

Green Production

The issue of climate change is one of the environmental issues that the United Nations, governments, society and business are concerned about at this stage. According to the "Task Force on Climate-related Financial Disclosures Recommendation (TCFD)" Largan formulated its corporate governance, strategy, risk management and objectives as follows:

6-1 Climate Action

● TCFD Disclosure Framework

The Intergovernmental Panel on Climate Change (IPCC) released its Sixth Assessment Report (AR6) in 2021, indicating that global warming in the near term (by 2040) may lead to more extreme environmental variations. To address the challenges posed by climate change and enhance corporate climate resilience, Largan has adopted the Task Force on Climate-related Financial Disclosures (TCFD) framework. Through the four core elements—governance, strategy, risk management, and metrics and targets—the Company has established a governance structure to identify, assess, and manage climate-related risks and opportunities, integrate climate-related topics into decision-making processes, and determine factors that may affect future business operations in order to develop corresponding strategies. To further strengthen climate-related risk management mechanisms, the Board of Directors, as the Company's highest governance body, makes decisions and provides guidance, ensuring smooth top-down and bottom-up communication across all management levels and effective execution of strategies.

Governance	<ul style="list-style-type: none"> • The ESG Committee resolves and supervises the Company's climate and environmental management policies, formulates, and guides the execution of climate governance strategies by each department. • The Sustainability and Risk Management Section is responsible for establishing risk management mechanisms and processes. • The Corporate Governance Section promotes the linkage between sustainability goals and performance outcomes. • The ESG Committee collects and evaluates climate-related risks and opportunities, and, based on the assessment results, formulates energy-saving and carbon-reduction plans for implementation across all departments. 	Risk Management	<ul style="list-style-type: none"> • Quantitative impacts on the Company are evaluated to jointly develop risk management directions and response plans. • Climate-related risks and opportunities are incorporated into the Company's overall enterprise risk management, overseen by the Sustainability and Risk Management Section.
Strategy	<ul style="list-style-type: none"> • All governance units continuously monitor global climate trends and benchmark against industry peers to evaluate the Company's short-, medium-, and long-term climate-related risks and opportunities. • Climate scenario analysis is applied to assess risk factors under global climate change, disclosing the Company's resilience to climate-related risks and opportunities. 	Metrics and Targets	<ul style="list-style-type: none"> • The ESG Committee develops climate-related metrics and targets. • The Environmental Section supports all departments in implementing energy-saving and carbon-reduction plans, regularly reviewing execution results, and completing the annual greenhouse gas inventory.

6-1-1 Governance

● Climate Governance Structure

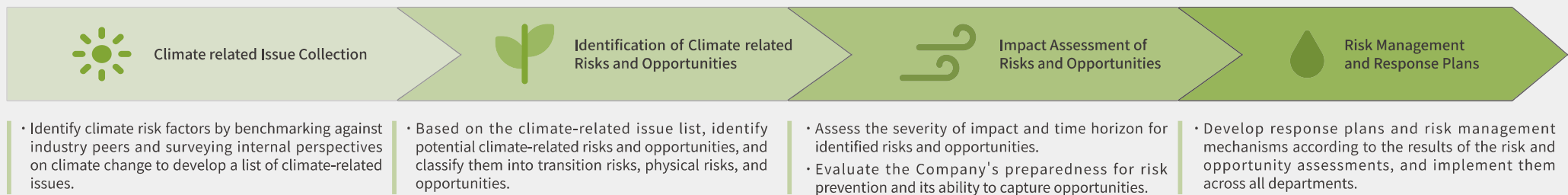
Facing the challenges of climate change, establishing a sound climate governance structure has become an urgent priority for corporations. Largan implements clear organizational structures to ensure execution in alignment with governance hierarchy, proactively addressing climate risks and opportunities. The Board of Directors sets climate and environmental management policies, while the ESG Committee and the Sustainability and Risk Management Section supervise the Corporate Governance, Economic, Environmental, and Social Sections in executing climate change response programs. Cross-departmental collaboration is conducted across environmental management, social initiatives, and corporate governance to comprehensively advance sustainability governance goals.

6-1-2 Strategy and Risk Management

● Climate-related Risks and Opportunities

Largan annually reviews and monitors international and industry trends in climate-related topics. Through a risk identification and assessment process, the Company systematically identifies climate-related risks and opportunities, evaluates their impact level and potential influence, and develops appropriate response plans to strengthen corporate climate resilience while maintaining optimized process execution.

● Climate-related Risk Identification and Management Process



6-1-3 Results of Climate-related Risk and Opportunity Identification

Under the supervision of the Board of Directors, Largan identifies three transition risks, two physical risks, and two opportunities based on the duration of impact and level of severity for each risk. These results provide internal reference to enhance understanding of the climate change challenges faced by the Company, monitor the implementation status of climate-related risk management, and facilitate collaborative discussion on the feasibility of risk management planning and response measures.

(1) Climate-related Risk Response Plans

Impact Dimensions	Impact Aspect	Climate Risks	Impact Duration	Impact Description	Risk Management and Response Plans
Transition Risks	Electricity Consumption Risk	Electricity Price Increases Taiwan's overall electricity demand has increased year by year. Combined with fluctuations in international fuel prices, this has led to higher summer peak loads, resulting in greater pressure on power supply and increased power generation costs. Electricity price adjustments have become a key variable in corporate operating costs.	Short	<ul style="list-style-type: none"> Rising electricity costs affect the manufacturing cost structure and require payment of carbon emission fees. Risk of power rationing during peak electricity demand periods. 	<ul style="list-style-type: none"> Implement high-efficiency air-conditioning, process cooling, and lighting systems (e.g., variable-frequency air compressors and LED lighting). Regularly monitor electricity prices, temperature trends, and policy developments.
	Regulations and Policies	Carbon Pricing Taiwan's carbon fee mechanism will take effect in 2025, and the EU Carbon Border Adjustment Mechanism (CBAM) will be officially implemented in 2026. Enhanced Disclosure Requirements Domestic and international requirements for greenhouse gas emissions reporting and disclosure are increasing.	Short	Additional resources are needed to enhance greenhouse gas inventory capabilities, leading to increased costs.	Since 2020, Largan has conducted greenhouse gas (GHG) inventories in accordance with ISO 14064-1:2018 standards and established a "GHG Inventory Task Force" to track overall emissions and develop preventive measures for climate change.
	Supply Chain and Raw Materials	Fluctuations in Critical Materials <ul style="list-style-type: none"> As corporations' advance energy transition initiatives, market demand for certain critical materials is growing. Environmental policies and carbon pricing mechanisms are driving up production costs for critical materials. Supply chains are affected by extreme weather events, impacting supply capacity. 	Short	<ul style="list-style-type: none"> Fluctuations in critical material prices necessitate sourcing alternative materials, increasing procurement costs. Climate impacts on the supply chain may cause production line disruptions, resulting in delivery delays that affect both costs and revenue. 	<ul style="list-style-type: none"> Diversify sources of supply to avoid reliance on raw materials from a single region. Select quality local suppliers to reduce transportation costs and carbon footprint. Identify suppliers with high climate risk exposure and enhance their capabilities to address climate change risks. Seek low-carbon manufacturing partners to strengthen the resilience of the sustainable supply chain.

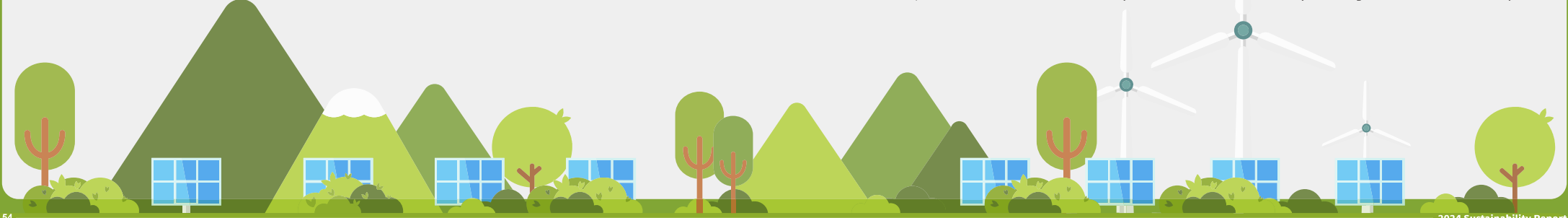
Impact Dimensions	Impact Aspect	Climate Risks	Impact Duration	Impact Description	Risk Management and Response Plans
Physical Risks	Immediate	Intensified Natural Disasters Increased frequency of typhoons and heavy rainfall events.	Short	Risks such as production line interruptions and equipment damage increase operating costs and reduce production capacity.	<ul style="list-style-type: none">Assess whether plant locations face potential compound natural disaster risks and conduct scenario simulations for corresponding response plans.Regularly inspect emergency power systems and uninterruptible power systems, and install water storage systems to ensure stable water and power supply during disasters; regularly check plant drainage facilities to prevent blockages.Establish an emergency response team to develop disaster response measures promptly in the event of natural disasters.
	Long-term	Extreme Climate Variability Water shortages and changing rainfall patterns.	Medium	Potential flooding at plant sites or insufficient water supply could increase costs.	

(2) Climate-related Opportunities and Response Plans

Note: Impact Duration: Short-term refers to 1–3 years; Medium-term refers to 4–7 years; Long-term refers to more than 7 years.

Impact Dimensions	Climate Opportunities	Impact Duration	Impact Description	Risk Management and Response Plans
Opportunities	Energy Conservation Develop energy-saving plans, promote paperless operations, phase out high-energy-consuming equipment, and implement water conservation improvement programs.	Short	Energy-saving plans reduce resource consumption.	<ul style="list-style-type: none">Continue to promote the importance of water and electricity conservation across all departments to foster sustainability awareness. Adjust temperature settings or install timers to reduce power consumption during operation.Promote e-systems to reduce paper consumption.Install a power monitoring system to promptly address any anomalies and reduce energy loss.Install water-saving equipment and regularly record and analyze water usage. Inspect and immediately repair if anomalies are detected.Replace high-energy-consuming and outdated equipment.In 2018, the plant located at No. 13, Jingke Road, Taichung, obtained a Green Building Label. The feasibility of adopting green building methods will be considered for all future plant constructions.
	Use of Alternative Energy Adopt green electricity and low-carbon energy, and install renewable energy facilities (such as solar photovoltaic systems).	Short	Increase revenue from energy generation.	

Note: Impact Duration: Short-term refers to 1–3 years; Medium-term refers to 4–7 years; Long-term refers to more than 7 years.



6-1-4 Climate Scenario Analysis

To assess the potential impacts of future carbon pricing changes on the Company's transition and physical risks, Largan referenced the Representative Concentration Pathways (RCPs) and temperature rise projections defined in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) when evaluating physical risks. Scenario settings were developed to analyze the impacts of extreme climate change—such as sea level rise, water scarcity risk, and changes in rainfall patterns—on Largan. Through climate scenario simulations, the Company formulates strategies and plans to respond to future risks, thereby reducing the potential for overall financial loss.

(1) Transition Risk Scenario Analysis: Carbon Pricing

Carbon pricing is a key policy tool for addressing climate change and has become a major factor affecting corporate policy and operational finance globally, both now and in the future. Using the Company's 2023 GHG inventory results as the baseline, the financial impacts of carbon pricing are as follows:
Largan's combined Scope 1 and Scope 2 GHG emissions in 2023 totaled 164,275.322 metric tons CO₂e. Based on Taiwan's latest announced carbon fee—NT\$300 per metric ton for entities not participating in voluntary reduction programs—the estimated carbon fee payable in the first year of implementation is approximately NT\$26.78 million. This constitutes a material risk.
Note: Calculations are based on 2023 Scope 1 and Scope 2 GHG emissions, without assuming any future carbon reduction target pathway.

Analysis results indicate that future carbon pricing will directly impact Largan's carbon emission costs. The Company conducts annual GHG inventories and third-party verification in accordance with ISO 14064-1:2018. Based on inventory results, Largan sets carbon reduction targets aimed at achieving net-zero emissions and formulates appropriate reduction strategies. The inventory results show that Scope 2 (energy indirect) emissions account for the largest share of the Company's total emissions. As a result, energy conservation has been prioritized. Measures include incorporating solar power installations in new plant construction plans, replacing lighting equipment at all sites with energy-efficient LED and sensor lighting, and setting an annual energy-saving target of over 1.5 million kWh.

(2) Physical Risk Scenario Analysis: Long-term – Water Scarcity Risk

The water scarcity risk assessment applied the World Resources Institute (WRI) Aqueduct Water Risk Atlas to project water stress levels for 2030 and 2050 under RCP 2.6 (low GHG emissions scenario, optimistic) and RCP 8.5 (high GHG emissions scenario, pessimistic). The data indicate that, under both scenarios, all sites would experience low to medium (10–20%) water stress, suggesting generally stable water supply conditions, though slight water stress could still occur during dry seasons.
Although the assumed scenarios indicate relatively low water risk, Largan adopts precautionary measures and promotes water conservation by planning both supply-expansion and demand-reduction strategies. These include maintaining an average process water recycling rate of over 99%, reusing recycled water in cooling towers and for process purposes to reduce raw water usage, installing water-saving devices, optimizing water efficiency in offices and plants, and regularly monitoring water consumption data to enable reasonable allocation without affecting production. In addition, the Company will continue to monitor climate change trends, evaluate the necessity of installing water storage systems, and strengthen its adaptive capacity to climate change.

(3) Physical Risk Scenario Analysis: Long-term – Changes in Rainfall Patterns Potentially Leading to Plant Flooding

The rainfall pattern change analysis adopted scenarios of 1.5° C and 2° C temperature increases, using "R200mm heavy rainfall days" (days with more than 200 mm of rainfall in a single day within one year) as the analysis indicator. The projections are based on the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP):

Plant Location		The Taichung City Precision Machinery Innovation Technology Park	Taichung Industrial Park
Assumed Data	Observation Baseline (days)	0.4	0.6
Warming Scenario	Data Indicator		
1.5°C	75th Percentile Value	0.2	0.2
	Maximum Value	0.6	0.6
2°C	75th Percentile Value	0.2	0.2
	Maximum Value	0.6	0.6
Projected Impact		Limited Impact	

Although the projections show no significant impact, Largan continues to closely monitor surrounding watershed levels and track changes in rainfall patterns in response to changes in precipitation. The Company conducts an annual emergency response drill to ensure that employees are familiar with evacuation and equipment protection procedures, and completes an annual inventory and preparation of flood prevention materials. In addition, the Company enhances protection for key production equipment by relocating critical instruments and equipment to higher positions and ensuring proper insulation of power systems to prevent electrical leakage in the event of water ingress. Each year, Largan also evaluates the need for installing floodgate systems at its plants, and allocates pumps and emergency power supply equipment. Through these response measures, Largan proactively strengthens corporate climate resilience and prepares thoroughly to address various challenges posed by climate change.

6-1-5 Internal Carbon Pricing

To enhance the effectiveness of climate change management and strengthen the decision-making basis for low-carbon transition, Largan plans to evaluate the implementation of an "Internal Carbon Pricing" mechanism to assess in advance the potential impacts of future carbon price increases on the Company's operations.

6-1-6 Metrics and Targets











Largan has established the following climate- and environment-related metrics and targets. The detailed implementation status for each metric is provided in the subsequent sections of this chapter.

The short-, medium-, and long-term environmental management targets for addressing climate change are shown in the table below:

	Short-Term (2024~2025)	Medium-Term (2026~2029)	Long-Term (2030 and Beyond)
Energy Saving and Carbon Reduction	Target electricity saved: 1.5 million kWh/ year	2026~2027Y : Electricity savings: 1.5 million kWh / year 2028~2029Y : Electricity savings: 2 million kWh / year	Target electricity saved: 2 million kWh/ year
	Greenhouse gas emission reduction: 750 tons CO ₂ e/year	2026~2027Y : 750 metric tons CO ₂ e / year 2028~2029Y : 1,000 metric tons CO ₂ e / year	1,000 tons CO ₂ e/year
	Installation of 1,100 kW solar photovoltaic capacity in new plant construction, and purchase of renewable energy equivalent to 10% of contracted consumption. (Project in progress, expected completion by 2027 – current implementation status to be supplemented)	By 2028, purchase renewable energy equivalent to more than 10% of contracted consumption, with potential increases depending on renewable energy market supply conditions.	Purchase renewable energy equivalent to more than 10% of contracted consumption, with potential increases depending on renewable energy market supply conditions.
Waste Management	Proportion of waste sent to incineration or landfill: ≤ 7%	Proportion of waste sent to incineration or landfill: ≤ 5%	Proportion of waste sent to incineration or landfill: ≤ 5%
	Proper disposal: all waste is 100% taken care of by the legitimate professionals	Proper disposal: all waste is 100% taken care of by the legitimate professionals	Proper disposal: all waste is 100% taken care of by the legitimate professionals
Water Resource Management	Recycled water usage: 1,300 CMD	Recycled water usage: 1,300 CMD	Recycled water usage: 1,300 CMD
	Precision Machinery Park Water Recycle Rate Inspection: Recycle rate of the whole factory is 94% Recycle rate during production is 99%	Precision Machinery Park Water Recycle Rate Inspection: Recycle rate of the whole factory is 94% Recycle rate during production is 99%	Precision Machinery Park Water Recycle Rate Inspection: Recycle rate of the whole factory is 94% Recycle rate during production is 99%
Regulatory Compliance	No violations of air pollution Regulations: 0 cases	No violations of air pollution Regulations: 0 cases	No violations of air pollution Regulations: 0 cases
	No violation of sewage discharge in compliance with regulations: 0 cases	No violation of sewage discharge in compliance with regulations: 0 cases	No violation of sewage discharge in compliance with regulations: 0 cases
	No violation of waste regulations: 0 cases	No violation of waste regulations: 0 cases	No violation of waste regulations: 0 cases

● Performance and Goal of Material Topics

Largan is committed to fulfilling its environmental protection responsibilities and becoming a sustainable enterprise with the aim to make continuous improvement. The overall performance of energy conservation and carbon reduction in the last two years based on the short-, medium-, and long-term objectives with the aim to reduce the impact on society and the environment is as shown in the table.

	2024 Target Performance	2024 Achieving Status	2025 Target Performance
Energy Saving and Carbon Reduction	Target electricity saved: 1.5 million kWh	 759.2 million kWh → Achieved	1.5 million kWh
	Green House Gas emission reduction: 750 tons CO ₂ e/year	 3,751 tons CO ₂ e/year → Achieved	Green House Gas emission reduction: 750 tons CO ₂ e/year
Waste Management	The proportion of incineration and landfill disposal waste reduced to ≤ 7%	 6.75% → Achieved	The proportion of incineration and landfill disposal waste reduced to ≤ 7%
	Waste Disposal: 100% managed by legitimate business	 100% → Achieved	Waste Disposal: 100% managed by legitimate business
Water Resource Management	Usage of recycled water up to 1,300 CMD	 2,626CMD → Achieved	Usage of recycled water up to 1,300CMD
	Precision Machinery Park Water Recycle Rate Inspection: Recycle rate (R2) of the whole factory is 94% Recycle rate during production is 99%	 Recycle rate (R2) of the whole factory is 95.8% → Achieved  Recycle rate during production is 99.1% → Achieved	Precision Machinery Park Water Recycle Rate Inspection: Recycle rate (R2) of the whole factory is 94% Recycle rate during production is 99%
Regulatory Compliance	No violation of air pollution protection regulations: 0 cases	 0 → Achieved	No violation of air pollution protection regulations: 0 cases
	No violation of waste regulations: 0 cases	 0 → Achieved	No violation of waste regulations: 0 cases
	No violation of sewage discharge in compliance with regulations: 0 cases	 0 → Achieved	No violation of sewage discharge in compliance with regulations: 0 cases

Note: The calculation of the recovery rate is taken from the Regulations for Review of Water Usage Plan.

● Environmental Risk

Major Risks	Energy Saving & Carbon Reduction	Waste Management	Water Resource Management
Management Measures	<ul style="list-style-type: none"> • In 2024, ISO 14064-1: 2018 greenhouse gas inventory was conducted, and verification was completed in accordance with the Ministry of Environment's policies. • The goal of energy saving and carbon reduction is by saving at least 1 million kWh/ year through industrial site landscaping and facilities improvement• Promote paperless policy to reduce paper usage. • Bring our own environmentally friendly tableware to reduce usage of disposable utensils. • Green building planning aims to effectively control carbon emissions. 	<ul style="list-style-type: none"> • The total weight of waste produced in 2024 is 5,065.33 tons. • Establish "Industrial Waste Management Regulation" to standardize the procedures for the classification, collection, storage, and treatment of industrial waste. • 93.25% of processed raw materials/ wastes in the factory that were meant for incineration can be recycled and reused. 	<ul style="list-style-type: none"> • Maximize the efficiency of water resource utilization through recycling, water quality diversion, and pollution prevention, with the goal of achieving a 94% water recycling rate (R2) and maintaining a process water recovery rate of over 99%.(The calculation of the recovery rate is taken from the Regulations for Review of Water Usage Plan)