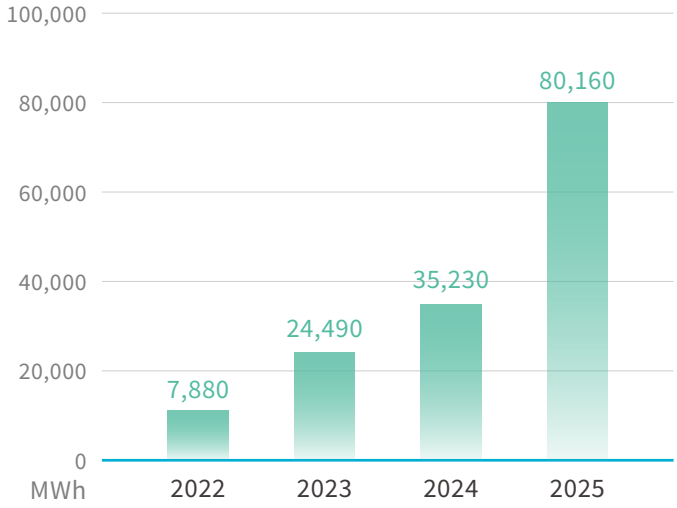
Nanya Technology adopted the ISO 50001 Energy Management System in 2018 and obtained certification. In 2020, the Company completed the establishment of our energy management platform. The establishment of the Energy Consumption Real-Time Monitoring Platform allows various systems to conduct statistical analysis and smart energy conservation. In accordance with the ISO 50001 standard, the Company has established an energy management system as illustrated below. An Energy Management Committee has been formed with the President serving as the Director, representing the highest management level. The committee is responsible for approving the Company's energy policy and commitments, as well as reviewing the Company's energy performance indicators. A management representative has also been appointed to oversee the establishment, implementation, and operation of the energy management system; report energy management system performance to the highest level management; review the setting of energy management objectives and targets; and approve action plans.

The Company's energy management policy is drafted by the management representative and approved by the President before it is officially announced and publicly disclosed on the Company website. Energy management performance is achieved through relevant energy review results; compliance with laws, regulations, and other requirements; consideration of internal and external issues; consideration of stakeholder expectations and requirements; establishment of energy management objectives, targets, energy baselines, and energy performance indicators; and execution of action plans. Nanya Technology's energy management policy:



To align with international initiatives such as SBT and RE100, connect with global standards, and implement net-zero practices, the Company utilizes the ISO 50001 Energy Management System to effectively manage its energy use and consumption, identify major energy uses and energy-saving opportunities, implement controls, and establish quantitative improvement targets to achieve energy-saving benefits. Monthly meetings are held to review energy assessments, implement energy-saving plans based on results, and report implementation outcomes and approve future targets during the annual senior management review meeting.

■ 2022–2025 Renewable Energy Usage



In addition, through external collaboration, the Company works with renewable energy providers to procure renewable energy and gradually increase usage year by year. The target for renewable energy usage by 2030 is to reach 25% of total electricity consumption. Nanya Technology will further pursue wheeling agreements for large-scale renewable energy projects and move toward achieving 100% renewable energy usage.

The primary energy sources used by Nanya Technology are purchased electricity, steam, and natural gas. In 2025, the energy mix was: purchased electricity 89.7%, natural gas 6.4%, and steam 3.9%. Total energy consumption (electricity + natural gas + steam) in 2025 reached 948,165 MWh (3.41×10^9 MJ), including 868,005 MWh (3.13×10^9 MJ) of non-renewable energy and 80,160 MWh (2.89×10^8 MJ) of renewable energy. Electricity consumption was 850,366 MWh (3.06×10^9 MJ), comprising 80,160 MWh (2.89×10^8 MJ) of purchased renewable energy and 770,206 MWh (2.77×10^9 MJ) of non-renewable energy. Natural gas consumption was 60,644 MWh (2.18×10^8 MJ, 5,794,914 m^3), and steam consumption was 37,155 MWh (1.34×10^8 MJ, 49,122 metric tons). In terms of energy intensity, energy consumption per unit of production capacity in 2025 was 0.87 MWh/kpcs, a 4.8% decrease from 2024.

From the outset of new product development, Nanya Technology keeps the environmental impact in mind throughout the entire product lifecycle. For electronic products, energy consumption during the usage phase is one of the most significant indicators of environmental impact. Nanya Technology actively develops energy-efficient products to help customers lower energy consumption when using electronic products, thereby reducing GHG emissions. Based on total sales volume in 2025, mainstream process products (low-power DRAM products and 20nm consumer DRAM products) achieved electricity savings exceeding 1.20485 billion kWh ($4,337 \times 10^{12}$ MJ). Calculation baseline: comparison of power consumption between current-year mainstream process products and previous-generation products. Calculation method: the total annual sum of power consumption differences between all products sold in the current year and their previous-generation equivalents.

Through supplier self-assessment questionnaires, the Company collects data on suppliers' energy management practices, including annual energy consumption and renewable energy usage. A total of 85 valid responses were received from raw material manufacturers and specialized equipment suppliers. In 2025, total energy consumption among these suppliers reached 6,044,602 MWh (2.176×10^{10} MJ), with renewable energy usage totaling 585,299 MWh (2.107×10^9 MJ).



Nanya Technology's energy conservation targets are as follows

2017-2030 Period

- Nanya Technology's energy-saving target for 2030 is a cumulative energy savings of 103,000 MWh/year from 2017 to 2030.

FY2025

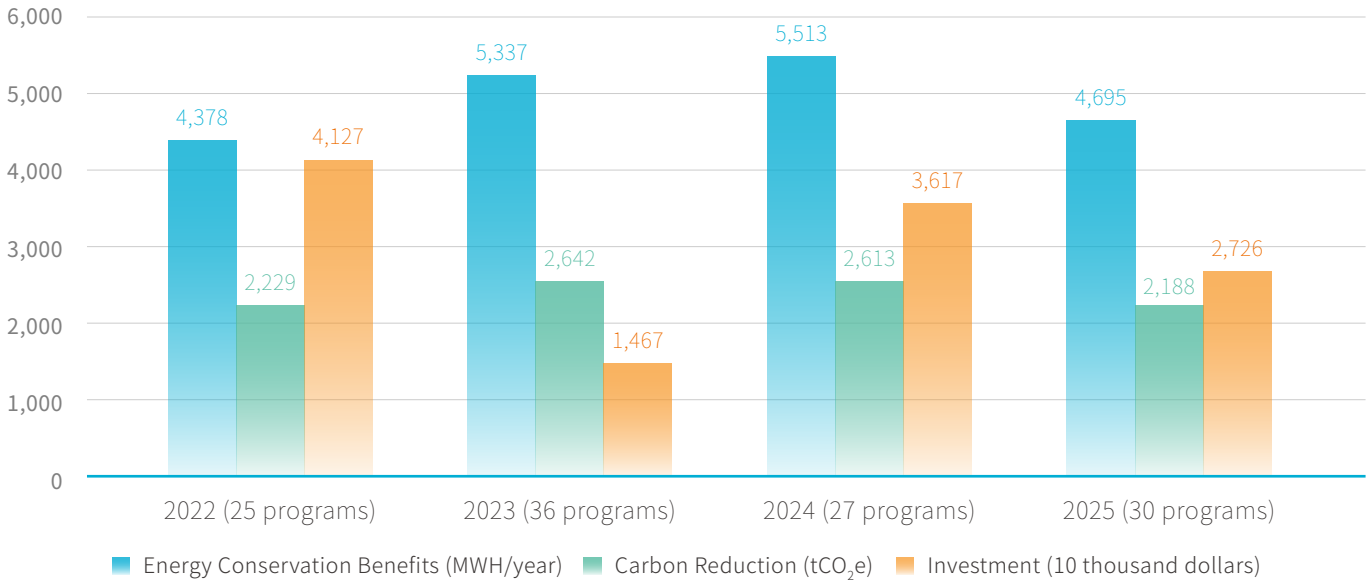
- In 2025, NT$27.26 million was invested in 30 energy-saving projects, generating a total energy-saving benefit of 4,695 MWh/year (1.985 x 10^7 MJ/year).

FY2026

- For 2026, the Company plans to implement 28 projects (25 new and 3 continuing), with an estimated savings of 4,637 MWh/year (1.188 x 10^7 MJ/year).



■ List of Energy Conservation Programs and Benefits





■ Energy Conservation Programs Completed in 2025

10 programs Energy conservation from process equipment management

(Reduced equipment energy consumption by shortening testing time and CMP time for wafers.)
Type of Energy Saving：Electricity
Reduction Location：Equipment
Calculation Method：
1. Difference in actual measured energy consumption before and after improvement.
2. Rated energy consumption x difference in operating hours.

5 programs Improvements and energy conservation management for lighting

(Installation of recessed LED lighting in yellow light areas; replacement of PCW room lighting fixtures with energy-efficient lighting)
Type of Energy Saving：Electricity
Reduction Location：Lighting
Calculation Method：
Rated energy consumption of lighting x difference in operating hours.

10 programs Energy conservation from non-process equipment management/improvement

(Nighttime load reduction of air handling units; load reduction of CUB building exhaust fans)
Type of Energy Saving：Electricity
Reduction Location：Equipment
Calculation Method：
1. Difference in actual measured energy consumption before and after improvement.
2. Rated energy consumption x difference in operating hours.

3 programs Improvements to process equipment

(Variable-frequency chiller energy savings; DAS scrubber energy-saving mode to reduce circulation motor electricity consumption)
Type of Energy Saving：Electricity
Reduction Location：Equipment
Calculation Method：
1. Difference in actual measured energy consumption before and after improvement.
2. Rated energy consumption x difference in operating hours.

Energy savings: 4,695 MWh/year
(1.69 x 10^7 MJ/year)
Carbon reduction: 2,188 tCO_2e

1 program Energy conservation for CDA equipment

(PCDA dryer upgraded from heatless type to heated type to reduce CDA consumption)
Type of Energy Saving：Electricity
Reduction Location：CDA dryers
Calculation Method：
Difference in actual measured energy consumption before and after improvement.

1 program Energy conservation for chillers

(Refrigerant purification of chillers to reduce contaminant adhesion on pipelines and improve heat exchange efficiency)
Type of Energy Saving：Electricity
Reduction Location：Chillers
Calculation Method：
Difference in actual measured energy consumption before and after improvement.



Enhanced Resilience to Energy Transition Risks

In recent years, due to industrial development and changes in the power supply structure, grid pressure has significantly increased. When reserve capacity is insufficient, there may be risks of voltage sags, power rationing, or blackouts. Even minor power fluctuations can disrupt the precision operations of semiconductor processes. To ensure yield and production line stability, Nanya Technology has prepared contingency plans, including:

1. 18 emergency generators and 26 DUPS systems have been installed at our facility; and are capable of supplying approximately 60% of the required power during shortages.
2. All equipment in the facility must comply with SEMI-F47 standards to reduce sensitivity to voltage sags and minimize power tripping incidents.
3. Our facility uses a dual-circuit power supply design to reduce the risk of single-circuit failures. Regular maintenance and testing are conducted to ensure stable power quality throughout the facility.
4. Custom energy-saving plans are implemented to reduce overall electricity consumption.
5. When the power supply is limited, non-production equipment undergoes load shedding to reduce power consumption.
6. Emergency drills are regularly scheduled based on recent power supply issues to enable prompt response during disruptions.
7. Government and Taipower's power development plans as well as stable power supply measures are regularly tracked to assess and respond to potential risks in a timely manner.

Process Improvements

Through new process formulations, reduced process times, and extended usage cycles, material consumption for processes was reduced. From 2023 to 2025, a total of 87 improvement projects were completed, cutting the use of chemicals, photoresists, and slurries by 1,246 metric tons, saving NT$204,074,000.

Year of Process Improvement	2023	2024	2025	合計
Completed	35	20	32	87
Annual reduction (ton)	691	170	385	1,246
Annual benefit (NT$ thousand)	102,411	33,226	68,437	204,074

▪ Key Areas of Focus in Process Improvements

2023

Recovered triethanolamine from single-wafer cleaning tools was reused, reducing chemical use per wafer from 2.4 L to 0.13 L, reducing consumption by 296 metric tons annually.

2024

In the CMP area, process parameter optimization and volume reduction improved slurry usage efficiency, reducing consumption by 135 metric tons annually.

2025

In the PH area, the dry-free suck back (DFS) function was implemented. By adjusting the photoresist nozzle cleaning formulation, the cleaning cycle was gradually extended from 1 hour to 24 hours. This effectively improved photoresist utilization efficiency, reducing photoresist consumption by approximately 34 liters per month, representing the most significant benefit.

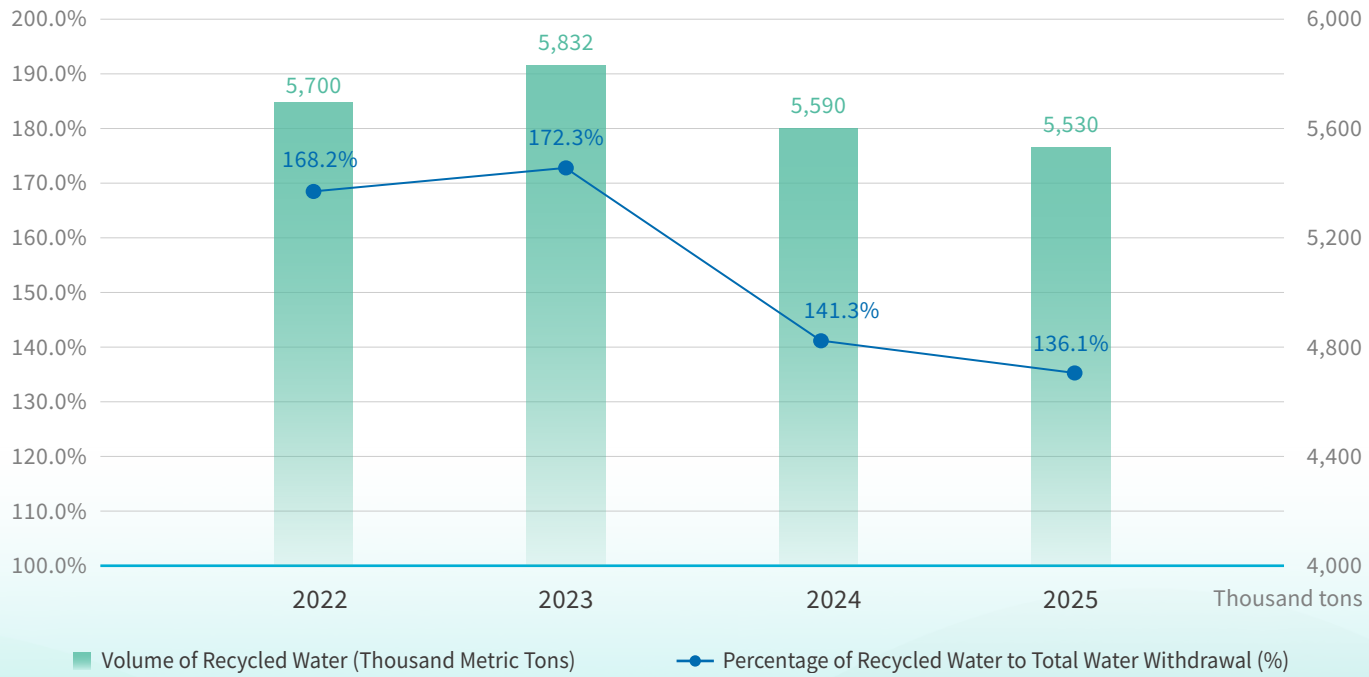
Water Resource Management Actions

In addition to designing water-saving processes, Nanya Technology prioritizes water usage reduction, recycling, and reuse in its water management. Acid-alkaline wastewater, hydrofluoric wastewater, and organic wastewater recycling systems have been installed at our facilities, and we have implemented a range of water conservation measures, with recovery rate steadily increasing year over year. Nanya Technology was given the highest-level A List rating on the CDP Water Security Questionnaire for two consecutive years (2022–2023). In addition, the Company was honored with the TCSA Water Resource Management Leadership Award for three consecutive years from 2022 to 2024. In 2023, the Alliance for Water Stewardship (AWS) Standard was introduced. This standardized framework was used to review water management practices through stakeholder engagement, evaluating water governance, water balance, water quality, and relevant water-related areas to understand water use, drainage basin conditions, and associated risks. The Company formulated and advanced water management and protection measures based on these findings. In the same year, the Company successfully obtained the highest AWS certification level: Platinum. For ongoing improvement of water usage efficiency and water recovery volume, we aim to elevate our production processes and equipment. In 2025, a total of 4 water conservation improvement projects have been completed, saving a total of 8,702 metric tons of water annually.

▪ Projects to Improve Water Resource Management in 2025

Item	Project Description	Water Conservation Effectiveness (Metric Ton/Year)
1	Gas & Chemical Department—water conservation improvements for empty barrel cleaning machines	456
2	CMP empty barrel cleaning tank parameters optimized for water conservation management	376
3	Adjustment of DAS local scrubber water replacement frequency	5,796
4	Reduction in water usage of backup scrubbers through Edwards scrubbers	2,074

▪ Amount of Water Recycled from 2022 to 2025

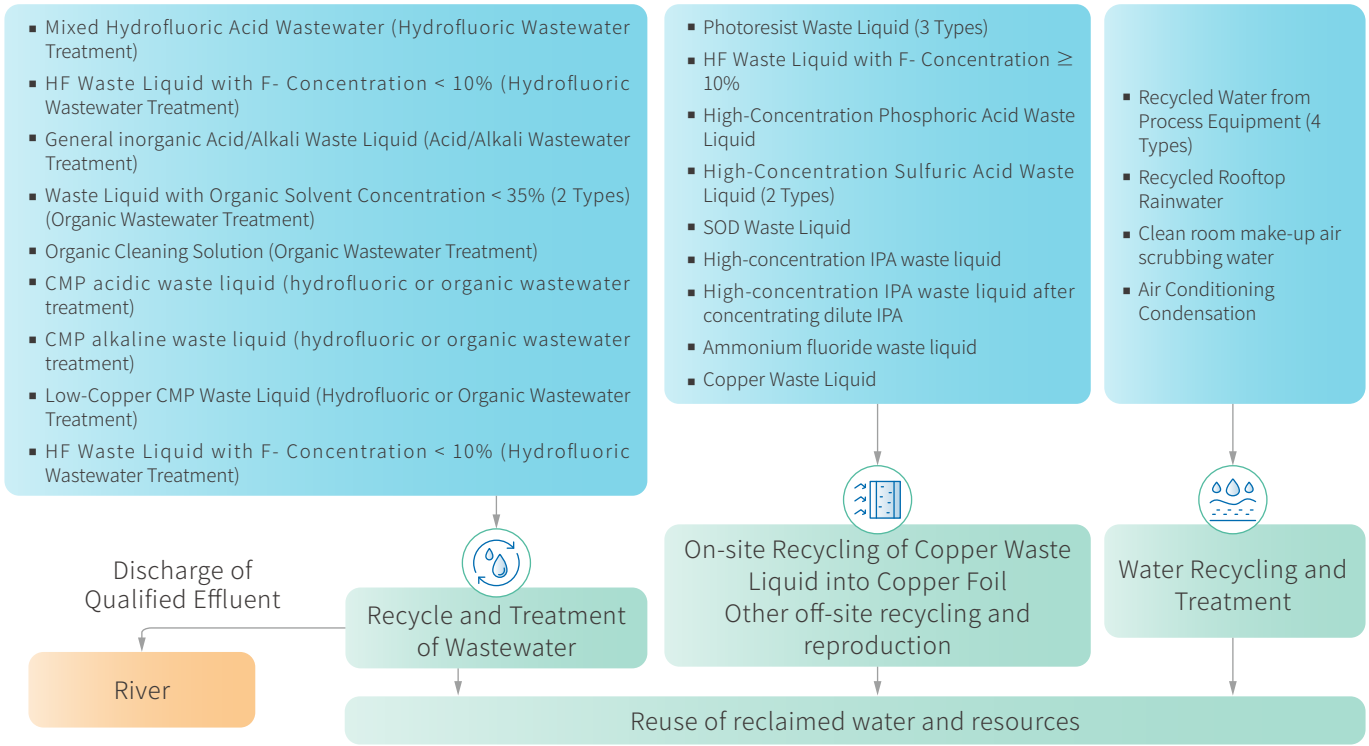


Performance of Water Pollution Reduction Measures

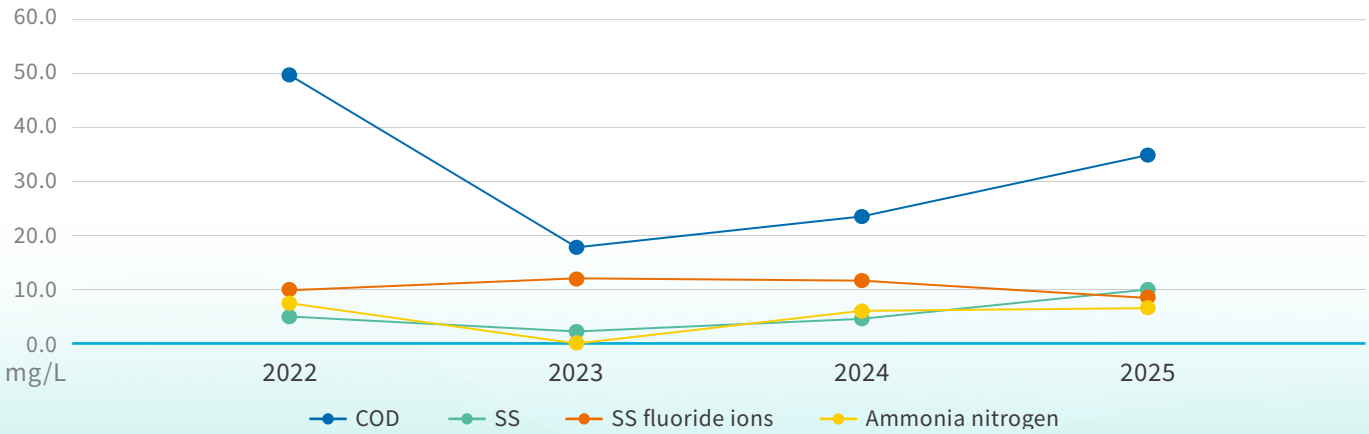
Based on the composition and concentration of process wastewater, Nanya Technology has established 28 separate drainage systems for subsequent treatment, recycling, and reuse. To ensure discharge quality meets standards, effluent is monitored in real time in coordination with the Environmental Protection Department, and monthly sampling and testing are conducted by third parties to enhance wastewater quality control. The Company has had zero discharge violations over the years.

To reduce wastewater discharge and improve the quality of treated effluent, Nanya Technology has continued to build recycling systems and expand wastewater treatment capacity in recent years. In response to high COD and total nitrogen levels in hydrofluoric acid wastewater from equipment, the Company invested NT$430 million to construct a new COD and total nitrogen treatment system. Officially launched in 2023, the system uses biological treatment combined with a membrane bioreactor (MBR). Following implementation, the COD level in treated effluent dropped from 50 mg/L to 20 mg/L, enhancing effluent quality and treatment performance, and reducing annual water pollution control fees by approximately NT$1 million.

▪ Sorting and Processing 28 Types of Wastewater



▪ 2022–2025 Effluent Water Quality Test Results

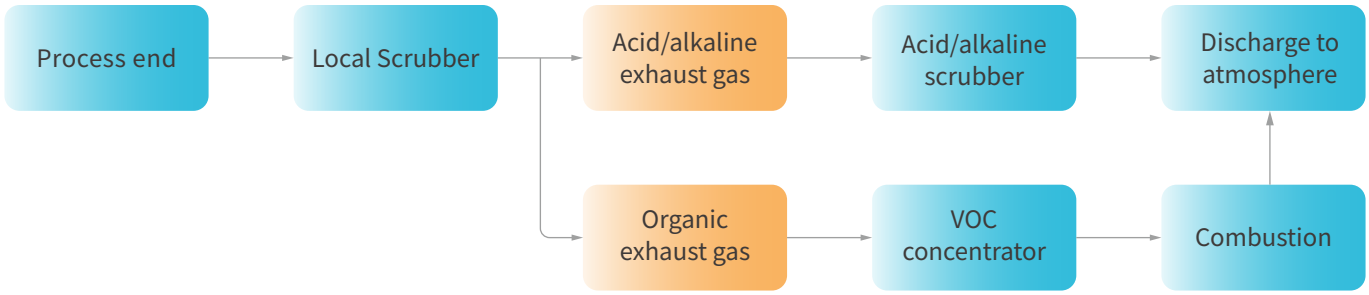


Performance of Air Pollutant Reduction Measures

Since the establishment of its facilities, Nanya Technology has placed great emphasis on pollution prevention. In addition to implementing environmental management plans to effectively reduce raw material consumption and lower the concentration of exhaust emissions, Nanya Technology uses air pollution control equipment that meets regulatory standards. These include local scrubbers (high-removal rate process exhaust treatment systems), acid/alkaline exhaust gas scrubbers, volatile organic compound (VOC) zeolite rotor concentrators, and afterburners. Testing has confirmed that pollutant emissions have consistently complied with, or been lower than, the limits set by government environmental regulations. The Company does not emit ozone-depleting substances (ODS). To maintain the optimal performance of treatment equipment, each unit undergoes regular maintenance and inspection. Operators receive thorough training to ensure the systems function properly and that emissions do not pose a threat to the surrounding environment.

The primary air pollutants generated by Nanya Technology include acidic, alkaline, and organic exhaust gases. Since trichloroethylene is not used as a raw material, no hazardous air pollutants (HAPs) are emitted. Based on the characteristics of each exhaust type, appropriate treatment processes and equipment are used. After being generated at the process level, emissions pass through local scrubbers to remove specific substances. Acidic and alkaline gases are routed to respective scrubbing towers before being discharged into the atmosphere. Organic exhaust is adsorbed by a zeolite rotor, concentrated, and then destroyed in afterburners, with combustion efficiency reaching 99%, well above regulatory standards. The overall VOCs (volatile organic compound) reduction rate is maintained at above 90% to meet regulatory requirements. In 2025, the VOCs emission intensity per unit of production capacity was 13.4 g VOCs/kpcs 4Gb eq.

▪ Waste Treatment Flowchart



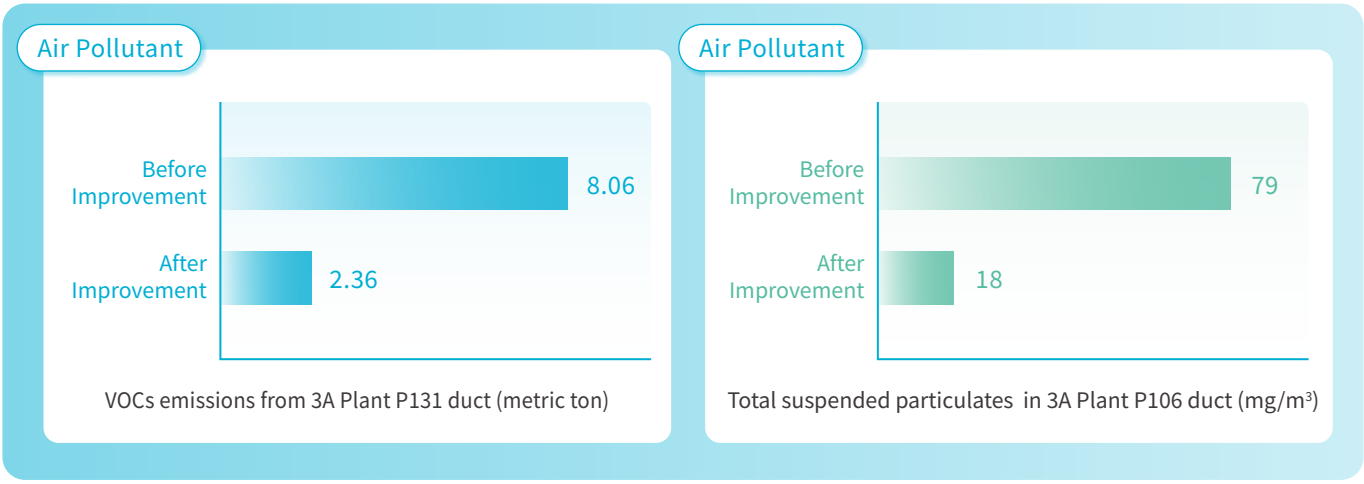
▪ Emission Trends

	2022	2023	2024	2025
Volume of VOCs generated (metric ton)	17.31	14.24	12.72	14.65
VOC emissions per unit of wafer area (kg/wafer area m^2)	0.29	0.30	0.27	0.31
VOC emissions per unit of production capacity (g/kpcs)	15.9	14.2	12.9	13.4
VOC emissions per unit of revenue (g/NT$ million)	304	476	373	220

▪ Trends in Other Air Pollutant Emissions

	2022	2023	2024	2025
NOx (metric ton)	10.50	11.21	12.65	13.07
SOx (metric ton)	1.66	1.66	2.12	2.21

Nanya Technology continues to enhance its air pollution reduction capabilities. To reduce emissions of inorganic acidic gases, Nanya Technology has continued optimizing the operating parameters of its existing air pollution control equipment annually. In 2024, the Company invested NT$55 million in its 3A and 3A-N plants to install additional scrubbers downstream of the current central scrubbers. This two-stage scrubbing process is expected to enhance the removal of inorganic acids from emissions. The project was completed in 2025 and is expected to achieve an inorganic acid removal rate of 80% or above. Furthermore, a dust removal tower was added to the 3A Plant's air pollution control system to reduce particulate matter emissions. Using atomized water scrubbing and impact interception, the system reduces particulate emissions. Third-party verification confirmed that reduction efficiency can reach up to 77%. In 2024, we invested an additional NT$30 million to install a dust removal tower at the 3A-N Plant to reduce particulate matter emissions. Completed in 2025, it is capable of increasing the particulate removal rate by 80% or above. Regarding VOCs emissions, in addition to monitoring existing VOC emission ducts, monitoring equipment has also been installed in acid and alkaline exhaust emission ducts to ensure that air pollution control equipment operates under optimal conditions.



Performance of Waste Management Measures

In 2025, Nanya Technology generated a total of 25,652 metric tons of waste, of which 24,931 metric tons were recycled and reused, accounting for 97.2% of the total waste generated. All hazardous industrial waste—primarily acidic waste liquids such as sulfuric acid, phosphoric acid, and hydrofluoric acid—was 100% treated and recycled by vendors into other industrial raw materials.

General and hazardous industrial waste at Nanya Technology is managed in a centralized manner by the respective departments responsible for their generation. Activities include storage, removal, inspection, and reduction initiatives. Annual training is provided to relevant personnel to ensure familiarity with regulations and compliance. In addition, Nanya Technology conducts irregular audits of waste contractors to ensure that removal and treatment practices comply with regulations, verifying legality and ensuring that all waste is properly handled or reused to prevent further environmental impact. From 2014 to 2025, Nanya Technology did not engage in any transboundary movement of hazardous waste. All hazardous industrial waste was handled by qualified domestic contractors, with a total of 42 certified waste treatment vendors engaged in 2024.

Each year, Nanya Technology conducts a materiality assessment of environmental impacts using the ISO 14001 Environmental Management System. High-risk items are prioritized for management planning. After a comprehensive evaluation, feasible items are selected for implementation that year. To implement source reduction, manufacturing processes are streamlined to minimize raw material usage and reduce waste generation. In 2025, a total of 5 proposals for raw material usage improvements were completed via the Kaizen Proposal System, including measures to reduce process time, extend usage cycles, and reduce material consumption during processes.



Green Buildings

Nanya Technology regards low-carbon green buildings as an important action for both mitigation and adaptation. Green building standards are fully incorporated during the design phase, and all buildings across our operating sites have obtained green building certification. By enhancing building performance, improving energy efficiency, and implementing environmentally friendly design, Nanya Technology reduces environmental impacts during operations and strengthens its operational resilience.

Energy-saving building envelope

Low-E double-glazed glass is used to effectively introduce natural light and reduce the load on air conditioning systems.

Air conditioning and energy management systems

Smart control technologies are integrated with an Energy Management System (EMS) for real-time monitoring and optimized operation, ensuring high efficiency and stability.

Water resource conservation design

Water use efficiency is improved through the comprehensive adoption of water conservation equipment and smart control systems, reducing overall water consumption.

Ecology and site planning

Multi-layered landscaping and a high proportion of native plant species are combined with permeable paving and water retention design to enhance site permeability.



2-5 Adaptation Actions and Contingency Mechanisms

All production sites of Nanya Technology have fully implemented Enterprise Risk Management and Business Continuity Plans (BCP) to ensure continuous operations at both existing and newly established facilities in the face of climate-related risks. In response to risks such as global warming, heavy rainfall and flooding, drought, as well as water scarcity, the Company has developed corresponding business continuity plans. In the short term (within five years), implementation of adaptation plans and target achievement, including the installation of a 43,000 m^3 cistern, a 500 m^3 detention basin, and rainwater harvesting wells. In addition, water resources will be coordinated with the nearby facilities of the Formosa Plastics Group. Water resource regeneration centers have been planned for new facilities (R&D Building and FAB-5A). Also, to address potential risks such as heavy rainfall, extreme precipitation, and flooding, both existing and new facilities (R&D Building and FAB-5A) have adopted green building practices and strengthened infrastructure protection.

Adaptation to Heavy Rain and Flooding

Nanya Technology's facility infrastructure is designed based on past extreme weather events, with an added safety margin. For example, street gutters are designed based on the maximum rainfall in the past 25 years plus a 20% safety margin. This is combined with permeable pavement, often used in green architecture. Flooding risks through the middle of the century remain minimal, though regular clearing of street gutters is necessary to maintain proper flow. Moving forward, the Company will continue to review whether drainage expansion is necessary based on the latest scientific data and operational conditions, to address increases in rainy days or short-duration intense rainfall associated with extreme weather conditions.

Adaptation Measures for Drought

Water is a key operational resource for Nanya Technology, with daily water consumption reaching approximately 11,000 m^3 (metric tons). Increased frequency of water shortages or droughts may raise the risk of operational disruptions. In line with international water security and management standards, the Company continues to strengthen its water management system and expand its water recycling capacity. The Company has established a robust contingency plan to mitigate the immediate impacts of short-term drought. The factory site includes a 43,000 m^3 cistern, a 500 m^3 detention basin that can effectively harvest rainwater during the rainy season (rainwater harvesting is temporarily paused during FAB 5A construction), and seven wells. Nanya Technology also formed an emergency response organization for water shortages with the neighboring facilities of Formosa Plastics Group for mutual water-sharing support. Improvement work has been completed at the Shimen Reservoir watershed. The risk of service disruption due to turbidity from heavy rainfall has decreased. The Company can handle raw water turbidity up to 10,000 NTU, enabling it to manage most conditions. Through internal adaptation capacity and water recycling systems, Nanya Technology can operate for up to 14 days without an external water supply.

Planned response measures

1. The FAB-5A expansion project will add eight wells to Chang Gung Golf Course, providing 7,200 CMD of water supply.
2. FAB-5A will apply for an additional 11,000 CMD of municipal water supply to diversify water sources.
3. Ongoing water conservation and wastewater recycling improvement programs will be implemented to reduce water consumption.
4. The FAB-5A expansion project will include additional cisterns with an effective capacity of 40,000 tons.
5. Emergency drills are regularly scheduled based on recent water supply disruptions to enable prompt response during water shortages.
6. Government water resource development plans and stable water supply measures are regularly monitored to assess and respond to related risks in a timely manner.

In 2025, Nanya Technology was given the highest-level A List rating on the CDP Water Security Questionnaire for the third time and maintained its AWS Platinum Certification. Nanya Technology has incorporated water resource utilization and management capabilities into the standards of new facilities (FAB-5A), including the establishment of water resource regeneration centers. These efforts have earned Platinum certifications for green buildings and continue to enhance the Company's resilience to climate change.

■ Nanya Technology's Complete Process Water Recycling System

Acid/alkaline Wastewater System





Organic Wastewater System





Hydrofluoric Acid Wastewater Recycling System





Water Stress Testing

Nanya Technology's Risk Management Steering Center conducts annual sensitivity analyses and stress tests on key financial and non-financial risks. The results of the stress test for nature-related risks are as follows:

Risk Item	Sensitivity Analysis or Stress Test
Water shortage	• We reviewed internal and external water supplies and storage systems and simulated various water restriction scenarios. The Company can draw from backup wells supplying 5,500 CMD, a 43,000-ton reservoir, and 3,600 CMD from the Chang Gung Golf Course well. Under total raw water shutdown, the factory can continue operating normally for 14 days. • We simulated Phase 1, 2, and 3 water restrictions. None of the scenarios involving raw water supply being "five days on, two days off," "four days on, three days off," "three days on, four days off," and "two days on, five days off" affect production.

Water Resources, Reduction in the Water Conservation Charge, and Responses to Related Impacts

In response to the Regulations on Water Consumption Charge Collection, we have focused on improving wastewater segregation, treatment, and recycling in recent years. In 2025, Nanya Technology's water recycling rate reached 95.2%, certified by a third-party auditor (Ernst & Young), based on guidelines and regulations issued by the Ministry of Economic Affairs, including the "Water Recycling Inspection Guidelines," "Water Use Plan Review and Management Regulations," and "Water Consumption Fee Collection Regulations." Our performance exceeds the government's industry benchmark range (50%~85%) and qualifies for the minimum fee rate. As a result, the estimated annual increase in water costs is approximately 3%, with minimal impact on operating costs.

2-6 Just Transition and Cultivation of Climate Change Awareness

Building awareness of climate change is not solely the responsibility of the management or specialized units—Nanya Technology encourages all employees to get involved. New hire training includes courses such as "Introduction to GHG Inventory and Carbon Footprint," "Introduction to the Green Product Management System and RBA," and "Introduction to the Sustainability of Nanya Technology Corporation," to give employees a foundational understanding of climate change issues and the Company's strategies and actions, enabling them to take these issues into consideration in their daily work.

Occasionally, the Company also organizes internal workshops and training on issues related to nature and climate, offering employee-requested courses such as "Equipment Energy Saving Design and GHG Reduction Solutions" and "Development of Industry Technology Within Global ESG Trends" to provide employees with the latest information. Educational activities are also held in alignment with environmental events, such as the "Eco-Quiz" program on Earth Day, which educates employees about the current status of waste in Taiwan, resource recycling, waste reduction, waste discharge, value estimation for recycled waste, and recycling practices. The program has an online test to encourage employee participation, with 160 employees earning perfect scores. The goal of this Quiz is to raise awareness about resource consumption and encourage reflection on how individuals can reduce waste and make a positive impact on the planet.

The Company also shares its progress in related matters with employees through e-newsletters and press releases, fostering a sense of shared purpose among employees and encouraging broader participation in environmental and climate-related efforts.



3 Nature and Climate Actions in the Value Chain

A company's sustainable development encompasses not only its own operations but also supply chain management and customer engagement. Nanya Technology conducts supply chain risk assessments, develops low-carbon products, and engages with investors to ensure upstream and downstream partners across the value chain that we can respond to risks related to nature and climate change and promote sustainable development across the industry, together.

3-1 Nature- and Climate-related Risks and Opportunities in the Supply Chain

Biologically Sensitive Areas Near Significant Suppliers' Operating Locations

Based on a comparative analysis using 9 high-sensitivity biodiversity GIS data layers, Nanya Technology identified significant high-risk suppliers located within a 2-kilometer radius of biologically sensitive areas. Taoyuan City has the highest number of high-risk suppliers, as some are located in the Dayuan Industrial Zone, which is in close proximity to a legally designated important wetland. Within this two-kilometer buffer zone, none of the significant suppliers operate directly within the protected area.

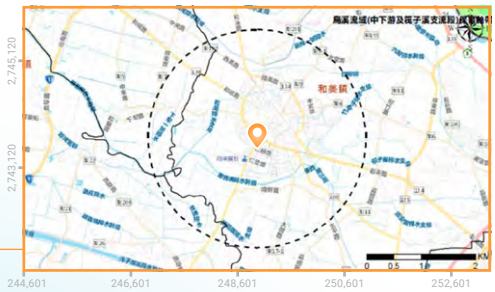
Among the 26 customer locations surveyed, 10 were found within two kilometers of protected areas, and were potentially in breach of Taiwan's regulations. When cross-referenced with IUCN classification standards, only 3 were potentially in breach. Further analysis confirmed that none of these companies were actively operating at areas of high biodiversity sensitivity.

- Results for biologically sensitive areas for upstream operations

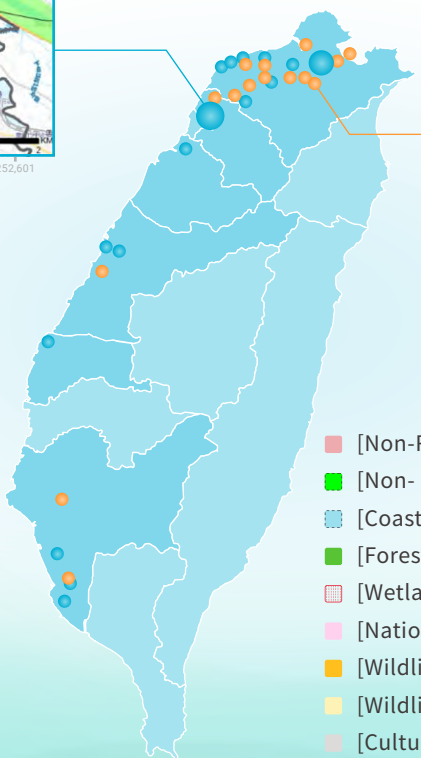


Facility Location — 2 Km Radius Buffer Zone around The Facility

- Results for biologically sensitive areas for downstream operations



Facility Location — 2 Km Radius Buffer Zone around The Facility

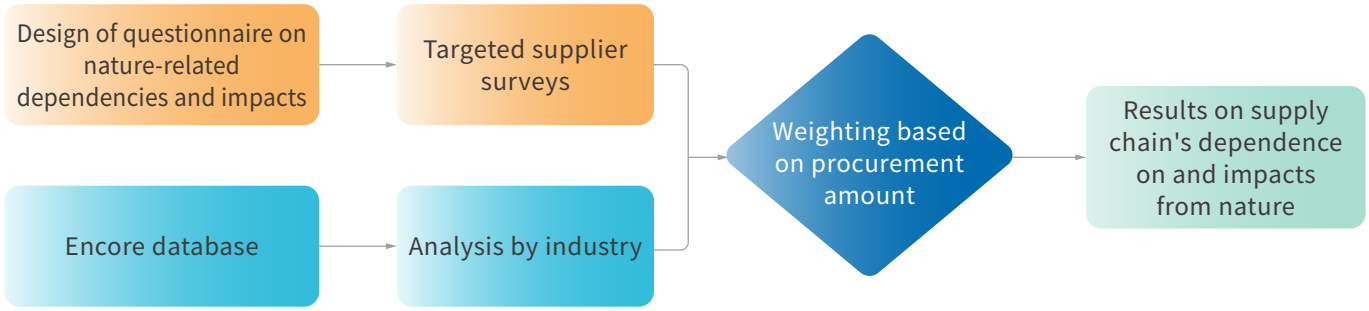


- [Non-Regulated Area] KBA
- [Non- Regulated Area] Conservation Corridor
- [Coastal Management Act] Coastal Protection Area
- [Forest Act] Nature Reserve
- [Wetland Conservation Act] Important Wetland
- [National Park Act] National Park
- [Wildlife Conservation Act] Wildlife Conservation
- [Wildlife Conservation Act] Important Wildlife Habitat
- [Cultural Heritage Preservation Act] Nature Preserve

Material Issues, Risks, and Opportunities Regarding Significant Suppliers' Nature-related Dependencies

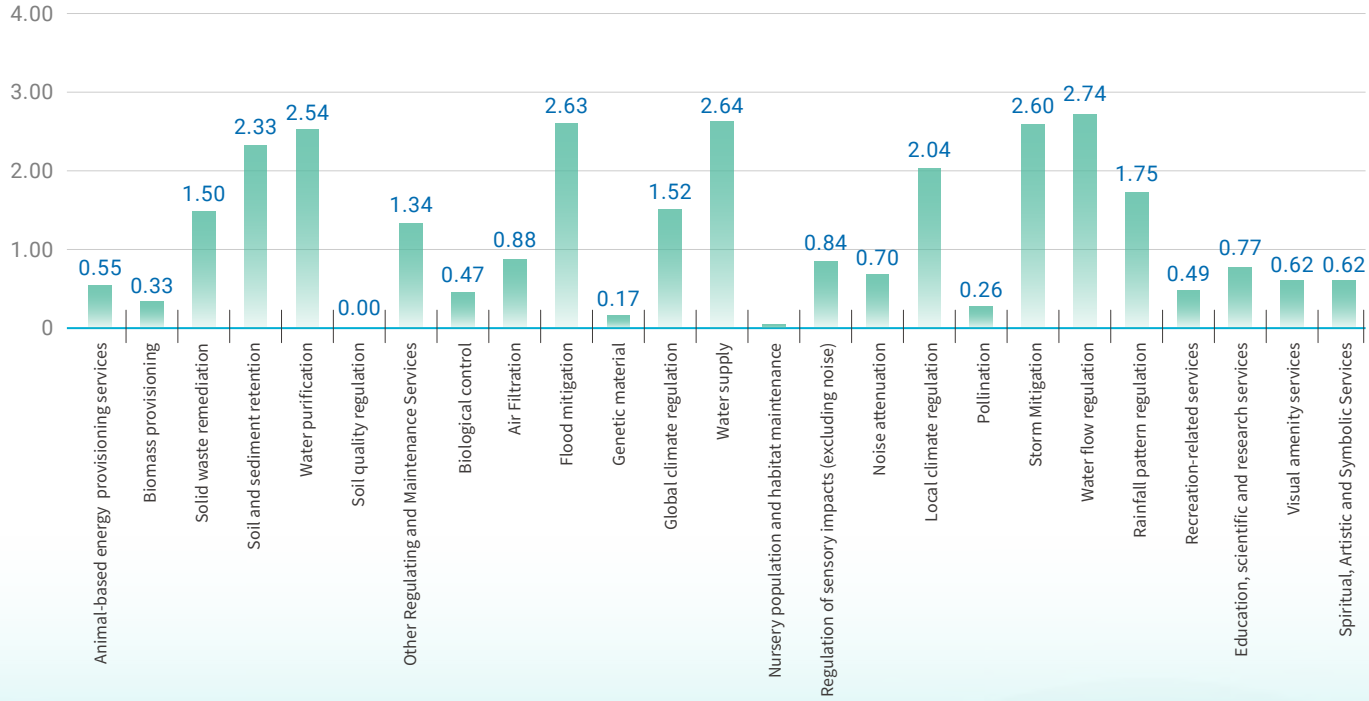
In 2024, Nanya Technology conducted surveys targeting significant suppliers, covering industries such as chemical manufacturing, electronics, and plastics. In 2025, we assessed the degree of suppliers' dependence on nature by incorporating nature-related dependencies' impact on four core business functions (manufacturing operations, marketing, human resources, and supply chain management) as well as their financial impact. The assessment combined supplier survey results with analysis using the Encore database, supplemented by weighting based on Nanya Technology's procurement amount with each supplier. The process is illustrated below:

■ Process for Assessing the Degree of Significant Suppliers' Dependence on Nature



Ultimately, the analysis identified the top five nature-related dependencies within the supply chain as follows: water flow regulation and flood mitigation services, water supply, storm mitigation, water purification (water quality), and soil and sediment retention (prevention of landslides and debris flows).

■ Materiality Analysis of Significant Suppliers' Dependence on Nature

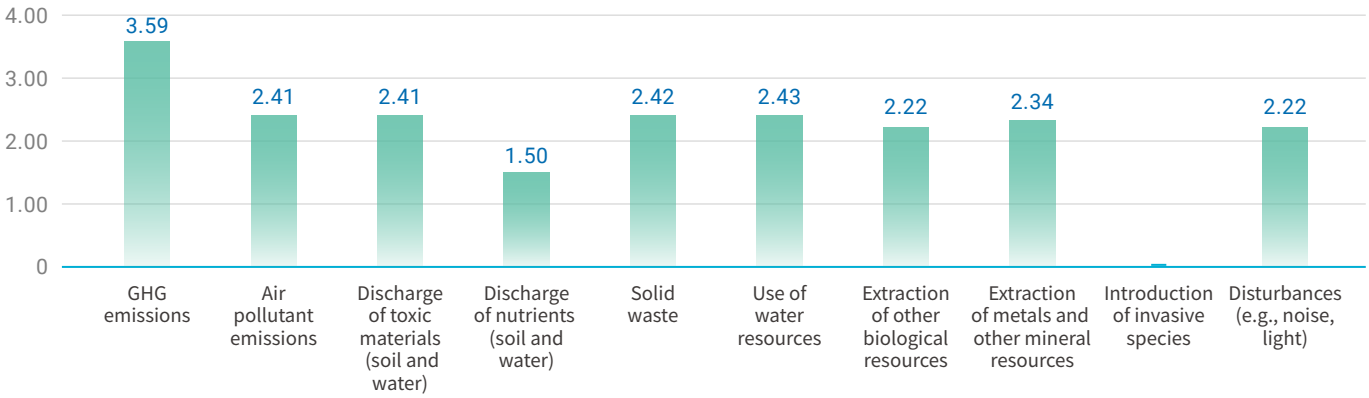


This indicates that Nanya Technology should ensure whether suppliers have comprehensive measures for water management and disaster preparedness for extreme weather events, and review whether each supplier has adequate response plans to manage each nature-related risk in order to establish a more resilient supply chain.

Materiality Identification Results of Significant Suppliers' Nature-Related Impacts

Using the same methodology as the assessment of nature-related dependencies, surveys of significant suppliers are combined with ENCORE analysis, with the results indicating that the most significant environmental impact across the supply chain is greenhouse gas emissions, followed by water use and waste. These findings are consistent with the 2024 survey results and are aligned with the strategic direction of the Company's supply chain management.

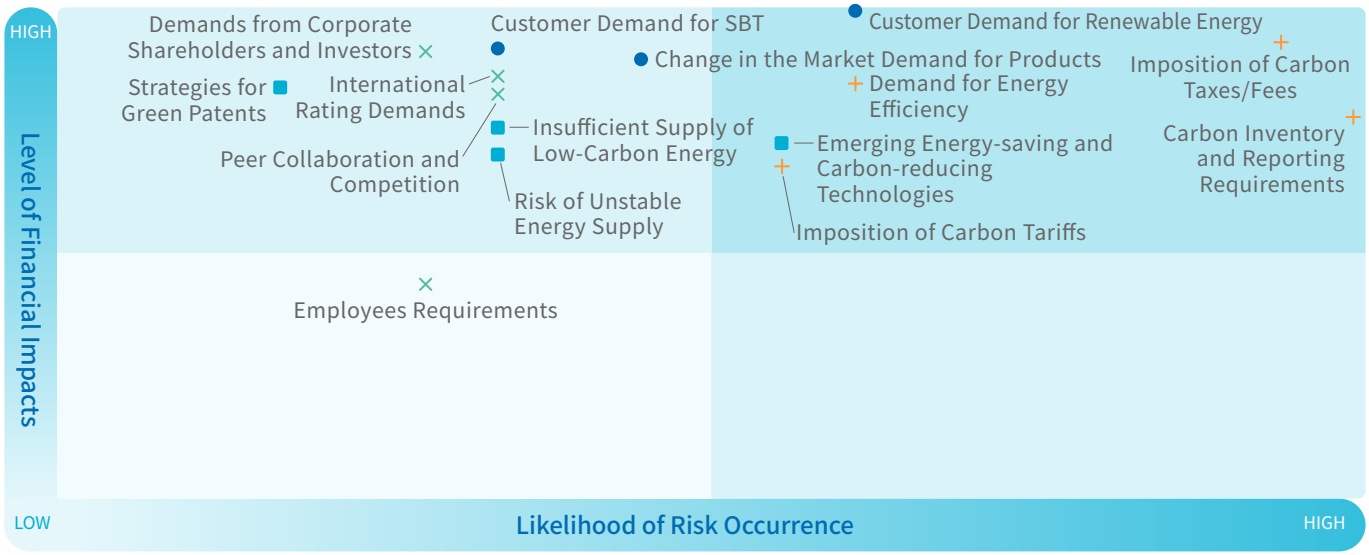
■ Materiality Analysis of Significant Suppliers' Nature-related Impacts



Significant Suppliers' Climate Change-Related Transition Risks

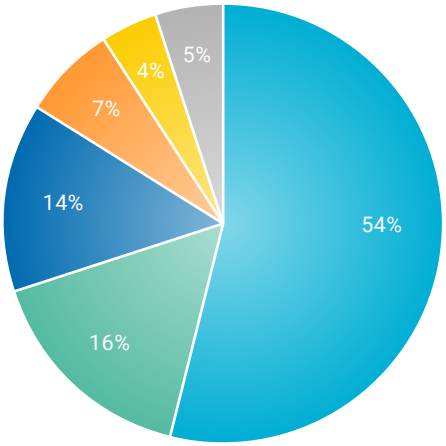
Nanya Technology conducts workshops to collect and consolidate suppliers' climate change-related transition and physical risks faced by suppliers. The results show that the most significant transition risk factors for suppliers come from regulatory risks, such as carbon fee imposition, carbon inventory, and related reporting requirements. The second most cited concern is the increasing pressure from suppliers' customers regarding the use of renewable energy and energy efficiency during operations.

■ Climate Transition Risk Matrix



In addition to Nanya Technology's own operations, upstream suppliers may also face operational impacts due to climate change policies and regulations, including the introduction of carbon fees, government mandates for renewable energy use, and carbon tariffs affecting import and export. Nanya Technology actively inventories and assesses how suppliers are affected by these impacts. Through Scope 3 GHG inventory and product life cycle analysis, we have identified emissions hotspots and initiated collaborative efforts with key suppliers in the supply chain.

■ Carbon Footprint Proportion of Raw Material Procurement



- Auxiliary Materials
- Resource Investment
- Primary Materials
- Chemicals for Wastewater Treatment
- Pure Water
- Other

■ Assessment of the Impact on Revenue under Risk Scenarios

Risk Scenario	Impact on Revenue (NT$ million)	Assessment Methodology
Regulations Requiring Large Electricity Consumers to Use Renewable Energy	24.5	According to the Taiwanese government, at least 10% of installed capacity is required to come from renewable energy; costs passed on by suppliers
Increase in Energy Usage Costs	557.4	Due to rising fossil fuel prices and changing energy structures, electricity costs in 2030 are projected to increase by 50%; costs passed on by suppliers
Imposition of Carbon Fees	23.6	Estimate based on current carbon fee range of NT$100–300 per ton; costs passed on by suppliers.[1]
Investment in GHG Reduction	87.5	Estimate based on suppliers who have set SBTs with a minimum 25% GHG reduction by 2030. Costs passed on by suppliers.[2]

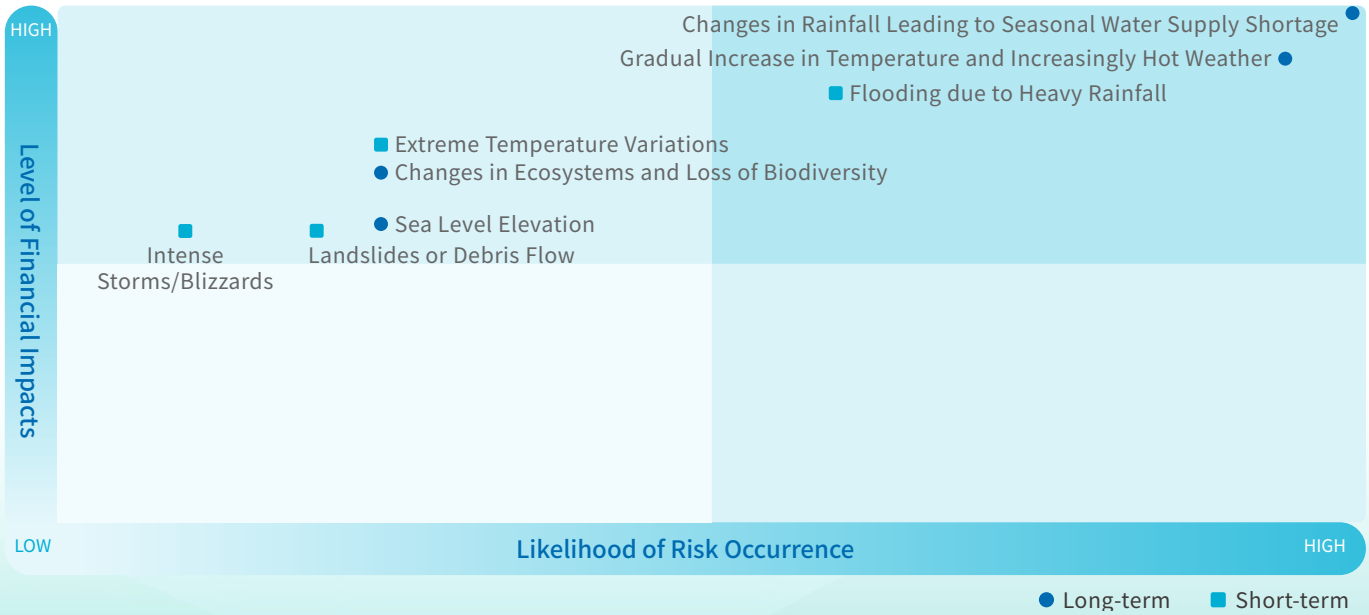
Note 1: Comparable to Taiwan's NDC 3.0 scenario.
Note 2: Comparable to the IEA WEO APS scenario.

Assessment and analysis show that suppliers' impact on Nanya Technology's operational costs under various transition risk scenarios is limited (approximately 1%). However, in order to meaningfully reduce product carbon footprints and meet climate goals, we have initiated high-level discussions with suppliers' executives on topics such as renewable energy, product carbon footprint, and circular economy. Nanya Technology representatives have visited suppliers across various sectors—including wafer, chemical, gas, and subcontracting—and received positive feedback. The exchanges also helped clarify challenges in implementing net-zero strategies within industries. We will continue to share our experience and sustainability knowledge, help suppliers access external resources, and participate in industry associations in order to resolve shared issues.

Significant Suppliers' Climate Change-Related Physical Risks

During the identification of physical risks, the most significant climate-related risks affecting the supply chain are water scarcity and flooding caused by changing rainfall patterns. Additionally, weather patterns that feature increasing temperatures are also having a notable impact on supplier operations.

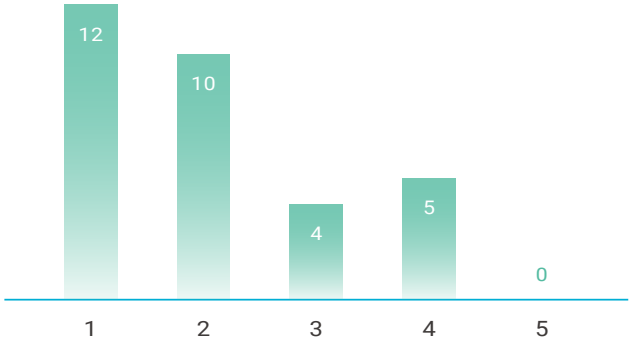
■ Physical Climate Risks



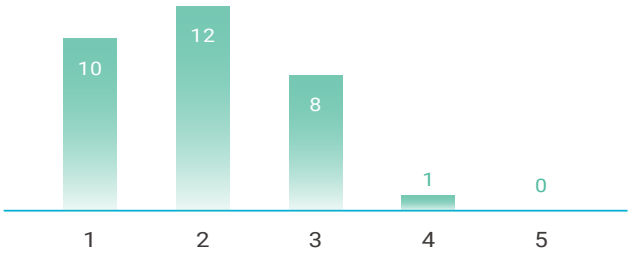
In addition to the transition risks faced by the supply chain, Nanya Technology is proactively assessing trends in natural disasters in suppliers' operational locations. Our aim is to prevent supply disruptions in case supplier production is impacted by climate change-intensified disasters. The Company has prioritized assessments of its significant suppliers' production and delivery sites in Taiwan (totaling 31 sites). Analysis using the water resource assessment tool developed by the World Resources Institute indicated that overall water risk, water stress, and water stress levels across different periods under various climate scenarios were all rated at low to medium levels. Making use of IPCC AR5 RCP8.5 scenario data published by the Disaster Risk Adaptation platform (hereinafter referred to as "DR.A") of the National Science and Technology Center for Disaster Reduction (hereinafter referred to as "NCDR"), cross-comparisons showed that 22 of the Company's significant suppliers' production sites are located in flood- and drought-prone high-risk areas (levels 4 and 5), mostly distributed across central and southern Taiwan.

So far, Nanya Technology has already developed contingency plans for the sites of high-risk significant suppliers. As a result, we believe that physical climate change-related risks have a limited impact on the Company's Taiwanese suppliers and are unlikely to cause production disruptions. We will continue to monitor these high-risk suppliers and expand climate-change related risk assessments to supply chain production sites outside of Taiwan to ensure supply and production security throughout the supply chain.

- Distribution of Suppliers with Different Risk Levels of Flood



- Distribution of Suppliers with Different Risk Levels of Water Shortages



Note: A flood hazard level of five indicates a relatively high probability of extreme rainfall occurring, while a flood hazard level of one indicates a relatively low probability of extreme rainfall occurring.



3-2 Supply Chain Management and Performance

Nanya Technology is committed to building a responsible and sustainable supply chain. Through risk control, audit mechanisms, and responsible mineral management, the Company ensures stable operations while jointly advancing environmental and social responsibility with suppliers.

Supply Chain Management and Performance

Nanya Technology requires suppliers to sign the "Supplier Corporate Social Responsibility Commitment," and has established a comprehensive sustainable supply chain management process. This includes the development of standards, risk investigation, on-site audits, and capacity-building to enhance suppliers' sustainability performance. In addition, water management as well as nature- and climate-related topics have been included in the Supplier Assessment Questionnaire (SAQ). The Company also uses the National Science and Technology Center for Disaster Reduction (NCDR)'s Disaster Risk Adaptation (DR.A) platform and IPCC AR5 RCP8.5 scenario data to cross-reference and assess suppliers' water-related risks. In 2025, a total of 31 significant suppliers were assessed to ensure they had water management measures and contingency plans in place. High-risk and key suppliers received on-site audits and guidance on improvements they could make, ensuring that the physical risks of climate change remain manageable for our suppliers in Taiwan and do not affect production stability.

Nanya Technology identifies high-risk suppliers based on an analysis of the SAQs and conducts audits and follow-up guidance in accordance with supplier characteristics. For deficiencies identified during audits, suppliers are required to submit an improvement plan, and complete improvement measures within two years. Suppliers failing to complete improvements within the required timeframe will be reviewed by the Material Review Board (MRB). Depending on the severity of the issue, actions may include further communication, reduced orders, reallocation of orders, or termination of partnership to ensure risks remain manageable. In 2025, no partnerships with suppliers were terminated due to unaddressed deficiencies.

Responsible Mineral Management

Metallic minerals are a key component for natural resource-dependent industries. Nanya Technology is committed to following the standards of the Responsible Business Alliance (RBA) and the Responsible Minerals Assurance Process (RMAP) to ensure that mineral sourcing does not involve illicit financial flows or violations of human rights.

Policy and commitment	● Suppliers must comply with Nanya Technology' s responsible mineral sourcing policy and participate in supply chain investigations for tantalum, gold, tin, tungsten, cobalt, and mica.
Supply chain investigation mechanism	Conducts at least one supply chain investigation per year using internationally recognized tools: ● Conflict Minerals Reporting Template (CMRT): For investigating 3TG minerals ● Extended Minerals Reporting Template (EMRT): For investigating cobalt and mica
Product labeling and certification	● All product labels are marked with "Complies with RMI Policy and Conflict Mineral-Free," emphasizing our alignment with responsible mineral sourcing standards.

In response to global supply chain trends, Nanya Technology expanded the scope of responsible sourcing to include aluminum, copper, nickel, zinc, natural graphite, and lithium, and incorporated them into supply chain traceability investigations.

Nanya Technology will continue to strengthen sustainable supply chain management by enhancing risk management, implementing supplier audit mechanisms, and promoting responsible mineral sourcing. We will ensure that our supply chain complies with international standards, and work with suppliers to co-create a sustainable value chain.

Supply Chain Sustainability Projects

Name	Description	Target	Benefit
Product Carbon Footprint Inventory	Promoting carbon footprint inventory among raw material suppliers and packaging/testing contractors	1. Align with global climate change initiatives 2. Reducing the Company's product carbon footprint 3. Achieve SBT certification and reach targets by 2030	We took part in a carbon footprint inventory and carbon reduction projects led by the Industrial Development Administration of the Ministry of Economic Affairs—with guidance from the Industrial Technology Research Institute—after promoting the project and communicating with our top 30 raw material and packaging/testing suppliers with the highest emissions. Together with 10 supply chain partners, Nanya Technology aims to collectively reduce emissions by **6,300** metric tons over two years (Nov 2023–Oct 2025).

Sustainable Supply Chain Seminar

As the era of carbon pricing approaches, Nanya Technology continues to advance low-carbon transformation across its supply chain while actively investing in the in-house development of 10nm-class advanced process technologies. Through industry-academic technological collaboration, cross-sector capability sharing, and the implementation of digital tools, we empower our suppliers and jointly strengthen the momentum for low-carbon transformation, hoping to build a resilient, competitive, and sustainable industry chain. On December 30, Nanya Technology hosted the Sustainable Supply Chain Seminar—DRAM Supply Chain Low-Carbon Transformation Program Achievement Presentation. The seminar convened 10 suppliers that participated in the two-year program—including Formosa Sumco Technology Corporation, Formosa Advanced Technologies, KANTO-PPC, MFC Sealing Technology, Jao Jai Enterprise, RSTEC Semiconductor, Tian-Cheng Science and Technology Corporation, Linde Taiwan Technologies Limited, Shih Her Technologies, and Echo Chemical—alongside the Industrial Development Administration of the Ministry of Economic Affairs, the Industrial Technology Research Institute, National Taiwan University of Science and Technology, and supplier partners not involved in the program to share results and exchange experiences. A total of 20 supplier partners and 76 participants attended the event.



Group photo of teams that participated in the 2023–2025 DRAM Supply Chain Low-Carbon Transformation Program


Group photo of participants at the 2025 Sustainable Supply Chain Seminar

2020	• Trends in sustainable supply chain, achievements in energy conservation, and new energy technologies
2021	• Supply chain sustainability trends, Nanya Technology's sustainable supply chain strategy, supplier renewable energy plans, and outcomes of projects involving the human rights of migrant workers
2022	• Sustainability trends in the semiconductor industry, Nanya Technology's sustainable supply chain strategy for mutual good, suppliers' single-carbon finished product, and outcomes of circular economy initiatives
2023	• The net zero trend in ESG, digital carbon management and decarbonization hotspot analysis, the importance of nature and biodiversity—analysis of the TNFD trend, and future directions for collaborations on nature- and climate-related issues in the supply chain
2024	• Nature and Climate Synergistic Supply Chain Workshop
2025	• Sustainable Supply Chain Seminar—DRAM Supply Chain Low-Carbon Transformation Program Achievement Presentation

3-3 Product Contributions to Nature and Climate

R&D of Low-Carbon Products

In response to global climate change and the surge in electricity demand driven by AI-powered digital transformation, Nanya Technology embeds environmental sustainability at the very beginning of the product life cycle. In addition to advancing DRAM R&D, we leverage process shrinkage and next-generation architectures to provide the market with sustainable solutions that combine high performance with ultra-low power consumption. These efforts position us as a key force in promoting energy-saving transformation. Our approach is based on the following three R&D strategies:

Strategy 1

Advanced process shrinkage to maximize resource usage efficiency: We continue to advance 10nm-class process technologies, increasing output per unit area to achieve both energy savings and carbon reduction.

Capacity growth and low-carbon footprint

- As process evolves from 1B to 1C and 1D, die per wafer (DPW) increases by more than 30% with each generation. Through economies of scale, water and energy consumption are effectively distributed, significantly reducing the carbon footprint per unit product.

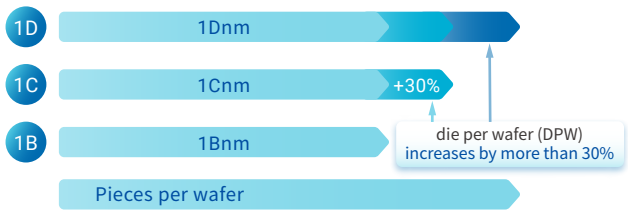
Process development blueprint

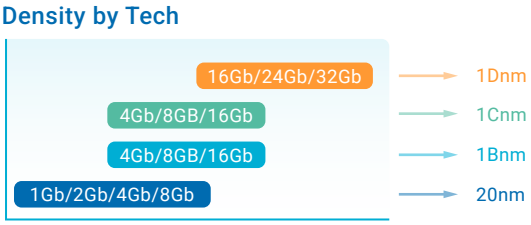
- 1Bnm has reached stable mass production; 1Cnm DDR5 has entered pilot production and validation, with LPDDR5 initial samples progressing in parallel; early-stage 1Dnm DDR5 products are also approaching design completion.

High-density transition

- Strategic focus on high-density products of 16Gb and above, with continued advancement toward 24Gb and 32Gb.

■ Nanya Technology's Manufacturing Process Shrinkage





Strategy 2

DRAM specification evolution to drive low-carbon transformation in end devices: Energy consumption during product use is central to emissions reduction. Through continuous technological upgrades to optimize power efficiency, we reduce the energy burden on data centers and mobile devices at the source. Environmental responsibility is thus extended upstream from the end system manufacturers to the wafer fabrication phase.

High bandwidth and low voltage

- DDR5 5600Mbps products are entering mass production, with bandwidth scaling to 6400/7200/8000Mbps; LPDDR5x targets the mobile computing market, aiming for 8533/9600Mbps bandwidth, combined with fast sleep technologies to optimize both dynamic and static power consumption.

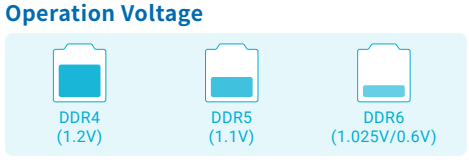
Built-in intelligent architecture

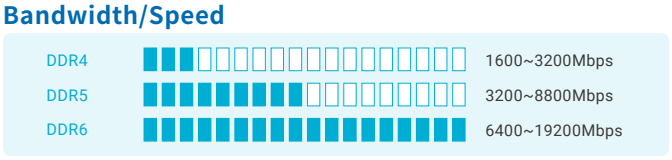
- On-die ECC is introduced to enhance stability in extreme environments while recovering failed marginal dies, maximizing the value of each silicon wafer.

Highly integrated design

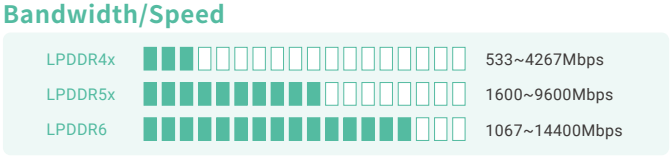
- DDR5 module products optimize PMIC configurations to improve conversion efficiency and help customers reduce materials used for motherboard components, enabling lighter, thinner, and more environmentally friendly electronic products.

■ Nanya Technology's Product Planning and the Evolution of Product









Strategy 3 3DS stacking technology empowering green computing in the AI era: To meet the high computational demands of AI, through-silicon via (TSV) technology provides critical support for high-performance solutions.

Through-silicon via (TSV) technology

- TSV technology is implemented in 1Bnm DDR5 products, doubling storage capacity while significantly reducing energy loss during high-frequency data transmission.

Edge AI solutions

- High-bandwidth solutions are developed for AI PCs and smartphones to support localized computing, reducing the energy demand of network infrastructure caused by cloud data transmission. Nanya Technology is also investing in the development of customized ultra-high-bandwidth DRAM, with products currently in pilot production and validation. Through high levels of integration, we aim to achieve product light-weighting and a two-fold improvement in performance for our customers.

From the outset of new product development, Nanya Technology keeps the environmental impact in mind throughout the entire product lifecycle. For electronic products, energy consumption during the usage phase is one of the most significant indicators of environmental impact. We are actively developing low-power products to help customers reduce energy consumption during use, thereby lowering GHG emissions.

In 2025, mainstream process products (low-power DRAM and 20nm consumer DRAM)

helped customers save over **1.2485 billion kWh** of electricity, equivalent to the average annual electricity usage of **335,000** households[1]. This also reduced GHG emissions by **571,101 tCO_2e**[2], equivalent to the annual carbon absorption of **1,468** Daan Forest Parks[3].



Note 1: Estimated using the monthly residential and small-scale commercial electricity usage data on Taipower's website; the annual household consumption is 3,601 kWh/year (as of January 9, 2026).
Note 2: Emission factor for electricity calculated based on the Energy Administration's 2024 published value of 0.474 $kgCO_2e/kWh$.
Note 3: Based on the Energy Administration's estimation that one Daan Forest Park absorbs 389 metric tons of CO_2 annually.

Carbon Reduction Linkages in the Product Value Chain

Having long been part of the DRAM industry, Nanya Technology aspires to become the *Best DRAM Partner for Smart World*. It is upon our foundations in innovative R&D that we continue to develop advanced process technologies (1Bnm, 1Cnm, 1Dnm) and products (DDR5, LPDDR5), enhance our portfolio of low-power products, and improve packaging methods. These efforts help the Company implement its low-power R&D strategy, and enable the delivery of high-efficiency, energy-saving products. By introducing new processes, the carbon footprint of each product can be further reduced, allowing the benefits to reach customers' end products.

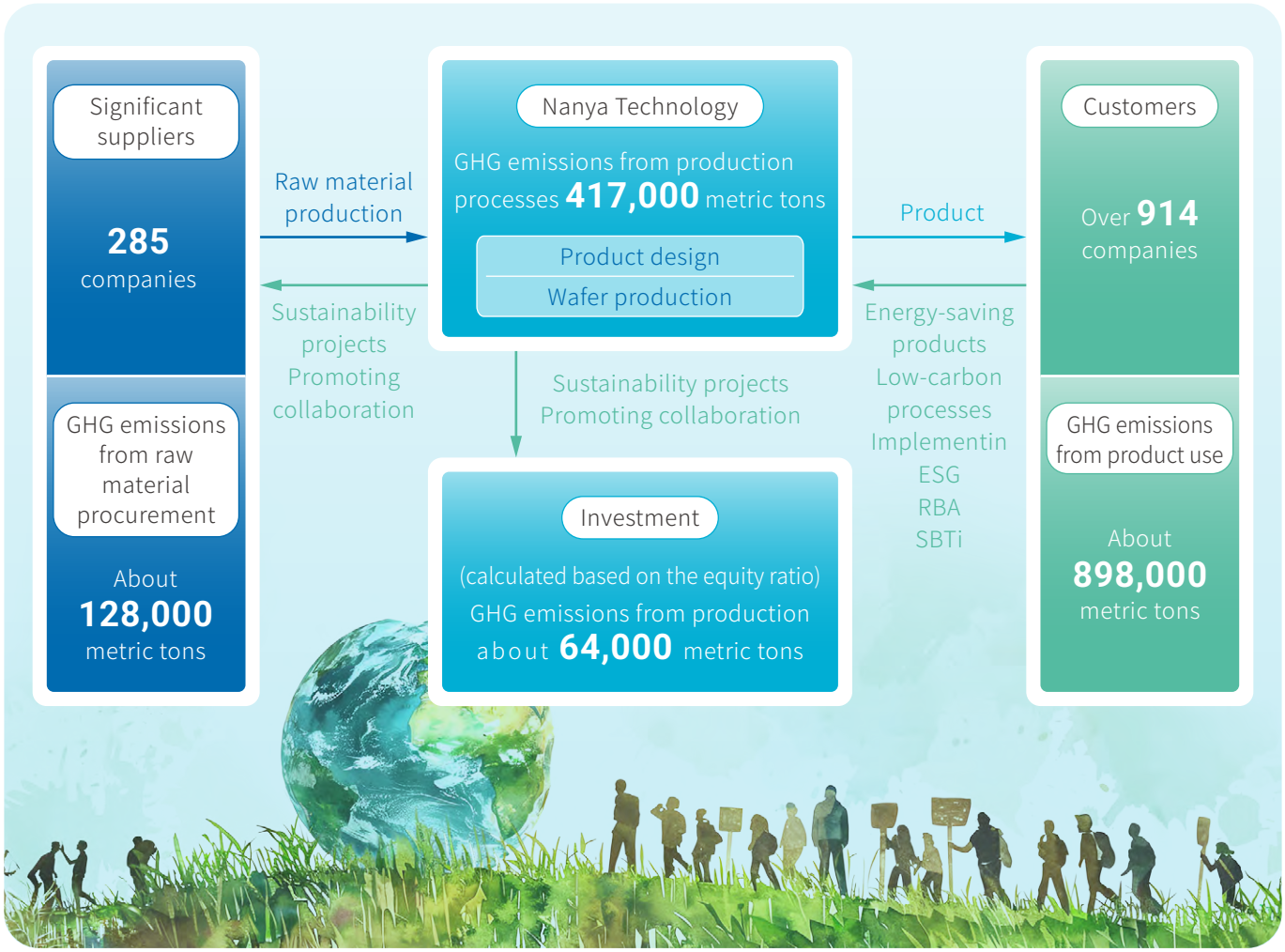
Nanya Technology continues to develop advanced process technologies. So far, next-generation products based on advanced processes have reduced power consumption by approximately 15% compared to previous generations.

Guidelines for the R&D of Energy-Efficient Products

Collaboration with main chip customers to adopt multi-chip packaging, reducing the number of test channels during backend processes and cutting energy consumption.

Strengthening the development of low-power product lines and expanding the product portfolio to fully meet the needs of various mobile electronic devices.

Nanya Technology understands that many clients are concerned about climate change. In addition to regularly disclosing relevant information through sustainability reports, the Company also participates in domestic and international initiatives and ratings related to sustainability and climate change—including TCFD (IFRS S2), SBT, the Taiwan Alliance for Net Zero Emission, DJBIC and CDP. Through our comprehensive customer service management system, clients are provided with timely and transparent access to the Company's carbon reduction actions. At the same time, high-performance products also contribute to society's overall transition toward a low-carbon economy. This process contributes to avoided emissions throughout society's transition process. Avoided emissions have become an issue of concern for Nanya Technology in recent times. The Company is studying methodologies outlined in the guidelines on avoided emissions provided by the World Business Council for Sustainable Development (WBCSD) to effectively quantify how its products contribute to reducing carbon emissions across society.



Within the industry chain, Nanya Technology has not only established its own net-zero transition pathway but also promotes supplier engagement in net-zero initiatives through training, seminars, and guidance programs. In 2025, one Sustainable Supply Chain Seminar—DRAM Supply Chain Low-Carbon Transformation Program Achievement Presentation was held. The 2024–2025 two-year Low-Carbon and Smart Upgrade Transformation Program was carried out in collaboration with National Taiwan University of Science and Technology and the Industrial Technology Research Institute. The program was advanced across three key areas—capacity building, digital tools, and the introduction of low-carbon technologies. The program supported 10 significant suppliers in comprehensively enhancing their carbon management capabilities. The original target was to reduce carbon emissions by 6,300 metric tons over two years; actual reductions reached 8,536 metric tons, achieving 135% of the target. We will continue to work with suppliers to advance toward net-zero transition.

Nanya Technology also co-founded the Semiconductor Climate Consortium (SCC) with other leaders in the global semiconductor industry. As a founding member, the Company partners with the industry chain to advance net-zero emissions through GHG inventories, education, innovative technology empowerment, and policy advocacy. We are also a member of the SEMI Taiwan Sustainable Manufacturing Committee, collaborating to integrate industry resources and shape a shared sustainability vision and action plan for the semiconductor sector.

3-4 Customer and Investor Engagement

As awareness around sustainability initiatives and sustainable finance grows among customers and investors, customers and stakeholders are now looking beyond operational performance. They expect companies to disclose complete, transparent, and timely ESG information to understand how sustainability issues impact business operations and to assess the Company's long-term value, risk management, and sustainability performance. Nanya Technology engages proactively with customers and investors through three channels: Sustainability and finance-related disclosures, long-term two-way communication, and active participation in sustainability assessments.

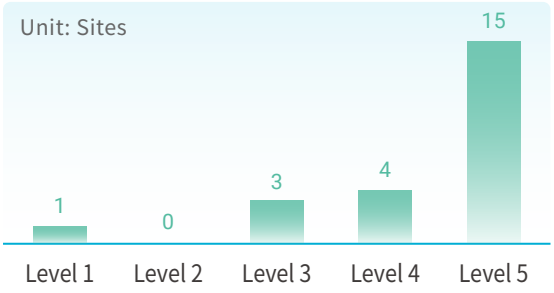
In terms of sustainability and finance-related disclosures, Nanya Technology released its first *Nature and Climate-related Financial Disclosure Report (TNFD-TCFD Report)* in 2024, incorporating the LEAP (Locate, Evaluate, Assess, Prepare) framework to assess the materiality of nature-related issues at its operational sites. Unlike TCFD, which focuses on carbon reduction and net-zero, TNFD emphasizes the impact on the natural environment. Integrating both frameworks allows the Company to provide a more comprehensive perspective on the financial impact of climate- and nature-related risks and to explain the Company's management strategies to investors.

Nanya Technology compiles customer requirements and evaluates physical risks at delivery locations as a reference for ESG improvements. As of 2025, we serve 35 customers who are RE100 members, 50 customers with SBTs, and 56 customers participating in CDP assessments. 59 customers have actively advanced sustainable supply chain management by setting climate action targets, including setting SBTs, adopting renewable energy, conducting GHG inventories, and participating in CDP assessments.

Scenario	Number of customers in 2024	Number of customers in 2025	Year-on-year growth (%)
Customers participating in RE100	26	35	↑ 35%
Customers with SBTs (committed or established)	48	50	↑ 4%
Customers participating in CDP	52	56	↑ 8%
Customers who set climate targets for suppliers	47	59	↑ 26%

Nanya Technology conducted climate change risk assessments for delivery locations. Analysis using the water resource assessment tool developed by the World Resources Institute indicated that overall water risk, water stress, and water stress levels across different periods under various climate scenarios were all rated at low to medium levels. In addition, using the NCDR's DR.A platform database[1], climate change risk levels (flooding) were assessed for 23 dispatch locations in Taiwan, of which 15 were classified as high risk. Nanya Technology has established internal procedures, including the"Incoming and Outgoing Product Management Process"and theProduct Transport, Storage, Packaging, and Delivery Procedures,"along with contingency plans to address potential disruptions (including natural disasters), ensuring products are delivered to customers without any trouble. The Company plans to expand the scope of its inventories, continue to meet customer demand, and monitor climate change risks at dispatch locations to ensure secure and complete product delivery.

■ Climate Change Risk Rating of Delivery Locations



Note 1: Analysis of the database is based on the IPCC AR5 RCP8.5 scenario

As part of our ongoing communication mechanism with customers, sales representatives submit weekly feedback on customers' projected future demand. After they consolidate demand forecasts from global sales teams, the information is converted into production plans through the production and sales system. These plans are then distributed to relevant departments for evaluation and implementation via the Document Management System (DMS) and the Customer Requirement System (CRS). Adjustments are continuously made based on weekly feedback from sales personnel to ensure alignment with customer expectations.

We also engage in two-way communication with investors through multiple channels. These include quarterly investor conferences that brief investors on operational and sustainability performance, and investor forums where we get feedback from external investors about their expectations regarding the Company's sustainable development. In addition, we share real-time sustainability information with investors via press releases, ESG newsletters, and social media platforms such as Facebook and YouTube.

We also actively participate in domestic and international ESG ratings and initiatives, such as: DJBIC, CDP, MSCI, and SBTi. These third-party assessments provide quantifiable, objective, and credible ESG performance indicators for investors. These assessments help us review our sustainable development management mechanism, align our sustainability strategy and targets with global trends, and enhance the Company's resilience.

4 Actions Beyond the Value Chain

In addition to managing nature- and climate-related risks across its value chain, Nanya Technology actively engages in environmental protection and community development. Promoting both environmental stewardship and cultural preservation, our initiatives include on-site ecological surveys and nature-inclusive programs within communities. These efforts strengthen ties between the Company and the community, reflecting a commitment to harmonious coexistence with nature.

4-1 Development in Harmony with Nature

Ecological Monitoring Program

Since 2013, Nanya Technology has collected data on regional species, utilizing the population of dominant species as an indicator to assess external construction disturbances, with ongoing monitoring and data updates.

The area covered is within a 500-meter radius of the site. The surveys follow the Ministry of Environment's Technical Specifications for Plant Ecological Assessment and Technical Specifications for Animal Ecological Assessment, and are conducted regularly on a quarterly basis. The flora survey uses transect and plot sampling methods, combining literature comparison with field collection and identification, followed by statistical analysis of plant species and calculation of diversity indices. The fauna survey employs line and point observations to record the community dynamics of mammals, birds, amphibians, reptiles, and butterflies.

- Results of the 2025 Ecological Monitoring Survey

Flora

A total of 128 families, 375 genera, and 526 species of vascular plants were recorded within the site. Approximately 62.0% are native to Taiwan (including endemic species), while 14.4% are naturalized and 23.6% are cultivated species. The proportions of herbaceous plants, shrubs, vines, and trees are approximately 47.7%, 17.5%, 10.5%, and 24.3%, respectively, indicating a relatively balanced regional vegetation structure. Even though the endemic species identified are not classified as nationally rare, the presence of 20 endemic plant species flourishing at the site underscores its ecological diversity and value.

Fauna

The mammal species mainly recorded were the Japanese house bat and the Pallas's squirrel. The bird survey recorded 61 species, including resident and migratory birds. Overall biodiversity indices were high, indicating that, despite urban and industrial influence, the site still provides stable habitats. In addition, records of amphibians, reptiles, and butterflies show distinct seasonal patterns. While the population of some species fluctuated because of construction or climate factors, comparisons with previous data indicate a stable trend.

Ecological monitoring results were analyzed via diversity indices such as the Shannon-Wiener index and Pielou's evenness index to objectively assess community richness and species distribution evenness across sampling areas. Although the data fluctuated because of localized human activity and construction, the ecosystem still demonstrated strong resilience and stability. This year's monitoring reflects current ecological conditions and helps the Company continuously refine its operational and project management strategies toward harmonious coexistence with nature.

Nanya Technology's FAB 3A and the new FAB 5A are reconstructions of existing sites, not new land development projects. However, we fully understand that ongoing operations may still impact the surrounding environment and ecology. To address potential ecological impacts, the Company follows its established biodiversity management cycle and adopts the Biodiversity Impact Management Framework, which includes four strategies: avoidance, impact mitigation, restoration, and compensation. Among them, avoidance and impact mitigation are our main strategies. For new facility development, the Company has conducted ecological impact assessments on surrounding flora, fauna, and aquatic environments, as well as corresponding preventive measures. If ecological loss still occurs despite these efforts, we will prioritize restoration measures. When restoration is not feasible, we will implement compensation actions—such as reforestation or establishing environmental trust funds—and aim for zero net deforestation. Through nature-related risk assessment and implementation of a biodiversity policy, Nanya Technology promotes ecological sustainability and corporate environmental responsibility, ensuring operations coexist harmoniously with surrounding ecosystems.

4-2 Beyond Value Chain Mitigation (BVCM)

Nanya Technology has begun developing high-quality carbon credit mechanisms and nature restoration projects, drawing on SBTi's Beyond Value Chain Mitigation (BVCM) issued in February 2024, as well as the ISO 14068-1:2023 carbon neutrality standard, is actively planning high-quality carbon credit mechanisms and nature restoration projects as concrete implementations of value-chain-outside mitigation actions. In 2025, the company will assess participation in nature-based solution projects and carbon removal technologies (CCUS), and from 2026 onward will launch a "New Afforestation Voluntary Reduction Credit" project for natural carbon sinks through collaboration among industry, government, and academia. The project will use native Taiwanese tree species (Taiwanese yellow buckthorn, Taiwanese beech, acacia, wind-box, light wax tree, and Taiwanese ebony) as the primary plantings, conducting systematic afforestation in Chishang, Taitung, to enhance forest carbon sequestration capacity. This aligns with the policy direction of the "Taiwan 2050 Net-Zero Transformation Natural Carbon Sink Key Strategic Action Plan," which calls for new afforestation on national, public, and private lands to increase forest cover and carbon sink volume. The project plans to plant 1,800 trees, with an estimated annual carbon sequestration of 15 t CO_2e, and aims to secure 80 % of domestic voluntary reduction credits (carbon credits). Additionally, a ten-year long-term ecological monitoring program will track changes in species richness, balancing the achievement of carbon removal targets with the promotion of local biodiversity, thereby delivering multiple ecosystem service benefits to the agriculture-dominant Chishang region.

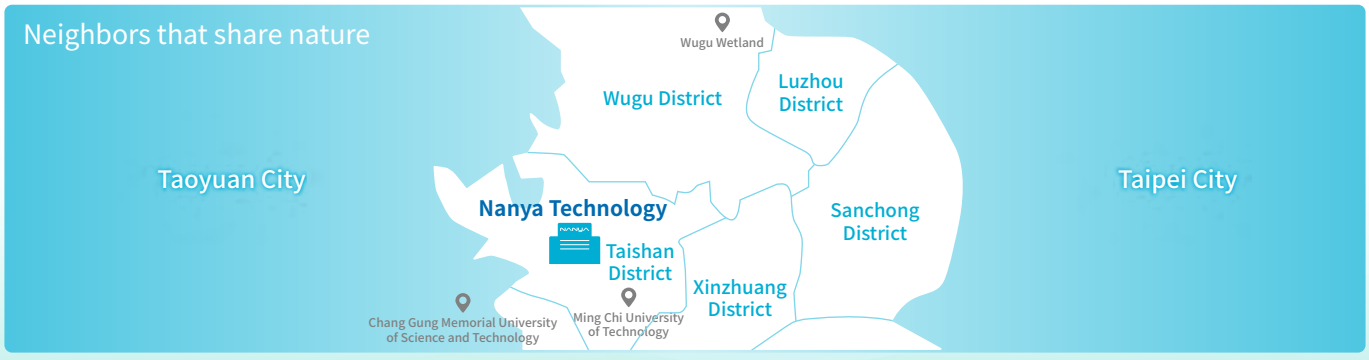
- Assessing and establishing targets for reducing emissions beyond the value chain
- Identifying emission reduction opportunities beyond the value chain
- Investing in BCVM projects such as renewable energy, reforestation, carbon sequestration, and carbon capture
- Purchasing voluntary carbon credits, with considerations ranging from verification standards, year of issuance (within five years), additionality, permanence, to biodiversity, among others

4-3 Community Inclusion, and Services to Nature and Culture

Nanya Technology maintains close ties with local communities, with a strong focus on environmental issues. It is also highly attentive to labor rights, and has established a Human Rights Policy as well as a Labor and Ethics Policy. These policies follow international human rights standards, including the Responsible Business Alliance (RBA) Code of Conduct, SA8000 Social Accountability Standard, International Labour Organization (ILO) conventions, the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, and the General Data Protection Regulation (GDPR), along with relevant local laws. These measures serve to promote human rights risk assessment and management across the value chain.

Nanya Technology understands that nature-related topics are closely tied to local communities. That is why the Company has promoted social engagement through talent cultivation, environmental conservation, humanistic care, and community harmony over the long term. We have also developed diverse engagement initiatives according to TNFD's emphasis on aligning nature and human rights. Community collaboration focuses on two themes: ecology and culture. Through voluntary employee participation, we work hand in hand with suppliers, non-profit organizations, local governments, and nearby schools to launch a series of initiatives that raise corporate awareness of environmental issues. Nanya Technology has also integrated the TNFD framework into its operations. Building on risk assessment results showing high dependence on water resources, we conducted a river survey in 2025 to strengthen our commitment to monitoring and protecting the surrounding environment.

■ Nanya Technology's Nature and Human Rights Engagement Network in 2025



Protecting Hills, Rivers, and Oceans

"A healthy forest gives rise to clear rivers, which in turn nurture clean oceans." Protecting the source is protecting the entire ecosystem. In 2025, Nanya Technology engaged volunteers and partnered with local schools and communities to host various ecological activities. We are committed to protecting the environment from hills to rivers and all the way to the sea.

Hill

Hill cleanups	Volunteers and their families removed litter from the hilly area of Taishan and kept hiking trails clean.
Species Survey	In collaboration with the Society of Wilderness, Nanya Technology built an ecological database of the surrounding area on the globally recognized iNaturalist platform. The initiative fosters a deeper connection between people and the land, and raises awareness of local ecological sustainability.

River

River Waste Survey Initiative	This year marks the second year of mobilizing volunteers to participate in a collaborative program between Ming Chi University of Technology and the Society of Wilderness. A total of 130 hours were dedicated to volunteer training and river waste survey activities. Through professional rapid screening and data recording, volunteers closely tracked the types and quantities of river waste in the Dake River. The survey findings were shared with relevant authorities to serve as a scientific basis for subsequent cleanup and remediation efforts. By leveraging the power of citizen scientists, this initiative fosters ongoing, collaborative solutions to river waste through public-private collaborations.
Wugu Wetland Restoration	Nanya Technology mobilized employee volunteers and their families to work with the Society of Wilderness in restoring the Wugu Wetland. Together, they removed 115.4 kg of mikania vine, one of the world's 100 worst invasive alien species, cleared the reeds in the wetland, and restored the golden leather fern to create more habitat for crabs and other wildlife, thereby protecting biodiversity and the wetland ecosystem.

Ocean

Beach Cleanup	A low-carbon, low-plastic beach cleanup activity was held with 70 employees and their families participating. During the activity, employees brought their own water bottles to refill with on-site drinking water. The lunch boxes provided for the occasion also featured plastic-free rice dumplings. We aim to lead by example in minimizing waste. A total of 76.3 kg of trash was collected during the beach cleanup.



Mountain cleanup activities are held annually to raise awareness of the surrounding environment.



In addition to removing mikania vines and clearing the wetland of reeds, an initiative to restore the golden leather fern has been introduced this year to help maintain wetland biodiversity.

Hometown of

Environmental Advocacy and Education

Through education and action, Nanya Technology deepens understanding of ecology and transforms it into actions for change. By offering lectures and hands-on experiences, employees are able to recognize environmental issues and participate in protecting nature, contributing to a sustainable future.

Arbor Day	In collaboration with the Guishan District Office of Taoyuan City, corporate partners and local residents, native Chinese fringetrees were planted as a symbol of sustainability.
River Waste Training and Survey	In collaboration with Ming Chi University of Technology, the lecture explained the causes of river pollution and fostered the citizen scientist mindset.
"The Beauty and Sorrow of Wild Birds" Seminar	This seminar helps employees gain a deeper understanding of commonly seen wild birds near the Company's operational sites, including their behaviors and the challenges they face, thereby enhancing awareness of ecological conservation.
Volunteer Environmental Ecology Day	Organized in partnership with the Butterfly Conservation Society of Taiwan, this eco-camp promotes awareness of ecological conservation through family-friendly activities, fostering greater understanding of biodiversity.


Supporting tree planting initiatives.


Employees participated in river waste training and surveying.



"The Beauty and Sorrow of Wild Birds" seminar.


Volunteer Environmental Ecology Day.

Journey to Taishan—Coexistence with Culture and Nature

Culture and nature are the two pillars of local development. We partnered with Ming Chi University of Technology to preserve the traditional culture nurtured by Taishan's natural landscape. Together, we strive to keep local heritage and craftsmanship alive amid urban development, safeguarding the area's unique identity and history.

Taishan Renaissance Series



Nanya Technology and Ming Chi University of Technology have launched the "Taishan Renaissance Project." Guided tours and traditional craft workshops were held to preserve local heritage and increase public interest and participation.

Centering on temples, drum performances, and bamboo weaving:

Temples：Centered around Upper Taishan Temple, the project held calligraphy and sketching competitions to promote traditional culture.

Drum performances：Taishan is renowned for its traditional drum-making craft. Through events like the Taishan Drum Performance Competition and Taishan Prayer Drums Celebration, local drum troupes presented innovative performances that helped bridge cultural traditions across generations.

Bamboo weaving：In Dake Village, once known as the *Hometown of Bamboo*, traditional bamboo-woven objects are gradually being replaced by plastic products. Thus, a bamboo weaving workshop is held every year to give employees and the public the opportunity to experience the beauty of this traditional craft and to rekindle interest in the art of bamboo weaving.

Taishan Lion Dance Cultural Festival



The New Taipei City Taishan Lion Dance Cultural Festival, an important cultural event in the Taishan area, has been hosted annually by the Taishan District Office and Nanya Technology serves as a co-organizer. This event began as a celebration of the birthday of "Master Xianying," the main deity of both Upper Taishan Temple and Lower Taishan Temple (celebrated annually on September 18 in the lunar calendar). Due to the frequent inclusion of lion dance performances in temple celebrations, the Taishan Lion Dance Championship was created to showcase this cultural tradition. As the ceremonial activities grew larger, what started as a local cultural event has since 2006 evolved into Taiwan's landmark lion dance competition, the Taishan Lion King Championship, which has been held for 18 consecutive years. Nanya Technology has sponsored this traditional local event for 8 consecutive years.

According to the survey of the Taishan Prayer Drums Celebration, 70% of participants are local residents. The results reflect that community revitalization and development of natural and cultural heritage is closely tied to community engagement. These initiatives strengthen the connection with the community, and protect local culture and ecological resources. In the future, Nanya Technology will continue to strengthen interactions between nature and human rights, allowing culture and nature to develop together, and achieving sustainable coexistence and shared prosperity.

5 Targets and Indicators

Nanya Technology has set measurable targets for nature and climate actions. We use indicators to track progress, ensuring the effective implementation of sustainability strategies. These key performance indicators (KPIs) include greenhouse gas (GHG) emissions, water resource usage, and supply chain emission reductions. Nanya Technology continues to refine them in alignment with international standards to enhance its competitive edge in sustainability.

Setting Indicators Related to Nature and Climate

■ Table of Corresponding Targets and Indicators

Strategy	Topic	2025 Goals	2025 Performance	Goal Achievement	2026 Goals	2030 Goals
Mitigation and Transition	Focus on Development of Low-Carbon Products	Third-generation 10nm-class DRAM process and 16Gb DDR5 products meet shipping verification standards	Designs for early-stage third-generation 10nm-class DRAM products were completed in Q3 2025. The products are currently in pilot production.	Not achieved	Third-generation 10nm-class DRAM process and 16Gb DDR5 products meet shipping verification standards	Fourth-generation 10nm-class DRAM process and 16Gb DDR6 product development Introduction of EUV and HKMG technology
	Strategy for Production via Green Technology	12.5% reduction in 2025 Scope 1 and 2 emissions compared to 2020	Reduction of 11.2%	Not achieved[1]	Reduction of 15.0%	Reduction of 25.0%
		10.8% reduction in 2025 Scope 3 emissions per product unit compared to 2020	Increase 14.6%	Not achieved[1]	Reduction of 16.2%	Reduction of 27.0%
		≥ 93% reduction in process PFC emissions	93.6%	Exceeded goals	≧93%	≧93%
		Implementation of energy-saving measures that result in a cumulative energy savings of 75,000 MWh from 2017 to 2025	78,773 MWh	Exceeded goals	82,500 MWh	≧103,000 MWh
		Year-round renewable energy usage of ≥78,000 MWh (2.81×10^8 MJ)	80,160 MWh	Exceeded goals	90,000MWh	Renewable energy accounts for 25% of total electricity consumption

Strategy	Topic	2025 Goals	2025 Performance	Goal Achievement	2026 Goals	2030 Goals
Mitigation and Transition	Partners in Sustainability	100% use of conflict-free metals and responsibly sourced minerals	100%	Achieved	100%	100%
		100% improvement rate in the audit findings of high-risk sustainable suppliers	100%	Achieved	100%	100%
Resilience and Adaptation	Adaptation to Nature and Climate Change Risks	0 days of production interruption due to climate change-related disasters	0 days	Achieved	0 days	0 days
		The cumulative water consumption per unit of production capacity decreased by 35.5% compared to 2017.	34.0%	Not achieved[2]	≧35.5%	≧37.0 %
		Production losses due to water restrictions: 0 wafers	0 wafer	Achieved	0 wafer	0 wafer
Stakeholder Engagement	Nature and Climate Advocacy and Education	Climate change-related activities for all employees	Earth Hour 60 Earth Day 365	Achieved	Earth Hour 60 Earth Day 365	Earth Hour 60 Earth Day 365
		At least 5 volunteer projects related to nature themes	5 projects	Achieved	At least 5 projects	At least 5 projects

Note 1: In 2025, the recovery of the industrial economy caused greenhouse gas emissions to exceed the originally planned reduction scheme, resulting in the failure to meet the initially set annual carbon-reduction target.
Note 2: Due to an issue with the MBR membrane in the wastewater treatment system, the volume of reclaimed water was reduced, resulting in water consumption per unit of production capacity not meeting the target.

6 Appendix

A table of corresponding TCFD, TNFD, and GRI indicators, as well as relevant reference materials, is provided to ensure transparency and support stakeholder understanding of Nanya Technology's commitments and actions in nature and climate sustainability governance.

Appendix I—Table of Corresponding TCFD & TNFD Indicators

■ TCFD

Aspect	Information Disclosed	Chapter	Page
Governance	Description of the Board of Directors' oversight of climate-related risks and opportunities.	1-1	P.3
	Description of the role of the management in assessing and managing climate-related risks and opportunities.	1-1	P.3
Strategy	Description of the short-, medium-, and long-term climate-related risks and opportunities identified by the organization.	2-2	P.16-20
	Description of the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning.	1-2 2-2 2-4	P.20-26
	Description of the organization's resilience in its strategy, considering different climate-related scenarios (including a 2° C or severer scenario).	2-3	P.27-31
Risk Management	Description of the organization's process for identifying and assessing climate-related risks.	1-4	P.12-15
	Description of the organization's process for managing climate-related risks.	1-4	P.12-15
	Description of how the identification, assessment, and management processes for climate-related risks are integrated into the organization's risk management system.	1-1 2-2 2-4	P.2-6 P.21 P.50
Indicators and Targets	Disclosure of the indicators used by the organization to assess climate-related risks and opportunities in accordance with its strategy and risk management processes.	5	P.67-68
	Disclosure of GHG emissions and related risks for Scope 1, Scope 2, and Scope 3 (if applicable).	2-4	P.35
	Description of the targets used by the organization to manage climate-related risks and opportunities, as well as its performance in implementing these targets.	5	P.67-68

■ TNFD

Aspect	Information Disclosed	Chapter	Page
Governance	Description of the Board of Directors' oversight of the organization's dependencies, impacts, risks, and opportunities related to nature.	1-1	P.3
	Description of the role of management in assessing and managing the organization's dependencies, impacts, risks, and opportunities related to nature.	1-1	P.3
	Description of the organization's human rights policies and engagement activities in relation to assessing and responding to nature-related dependencies, impacts, and risks, as well as the Board of Directors and management's oversight of and opportunities for indigenous peoples, local communities, affected parties, and other stakeholders.	1-3	P.10-11
Strategy	Description of the organization's dependencies, impacts, risks, and opportunities related to nature identified in the short, medium, and long term.	2-2	P.16-20
	Description of the impact of nature-related dependencies, impacts, risks, and opportunities on the organization's business model, value chain, strategy, and financial planning, including any transition plans or analyses.	1-2 2-2 2-4	P.20-26
	Description of the adaptability of the organization's strategy to nature-related risks and opportunities depending on different scenarios.	2-3	P.27-31
	Disclosure of the locations of assets and/or activities within the organization's direct operations and, where possible, the upstream and downstream value chain that meets priority location criteria.	3-1	P.52-56
Risk Management	1. Description of the organization's process for identifying, assessing, and prioritizing nature-related dependencies, impacts, risks, and opportunities in its direct operations. 2. Description of the organization's process for identifying, assessing, and prioritizing nature-related dependencies, impacts, risks, and opportunities in its upstream and downstream value chain.	1-4 2-1	P.12-15 P.15-19 P.52-56
	Description of the organization's process for monitoring nature-related dependencies, impacts, risks, and opportunities.	1-4	P.12-15
	Description of how the process of identifying, assessing, prioritizing, and monitoring nature-related risks is integrated into the organization's risk management process and how it informs this process.	1-1 2-2 2-4	P.2-6 P.21 P.50
Indicators and Targets	Disclosure of the indicators the organization uses to assess and manage nature-related risks and opportunities, based on its strategy and risk management processes.	5	P.67-68
	Disclosure of the indicators the organization uses to assess and manage its dependencies on and impacts on nature.	2-4	P.35
	Description of the goals the organization sets to manage nature-related dependencies, impacts, risks, and opportunities, as well as its performance in implementing these targets.	5	P.67-68

Appendix II—Table of Corresponding GRI Standards

■ GRI 101: Biodiversity 2024 Index

Aspect	Information Disclosed	Chapter	Page
Topic Management Disclosure	101-1 Policies to halt and reverse biodiversity loss	1-1	P.3
	101-2 Management of biodiversity impacts	4-1 4-3	P.63-66
	101-3 Access and benefit-sharing	-	-
Topic Disclosure	101-4 Identification of biodiversity impacts	2-1	P.15-19
	101-5 Locations with biodiversity impacts	2-1	P.15
	101-6 Direct drivers of biodiversity loss	2-1	P.19
	101-7 Changes to the state of biodiversity	2-1	P.16-19
	101-8 Ecosystem services	1-4	P.15

■ GRI 102: Climate Change 2025 Index

Aspect	Information Disclosed	Chapter	Page
Topic Management Disclosure	102-1 Transition plan for climate change mitigation	1-1 1-2 1-3	P.3 P.8-9 P.11
	102-2 Climate change adaptation plan	1-1 1-2 2-2	P.3 P.8-9 P.26
Topic Disclosure	102-3 Just transition	1-2 1-3	P.9-11
	102-4 GHG emissions reduction targets and progress	2-4	P.37
	102-5 Scope 1 GHG emissions	2-4	P.34-35
	102-6 Scope 2 GHG emissions	2-4	P.34-35
	102-7 Scope 3 GHG emissions	2-4	P.36
	102-8 GHG emissions intensity	2-4	P.35
	102-9 GHG removals in the value chain	-	-
	102-10 Carbon credits	4-2	P.64

■ GRI 103: Energy 2025 Index

Aspect	Information Disclosed	Chapter	Page
Topic Management Disclosure	103-1 Energy policies and commitments	2-4	P.39
Topic Disclosure	103-2 Energy consumption and self-generation within the organization	2-4	P.40
	103-3 Upstream and downstream energy consumption	2-4	P.40
	103-4 Energy intensity	2-4	P.40
	103-5 Reduction in energy consumption	2-4	P.41-42

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