2023 Task Force on Climate-Related Financial Disclosures Report

南山人壽
Nan Shan Life

CONTENTS

Message from the Chairman

Climate change is driving global warming and increasing frequency of natural disasters. Furthermore, it also poses a significant threat to human health worldwide. As the insurance industry deeply interconnected with people and the environment and possesses a profound understanding of risks, it is imperative for us to address climate change proactively through our operations, investments and finance.

In 2023, Nan Shan Life took a decisive step toward achieving net-zero emissions by committing to the Science Based Targets initiative (SBTi). By August 2024, we became the first life insurance company in Taiwan to pass SBTi validation. This milestone underscores our commitment to meaningful, science-based climate action. Additionally, in 2024, we joined the Taiwan Net Zero Emissions Association, pledging to achieve RE50 by 2030 and RE100 by 2040. In the same year, Nan Shan Life received the “Green Level” certification from the Taiwan Alliance for Net Zero Emission, further affirming our ambition to reach company-wide net zero emissions by 2050.

To ensure we are prepared for the challenges ahead, Nan Shan Life has established a TCFD team to develop a comprehensive climate governance framework and strategy. This structure enables us to proactively identify risks and opportunities associated with climate change, track progress on climate strategies, and strengthen our resilience in an era of uncertainty. We have set short-, medium-, and long-term environmental sustainability goals including greenhouse gas reduction targets, energy-saving initiatives in offices, the installation of self-built solar panels, and the rollout of paperless insurance policies and services. Through these practical actions, we uphold our commitment to protecting the environment and creating lasting impact.

Nan Shan Life takes pride in its role as a leader in sustainable health. We remain steadfast in our focus on health risks and enhancing climate resilience while actively participating in global discussions, such as the World Climate Summit, for two consecutive years. Furthermore, we are working closely with partners across the value chain to mitigate and adapt to the impacts of climate change. Together, we aim to build a healthier, more sustainable future.

Chairman, Nan Shan Life Insurance Co., Ltd
Convenor of the Corporate Sustainability Committee

About This Report

According to “The Global Risks Report 2024” released by the World Economic Forum (WEF), the top four risks facing the world over the next decade are all related to the environment, with extreme weather events topping the list, followed by Critical change to Earth systems, Biodiversity loss and ecosystem collapse, and Natural resource shortages. Climate-related threats have become the major risks facing the world, and how to cope with the impact of climate change is an important issue that the world needs to face together.

In recent years, governments around the world have actively formulated regulations to strengthen their efforts to combat climate change. As one of the influential financial institutions, Nan Shan Life has been committed to international sustainability topics and actively responds to the impact that global climate-related issues may have on the Company. Nan Shan Life and Nan Shan General (hereinafter referred to as “Nan Shan”) , based on the “Taiwan's Pathway to Net-Zero Emissions in 2050" published by the Taiwan government and the disclosure framework form Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) released by the Financial Stability Board (FSB), implement the governance and strategies adopted by the Company in addressing climate related issues, identify and respond to material climate related risks and opportunities in our business operations, set relevant metrics and targets, and regularly track management performance, to continuously increase the Company's climate resilience. Through the disclosure of relevant information, this Report is expected to help interested stakeholders understand how Nan Shan will respond to the potential impact of climate-related issues on the Company.

Scope of Disclosure

The scope of disclosure for this Report encompasses Nan Shan Life and its subsidiary Nan Shan General (herein-after referred to as “Nan Shan”), as well as their associated operations in Taiwan.

Disclosure Period

The information disclosed in this Report covers the period from January 1 to December 31, 2023 and includes some events that occurred during the compilation period of this Report (2024) as well as supplemental information on climate-related actions and performance for previous years.

Compilation Principles

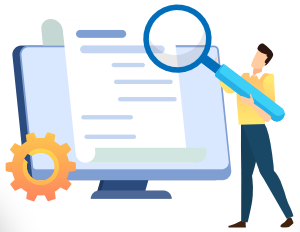
Task Force on Climate-Related Financial Disclosures (TCFD)

Nan Shan Climate Governance Milestones

Nan Shan established its TCFD Team in the second half of 2020 and has built a climate-related risk and opportunity management framework in accordance with TCFD recommendations. The TCFD Team regularly reports the implementations of relevant management measures to the Board.

2015

- Introduced and implemented the ISO 14064-1 GHG inventories.



2016

- Completed the ISO 14064-1 GHG inventory verification.
- Nan Shan General launched “additional terms for residential green energy upgrades” for low-carbon insurance products.

2018

- Nan Shan Life introduced the ISO 14067 carbon footprint standard.
- Obtained carbon footprint label certificates from SGS-Taiwan and Environmental Protection Administration (EPA), becoming the first insurance company in the world to receive dual product carbon footprint certification.

2019

- Nan Shan Life introduced the “PAS 2060 Carbon Neutral Implementation Standard” for micro-insurance policies.

2020

- Established climate governance framework and formed the TCFD Team.
- Compliance with TCFD recommendations was verified by SGS-Taiwan, an independent third-party verification institute, and a practitioner certificate was obtained.

2021

- Received Bronze Environmental Sustainability Award at the first Taiwan Sustainability Action Awards.
- Nan Shan General introduced the ISO 14067 carbon footprint standard.
- Nan Shan General introduced the “PAS 2060 Carbon Neutral Implementation Standard” for electronic insurance policies.
- Invested in establishment of green power generation systems.

2022

- Used the Partnership for Carbon Accounting Financial (PCAF) methodology to calculate GHG emission of investment portfolios.
- Assessed solar power generation benefits of self-owned buildings.

2023

- Signed SBTi (Science Based Targets initiative) commitments and completed the targets setting for carbon reduction. Officially passed SBTi validation in August 2024, becoming the first life insurance company in Taiwan that has passed the validation.
- Nan Shan Life joined “Taiwan Net Zero Emissions Association” in 2024, pledging to achieve RE50 by 2030 and RE100 by 2040. In the same year, Nan Shan Life received the “Green Level” certification from the Taiwan Alliance for Net Zero Emission, further affirming our ambition to reach company-wide net zero emissions by 2050.

Performance of the Year

Low-Carbon Insurance

63%

- Nan Shan General continues to launch green insurance products(1) related to climate and environment, and the annual increase rate of premium income hit 63% in 2023.

(1) : Green insurance products are defined by Taiwan Insurance Institute (TII), and the relevant calculations and data presentation are conducted in accordance with the TII's standards.

98sessions

- For its large enterprise customers, Nan Shan General conducts damage prevention publicity activities corresponding to common risks to improve the response ability in the face of various risks, including on-site risk inspection and identification or safety lectures, and infrared thermal imaging detection of electrical equipment. A total of 98 sessions were provided in 2023 and helped customers identify 159 risk points that needed to be tracked or improved immediately.

47times

- In 2023, Nan Shan General actively provided insurance services for a number of electronic energy storage, solar power plants, offshore wind power, etc., and the number of insurance policies increased 2 times, and the total amount increased 47 times.

Low-Carbon Economy

8.961billion

- The amount of investment in sustainable development bonds such as green bonds and sustainability bonds reached NT $8.961 billion.

100%

- Shareholder meetings' motions were discussed to evaluate sustainability topics one by one, and both the attendance rate and the voting rate of the motions reached 100%.

Talents Cultivation

273.89%

- Net-zero sustainable finance talent training hours increased by 273.89%.

Sustainable Procurement

ISO 20400

- Introduced and implemented the ISO 20400 Sustainable Procurement Guidance .

Participation in Domestic and International Events and Initiatives

First to Attend the WCS

- First insurance company in Taiwan to participate in the World Climate Summit (WCS).

First to Pass SBTi Validation

- First insurance company in Taiwan to pass SBTi validation in 2024.

Net Zero Green Level Certification

- Officially received the certification of the Net Zero Green Level issued by Taiwan Alliance for Net Zero Emission in 2024.

Low-Carbon Operations

Carbon Reduction Label

- Obtain the Carbon Reduction Label for Life Insurance Services in 2023.

415,355kWh

- The use of renewable energy reached 415,355 kWh of green electricity, and the carbon reduction was about 205.601 tCO_{2e}.

Governance

ONE

1

1.1 Climate Governance Framework

1.1 Climate Governance Framework

1.1.1 Board Oversight

The Board of Directors is the highest supervisory unit for climate-related issues of Nan Shan Life, and is responsible for approving climate-related risk management policies and climate-related risk appetite statement. The Board's functional committees, the Risk Management Committee and the Corporate Sustainability Committee, are separately responsible for regularly monitoring the implementation of climate-related risk and opportunity management (including the implementation of climate-related metrics and targets) and taking climate-related risks and opportunities into account in the operational and investment management structures. To ensure that the Board of directors have an appropriate understanding of climate-related risks and opportunities, the Company arranges for Board members to participate in training on climate-related topics to understand international trends in climate-related management.

To effectively manage the potential impact of physical and transition risks in the future, Nan Shan Life has developed a climate-related risk appetite statement. In line with "Taiwan's Pathway to Net-Zero Emissions in 2050" published by the Taiwanese government and is based on SBTi commitments, the Company will continue to assess the impact of physical risks and transition risks on its assets and liabilities, to continuously improve its climate risk management capabilities. In addition, to achieve effective climate change and sustainability governance and culture, Nan Shan will continue to integrate climate-related factors into annual performance review of the relevant departments promoted or implemented actions for climate-related risks or opportunities.

1.1.2 Senior Management

The President supervises and assigns the Climate-Related Financial Disclosure Team (TCFD Team) and the working team under Corporate Sustainability Committee (the Corporate Sustainability Executive Team) to be separately responsible for planning and executing management of climate-related risks and opportunities during the year, identifying potential risks and opportunities related to climate change each year, discussing and evaluating the impact of climate-related risks on different businesses, developing relevant response measures, and reporting annual execution results to the President, Risk Management Committee and Board of Directors at least once a year.

1.1.3 Competency Training

To ensure that directors and senior management have better knowledge of climate-related risks and opportunities, Nan Shan invites external consultants to provide training to Board members and senior management on climate-related issues. In 2023, Board members completed 3 hours of training course designed for directors. Meanwhile, senior management completed 3 hours of training on climate-related risk governance and carbon management in the financial industry.

In addition, to continuously cultivate the climate-related risk management capabilities of the TCFD Team and departmental risk management supervisors, and enhance the awareness of all staff members on climate-related risk management, a total of 12 issues of Nan Shan Sustainability e-newsletter were published in 2023, of which 4 issues were related to climate-related risk and opportunity topics such as environment, climate change and green finance. Meanwhile, the Company also provided a compulsory online e-Learning risk management training course and 4 elective climate-related courses to communicate and publicize the relevant trends of climate change and Nan Shan's response actions. At the same time, relevant internal and external training courses have been continuously arranged for talents of Net-Zero sustainable finance, and the training hours increased by 273.89% in 2023.

Board of Directors

Highest supervisory unit for climate-related issues

TCFD Team identifies climate-related risks that may cause short/ medium/long term business/financial impacts on the company

Risk Management Committee

Climate-related "risks" coordinated by the Risk Management Department

Transition Risks
- Policy and Legal
- Technology
- Market
- Reputation

Physical Risks
- Acute
- Chronic

Risks | **Opportunities**

Strategic Planning

Risk Management

Financial Impact

Corporate Sustainability Committee

Climate-related "opportunities" coordinated by the Sustainable Innovation and Development Department

Opportunities
- Resource Efficiency
- Energy Source
- Products and Services
- Markets
- Resilience

TCFD Team identifies climate-related opportunities that may cause short/ medium/long term business/financial impacts on the company

Strategy

Two

2

The year 2023 marked the 60th anniversary of the founding of Nan Shan Life. In the face of challenges such as an aging global population and low birthrate, climate change and intensified health risks, and political and economic turbulence at home and abroad, we, at Nan Shan Life, have continued to uphold our value of “being people-oriented” and to “whole-heartily” focus on the H.E.A.R.T., the five sustainability strategic themes (“Health” for health promotion, “Earth” for earth protection, “Action for Good” showing our love and care, “Reliability” by fulfilling our commitment, and “Talent” for talent empowerment) to promote sustainable practices of Nan Shan Life.

Climate change has affected human living environment and is directly posing threats to human health. At present, Nan Shan has more than 6.65 million policyholders, which means that about one quarter of Taiwan people are customers of our Company. Nan Shan understands that only by returning to the essence of insurance protection, implementing asset and liability management, providing appropriate insurance products and services from the perspective of customers and market needs, and actively transforming products and channels, can we better response to the challenges we face.

In the face of the uncertainty brought by climate-related risks, Nan Shan continues to promote “energy conservation and carbon reduction”, “energy management” and “green building” programs to achieve environment sustainable management. At the same time, based on the Principles for Responsible Investment, Nan Shan actively moves from ESG investments that “do not cause negative social and environmental impacts” to impact investments that “create positive social and environmental impacts” to help stakeholders reduce the impact of climate-related risks on them, explore new investment and industrial opportunities, and promote a low-carbon transition in the society.

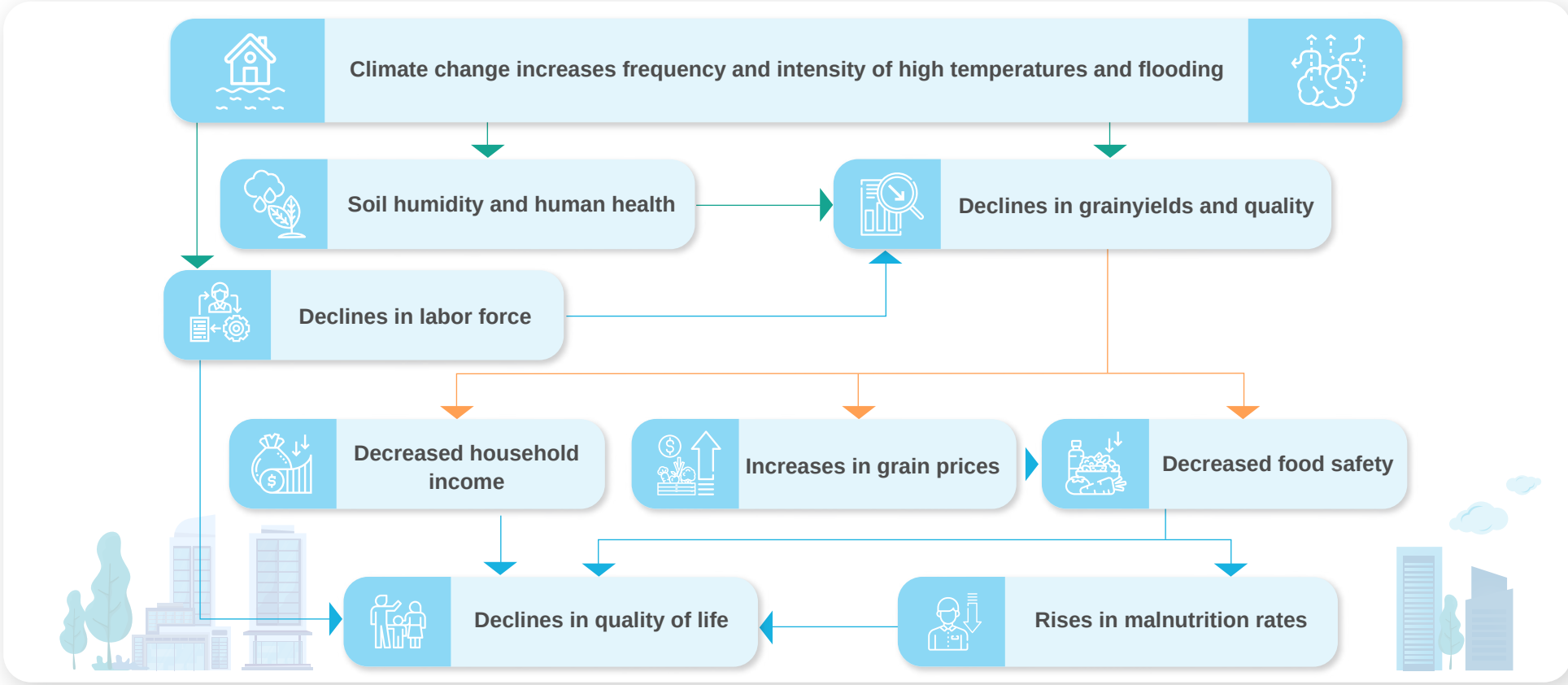
2.1 Climate-Related Risks and Opportunities

Based on the TCFD guidelines, climate-related financial disclosure reports issued by the financial industry, and climate-related issues of concern in domestic and foreign climate change research reports, Nan Shan makes an inventory of the types of climate-related risks and opportunities that affect financial business. At the same time, according to the characteristics of each business, the Company discusses the potential impact of climate-related issues on the Company, directly or indirectly, and links them with existing traditional risks, to further identify climate-related risks and opportunities associated with Nan Shan.

2.2 Transmission Pathways for Climate-Related Risks

Nan Shan explores the link between climate-related risks and existing risks in the insurance industry to understand how climate-related risks affect the operations of insurance companies. At the same time, the Company sorts out the transmission pathways of climate-related risks in Nan Shan according to the concept of the transmission pathways of the impact of climate-related risks on economic and social stability:

Diagram of the transmission pathways of the impact of climate-related risks on economic and social stability (take high temperatures and flooding as examples)



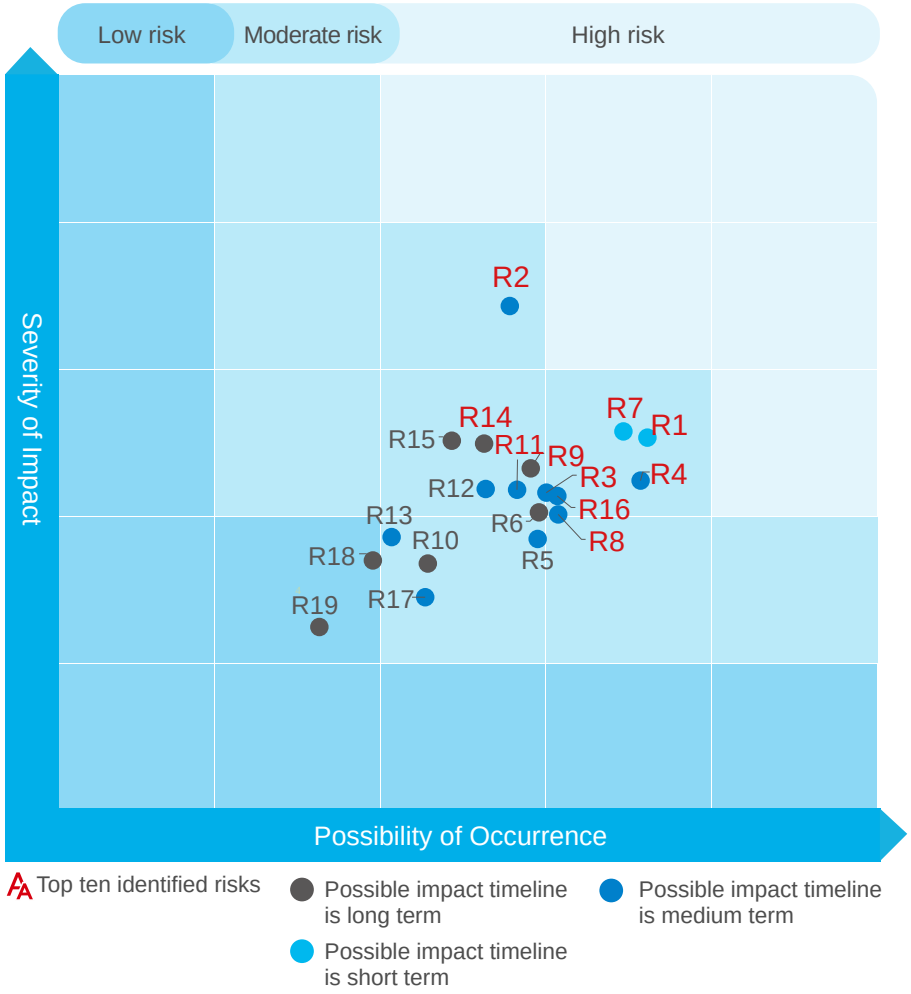
Transmission Pathways for Climate-Related Risks

Risk Item	Credit Risk	Market Risk	Insurance Risk	Operational Risk	Other Risk
Definition	Decreased profitability of counterparties and deterioration of repayment abilities increase default risks for insurance companies.	Increased volatility in market prices due to external risk factors affects physical and financial assets in the insurance industry, which in turn decreases overall revenues, cash flows, and asset values.	Risks transferred by insured parties and risk of losses from unexpected changes when paying out claims and related expenses according to contracts.	Operational risks refer to risks stemming from physical and transition risks which directly impact the ability of the insurance industry to continue operations, or risks of corporate losses caused by external events, including legal risks and legal compliance risks.	Refers to material risks that affect corporations which are distinct from the aforementioned risks, including but not limited to insurance risks and reputational risks. These risks are difficult to quantify, but companies should develop appropriate management processes to reduce risk of potential losses.
Transition Risks	Operational costs may increase for some industries due to new climate-related regulations (such as energy transition regulations), which may even result in operational difficulties that in turn impact repayment capabilities, raising default probabilities.	Impacts from regulations or innovative technologies may result in reduced revenues for carbon intensive industries in investment portfolios and create stranded assets, affecting shareholder equity and increasing market risks.	Impacts from regulations or innovative technologies may result in market exits by some industry players, lowering corporate income from insurance premiums and affecting profitability.	Legal risks may arise due to failure to comply with new climate-related regulations or policy requirements, or operational interruptions may occur due to use of immature low-carbon transition technologies (such as green electricity).	Non-compliance with climate-related regulatory requirements or inability to achieve pledged climate-related targets may impact Nan Shan's reputation, raising reputational risks.
Physical Risks	Physical risks may cause direct losses to real estate collateral (such as from floods or wind disasters) or indirect impacts to existing business models and values. For example, droughts may lower the value of some collateral items, thereby increasing default loss rates.	Severe climate events (such as typhoons) may directly damage investment targets and affect corporate profitability, thereby affecting associated markets and securities values.	Including but not limited to risks to human health caused by changes in long-term climate patterns, or loss of lives or properties of insured parties due to extreme weather events, resulting in increased claim amounts.	Severe climate events may damage business location, paralyze systems, and result in manpower deployment problems, directly affecting the abilities of these sites to continue operations.	Severe climate events may increase the likelihood of accidents for insured parties, increasing claim amounts for accident injury claims and mortality claims, raising insurance risks.

2.2.1 Identified Climate-Related Risks

By referring to the analysis reports released by domestic and foreign research and benchmark companies, and taking into account our own business characteristics, our TCFD team identified and summarized 19 climate-related risks (including physical and transition risks) that the Company may face in the future, evaluated their possibility of occurrence, impact degree and possible timeline (short, medium and long term), and ranked them in terms of significance. In 2023, we identified top ten climate-related risks, including three physical risks and seven transition risks, and proposed relevant response measures.

Matrix of climate-related risks



Risk factors considered

Risk type	Risk factor
Transition risk	Emerging and existing policy and legal, technology, market and reputation
Physical risk	Acute, Chronic

Time scale considered

Time scale	Definition
Short term	Possible occurrence within 3 years (inclusive)
Medium term	Possible occurrence in 3 to 10 years (inclusive)
Long term	Possible occurrence after more than 10 years

Value chain scope considered

Value chain scope	Coverage
Upstream procurement	All suppliers
Self-operation	All business locations and related operations
Downstream asset positions	All Investees and policyholders

The top ten climate-related risks for 2023 are listed below in order of materiality:

Identified climate-related risks and potential impacts

Rank	Issue Label	Risk Type	Time of Occurrence	Risk Issue	Risk Description	Corresponding Inherent Risk	Impact Aspect	Potential Business or Financial Impacts
1	R2	Transition risk: Policy and Legal	Medium term	Policy requirements to increase the proportion of green buildings	The Company needs to increase the proportion of green buildings in response to related regulations and tenant expectations. These changes will increase operating costs.	Operational risk	Self-operation / Investment and financing	• Increase investment costs to respond to tenants' preferences or regulatory requirements for green building targets. • Increase costs related to improving business locations.
2	R1	Transition risk: Policy and Legal	Short term	Policy requirements to increase the proportion of renewable energy	The Company needs to increase the use of renewable energy in response to related regulations, customer and international initiative requirements. These changes will increase operating costs.	Operational risk	Self-operation	• Policies require an increase in the proportion of renewable energy usage or an increase in renewable energy prices, resulting in an increase in operating costs for the Company.
3	R7	Transition risk: Technology	Short term	Current products and services at the risk of being replaced by low carbon alternatives may require additional company costs	The gradual low carbon transition may result in a smaller demand for current products and services. The Company may gradually adopt a low-carbon approach to reduce carbon emissions from business operations, such as the replacement of hardcopy insurance policies by electronic copies. This may increase the Company's Information Technology (IT) service costs (including system upgrade and storage expansion).	Operational risk	Self-operation / Insurance products	• The Company may gradually adopt a low-carbon approach to reduce carbon emissions from business operations. • Technological investment or construction costs during low-carbon transformation may increase operating costs of the Company.
4	R4	Transition risk: Policy and Legal	Medium term	Increase in cost of greenhouse gas emissions	With the tightening of carbon emission related policies or regulations, the cost of greenhouse gas emissions will increase, which will lead to an increase in the daily operating costs of the business locations	Operational risk	Self-operation	• Increase in operating costs of the Company .
5	R9	Transition risk: Market	Long term	Investment losses from inaccurate market and customer information	Due to the Company's vast investment holdings by its business nature, the increase in the environmental sustainability awareness and real estate related risks in the future may directly affect the market value of the investment, resulting in the impairment and loss of the Company's investment values.	Market risk Credit risk	Investment and financing	• The investment in the list of carbon-intensive industries are affected by transition risk. Due to the poor environmental performance indicators , it may lead to a decline in the market value of investment, thereby causing an impairment loss of the investment value. • The increasing awareness of environmental sustainability of investment real estate tenants and the impact of climate disasters may lead to a price reduction of real estate held by the Company or a decrease in rental income.

Rank	Issue Label	Risk Type	Time of Occurrence	Risk Issue	Risk Description	Corresponding Inherent Risk	Impact Aspect	Potential Business or Financial Impacts
6	R16	Physical risk: Chronic	Medium term	To response to the rising mean temperatures, the transformation of the electricity structure may lead to an increase in the Company's operating costs	In recent years, extreme temperatures has increased, and the average temperature will continue to rise in the future. Due to the transformation of Taiwan's electricity structure, it is estimated that electricity prices will gradually increase in the future, and the government will continue to promote the transformation of renewable energy. It will be necessary to purchase green electricity or renewable energy certificates to reduce the Company's carbon emissions, which will increase the Company's operating costs.	Operational risk	Self-operation	• The rise in energy prices leads to an increase in operating costs of business locations.
7	R14	Physical risk: Chronic	Long term	Insured targets suffer from losses due to rising sea levels	For the Company's insured subjects at high physical risk locations (e.g. by the sea or in low-lying areas), there is a higher probability for accidents and losses leading to an increase in claim costs.	Insurance risk	Insurance product	• Increased probability of insurance claims.
8	R3	Transition risk: Policy and Legal	Medium term	Transition-related legal risks may have financial impacts on the investment portfolios	As the net-zero carbon emission policies become more stringent around the world, the environmental performance indicators of the investment portfolios may become poorer (such as the carbon emissions of carbon-intensive industries), which may affect the valuations of the investment portfolios, leading to the Company's investment losses and financial health deterioration.	Market risk Credit risk	Investment and financing	• Affected by climate risk or the net zero carbon emission policies, investment portfolios in the list of carbon-intensive industries may suffer a loss in revenue, cash flow and asset value. The loss of the investment portfolio could result in a decline of their market values, which leads to impairment loss or deteriorated financial structure.
9	R8	Transition risk: Market	Medium term	Customer behavior changes	Under the trend of net zero transition, the general public develops an increasing awareness of sustainability-related issues. If the company is not active enough in promoting low-carbon insurance and services to help cope with climate change, it will result in falling behind in market share, the loss of business and customers, and a decline in revenue.	Operational risk Reputational risk	Self-operation / Insurance products	• Decrease in business revenue • Decrease in market share
10	R11	Physical risk: Acute	Medium term	Increased insurance claims from insured targets suffering from climate-related damages	The Company's insured targets in high physical risk locations may be damaged by climate disasters, such as personnel or property damages from typhoons or heavy rainfalls. This increases both the frequency and cost of insurance claims.	Operational risk Insurance risk	Self-operation / Insurance products	• Due to increased probability and intensity of heavy rainfall, underwriting the climate-related insurance products lead to an increase in the frequency and magnitude of losses, further resulting in an increase in claims costs. • Increased probability of insurance claims.

2.3 Scenario Analysis

Scenario analysis is a neural simulation estimation tool which explores different climate scenarios and applies analysis results to meet different management purposes. Nan Shan determines the impacts of climate-related risks and opportunities through analysis of climate scenarios. In terms of physical risks, Nan Shan considers the two scenarios: Representative Concentration Pathways (RCP) 2.6 and RCP 8.5 as simulated in the 5th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). For transition risks, the Company evaluates the impacts on investment portfolios by using the two scenarios: Nationally Determined Contributions (NDCs) and Net Zero 2050 in the Central Banks and Supervisors Network for Greening the Financial System (NGFS). Prospective scenario analysis models are then constructed to measure the financial impacts of climate-related risks and the resilience of the Company's strategies.

Scenario Descriptions

Climate Scenarios			Scenario Assumptions	Analysis Scope	Degree of Warming	Technological Changes	Carbon Dioxide Removal[1]	Regional Policy Changes	Scenario Parameters	Estimated Duration
Transition Risks	NGFS Scenarios	Nationally Determined Contributions	NDCs (Hot House World)	This scenario consists of various countries' stated policies to control global temperature increase through GHG reduction.	Bonds and stock investment portfolios from carbon intensive industries.	2.6°C.	Slow	Moderately low	Moderate	Carbon price and carbon emission parameters	2023－2050
		Net Zero 2050	Net Zero 2050 (Orderly)	This is the proactive scenario for GHG reduction whereby global temperature increase is controlled through strict climate policies and technological innovation.		1.4°C.	Fast	Moderately high	Moderate		2023－2050
Physical Risks	IPCC Representative Concentration Pathways	RCP2.6		GHG emissions show a continued downward trend by 2100, and warming will be limited to less than 2°C.	Operating sites and investment properties in Taiwan.	＜2°C.	N/A			Value at Risk (VaR), Failure Probability (FP)	2023－2100
		RCP8.5		GHG emissions continue to show an upward trend by 2100, and warming will exceed 4°C.		＞4°C.					

Note 1 : Carbon Dioxide Removal (CDR) refers to the process of removing carbon dioxide from the atmosphere. As "removal" and "emission" are opposite concepts, CDR methods and techniques are often described as "negative emissions" (IPCC).

2.3.1 Transition Risk Analysis

To respond to impacts of climate change, governments around the world develop policies for carbon emission supervision and carbon fee collection. Therefore, it is necessary to evaluate investment targets for financial risks that may cause financial losses in achieving global net zero carbon emission. Meanwhile, climate risk factors should also be incorporated into quantitative models to determine the resilience of investment strategies.

Scenario Analysis

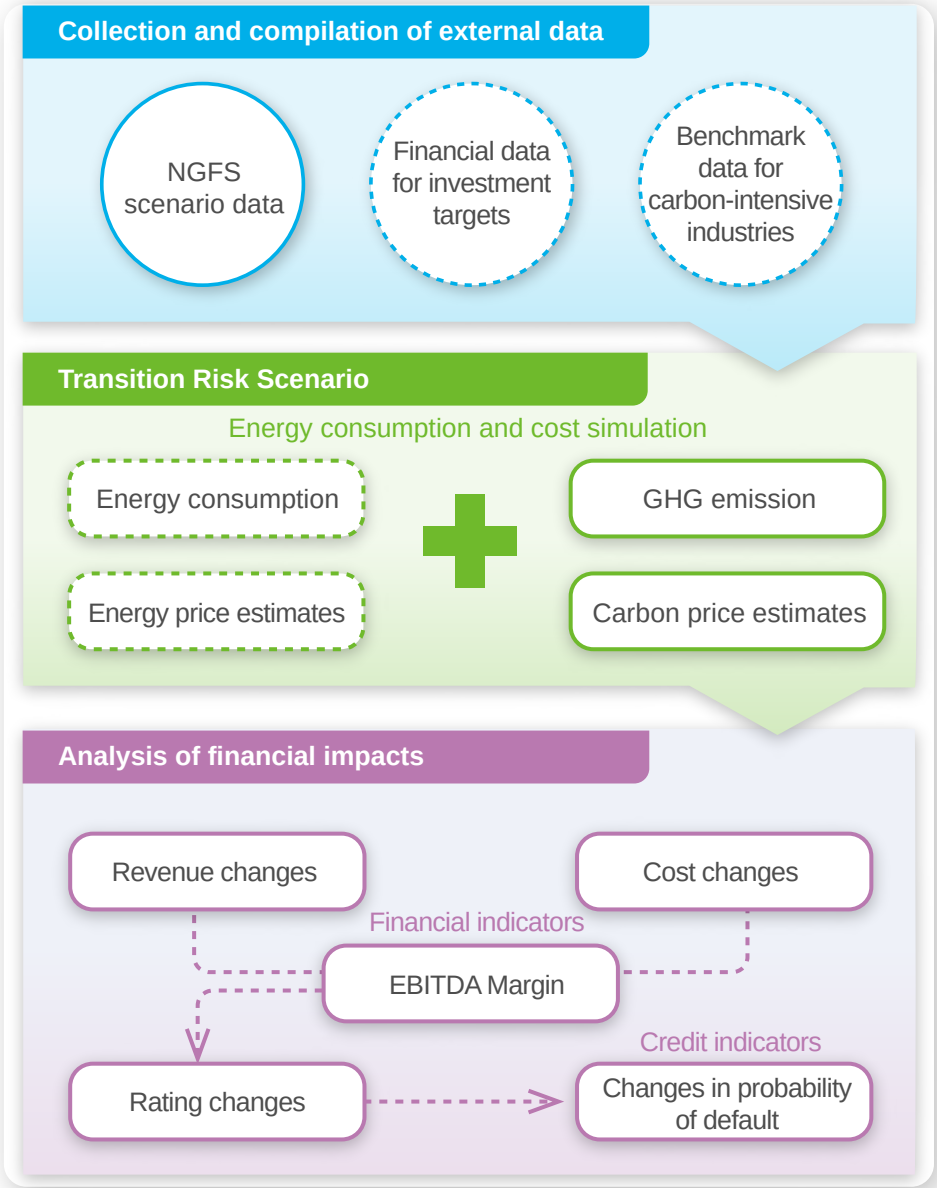
According to the guidelines released by the European Insurance and Occupational Pensions Authority (EIOPA) for the risks associated with climate change in Own Risk and Solvency Assessment (ORSA), enterprises should conduct their analyses based on at least two long-term climate scenarios.

Scenario 1: A long-term climate change scenario in which global temperature increase is limited to less than 2 °C.

Scenario 2: A long-term climate change scenario in which global temperature increase is equal to or greater than 2 °C.

Below is an explanation of the scenario analysis on NDCs and Net Zero 2050 under the NGFS Phase III Global Change Analysis Model (GCAM) 5.3 model adopted by Nan Shan. By adding parameters such as carbon fee and carbon emission to investment portfolios, a quantitative model is constructed to estimate the rating variations and financial impacts for investment portfolios. The scenario analysis results are then incorporated into calculations of credit risk and market risk for stress testing.

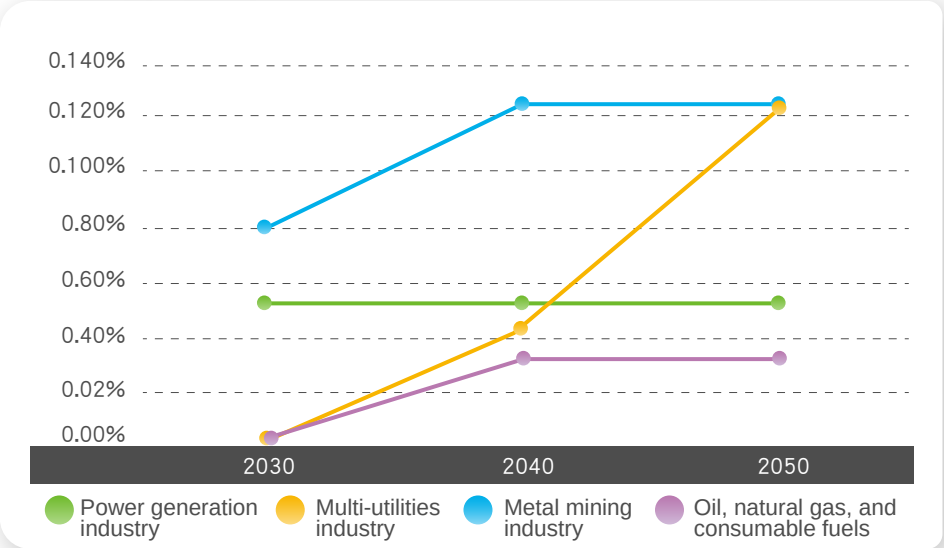
Transition Risk Analysis Flow Chart



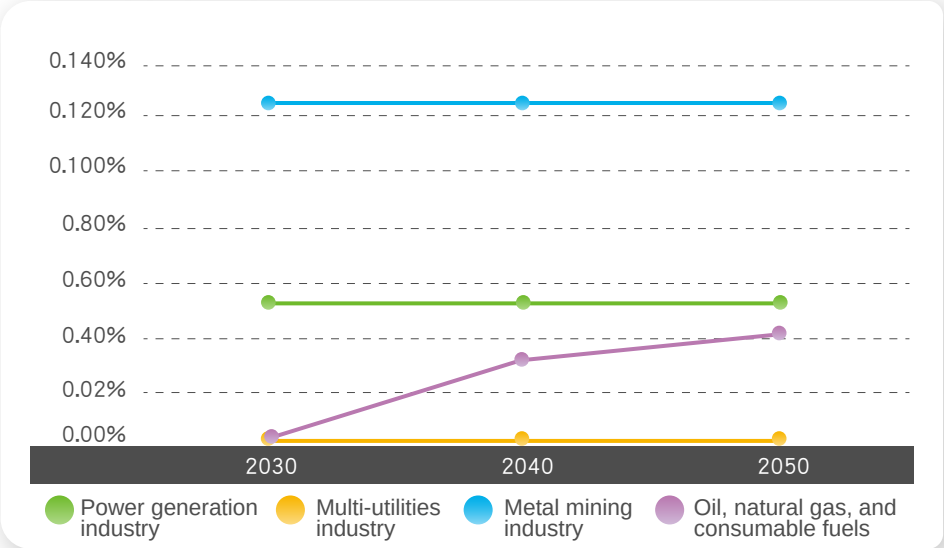
Analysis Result

After making an inventory of bonds and stock investments in carbon-intensive industries, Nan Shan completed the calculation of risk transmission pathways for risks associated with climate change by using transition risk driving factors and risk exposure financial disclosure reports, which generated the analysis results of investment targets to be affected by transition risks for the next 30 years. Among all the sectors, the Company should pay special attention to high carbon-emitting industries such as power generation, multi-functional public utilities, metal mining, and oil, gas, and consumable fuels. The table below also shows that the default rate in multi-functional public utilities is highly volatile in the NDCs scenario, while metal mining industry has a comparatively higher default rate before 2040 in the Net Zero 2050 scenario.

Issuer default rate fluctuations under NDCs scenario



Issuer default rate fluctuations under Net Zero 2050 scenario



2.3.2 Physical Risk Analysis

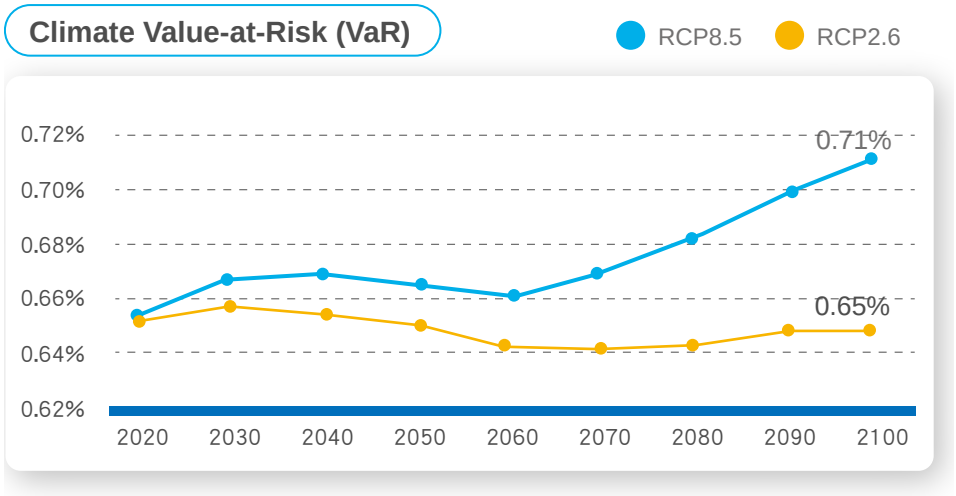
Applying IPCC RCP 2.6 and RCP 8.5 as scenario parameters, Nan Shan adopts the XDI Climate Risk Model Database to analyze climate Value-at-Risk (VaR) and operational Failure Probability (FP) associated with physical risks faced by the Company's self-owned operational sites and investment properties from 2020 to 2100.

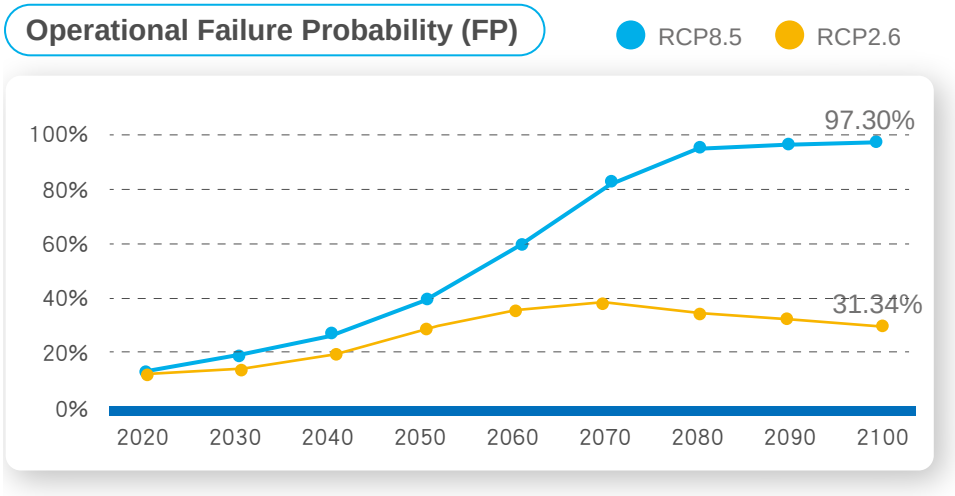
Climate Value-at-Risk (VaR) of XDI

The impacts of physical risks are estimated through various quantified VaRs obtained from surface water flooding, soil subsidence, riverine flooding, coastal inundation, forest fire, and extreme wind. At the same time, the potential financial impact of the physical risks on the Company's buildings and business locations are also evaluated with these quantified VaRs. Nan Shan adopts the XDI Climate Risk Model Database to conduct physical risk assessment and analysis on its own business locations and investment properties. Based on the data at the end of 2023, the average VaR of climate risks in 2100 is 0.65% under the RCP2.6 scenario and 0.71% under the RCP8.5 scenario.

Operational Failure Probability (FP)

Failure Probability of business operation refers to the likelihood of buildings experiencing interrupted operations due to climate disasters in specific areas during the year. For example, the building may be flooded, the air conditioning may stop working when the temperature exceeds 45°C and other climatic disaster factors which force the building to suspend operation. The analysis results reveal that "extreme high-temperature" is the greatest contributing factor to failure of business operation under both RCP2.6 and RCP8.5 scenarios. Based on the data at the end of 2023, the average Failure Probability of business operations in 2100 is 31.34% under the RCP2.6 scenario and 97.3% under the RCP8.5 scenario.





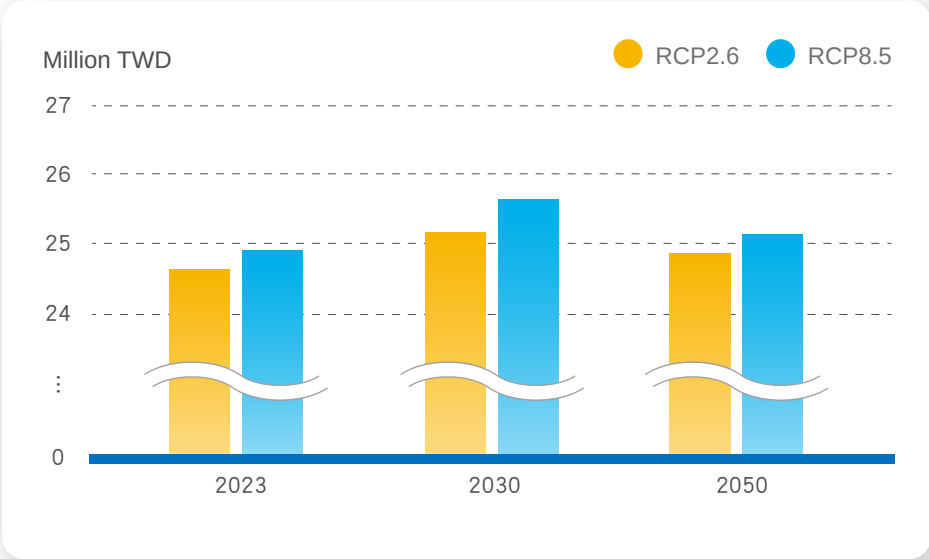
Note 1: Source of information on Climate VaR and Operational FP: XDI PTY LTD.
Note 2: Climate VaR: The proportion of repair costs to total asset reconstruction costs for a real estate property after suffering damage from climate disasters during a given year.
Note 3: Operational FP: The probability that a building will encounter operational interruptions within a given year due to impacts from climate disasters. This figure is merely a probability value and does not reflect incident scale, frequency, or number of occurrences.

Self-owned Operational Sites

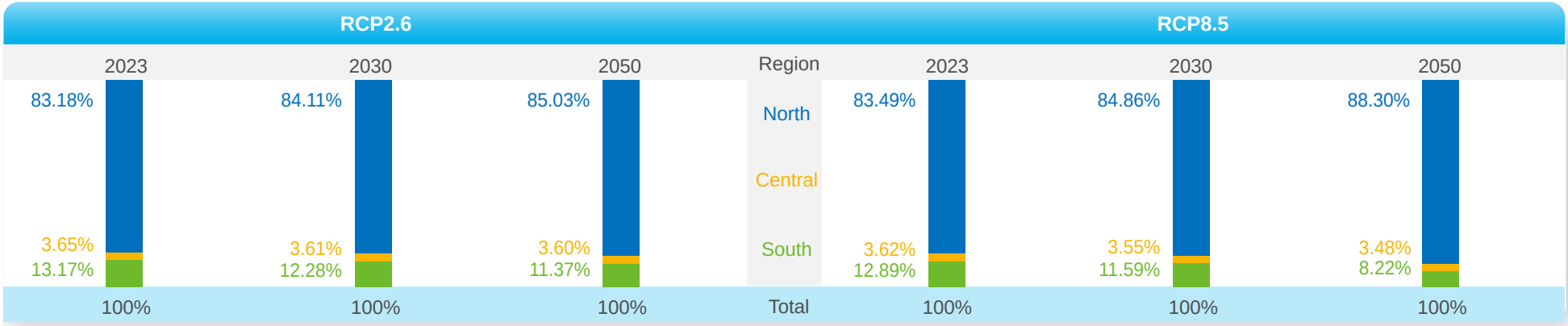
To assess the impact of various climate disasters on its self-owned operational sites and the possible financial losses such as asset repair and equipment replacement, Nan Shan adopts the XDI Climate Risk Model Database to conduct physical risk assessment and analysis for its self-owned operational sites. Nan Shan assessed the potential loss of its self-owned operational sites in 2023, 2030 and 2050 under the IPCC's RCP 2.6 and RCP 8.5 scenarios, and classified climate sensitivity into five levels: low, medium-low, medium, medium-high and high. The climate risk level analysis results show that under the RCP2.6 and RCP8.5 scenarios, Nan Shan has no self-owned operational sites in high-risk area, and there is only one self-owned operational site located in medium-high risk area. The analysis results show that the total amount of potential losses of self-owned operational sites in 2023, 2030 and 2050 under the RCP 8.5 scenario is higher than under the RCP2.6 scenario.

Under the RCP2.6 and RCP8.5 scenarios, the amount of overall potential losses of Nan Shan's self-owned operational sites increases in 2030 compared to 2023, but decreases in 2050 compared to 2030. The Northern Region has the highest proportion of potential losses mainly due to its higher number of self-owned operational sites and the higher average replacement cost. The percentage of potential losses of self-owned operational sites in the Northern Region increases year by year in both scenarios, mainly due to the increasing risk of soil movement caused by drought in the Northern Region over time. Nan Shan will continue to monitor the risks of soil movement and river flooding at its self-owned operational sites in the Northern Region. (Only the self-owned operational sites in Yilan region are at risk of river flooding.)

Total potential losses for self-owned operational sites



Self-owned operational sites—Potential loss proportions for each region

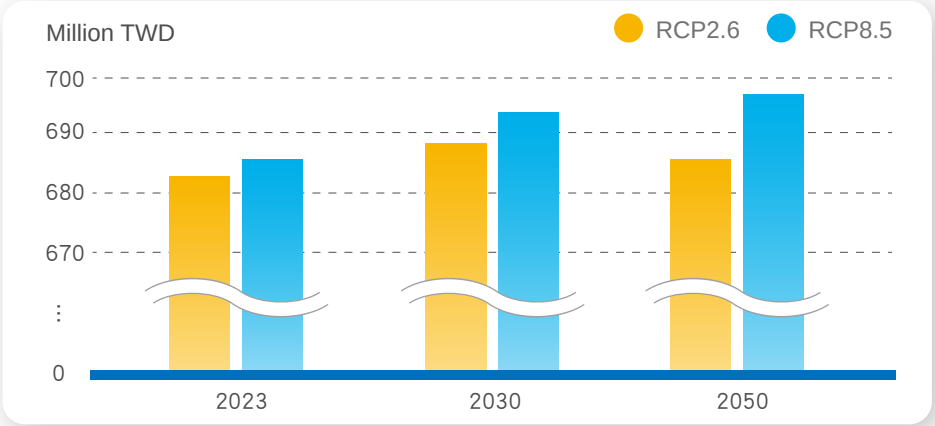


Note : As of the end of 2023, Nan Shan does not have any self-owned operational sites in the Eastern Region.

Investment Properties

Nan Shan conducted physical risk assessment analysis for its investment properties through the XDI Climate Risk Model Database. The Company assessed the potential losses in its investment properties in 2023, 2030 and 2050 under the IPCC's RCP 2.6 and RCP 8.5 scenarios, and classified climate sensitivity into 5 levels: low, medium-low, medium, medium-high and high. Nan Shan has 4 investment properties in the area with high climate risk, and there are no investment properties located in the area with medium-high climate risk. On the whole, the amount of total potential losses for investment properties in 2023, 2030 and 2050 under the RCP8.5 scenario are higher than under the the RCP2.6 scenario, and potential losses for 2050 under the RCP8.5 scenario are the highest.

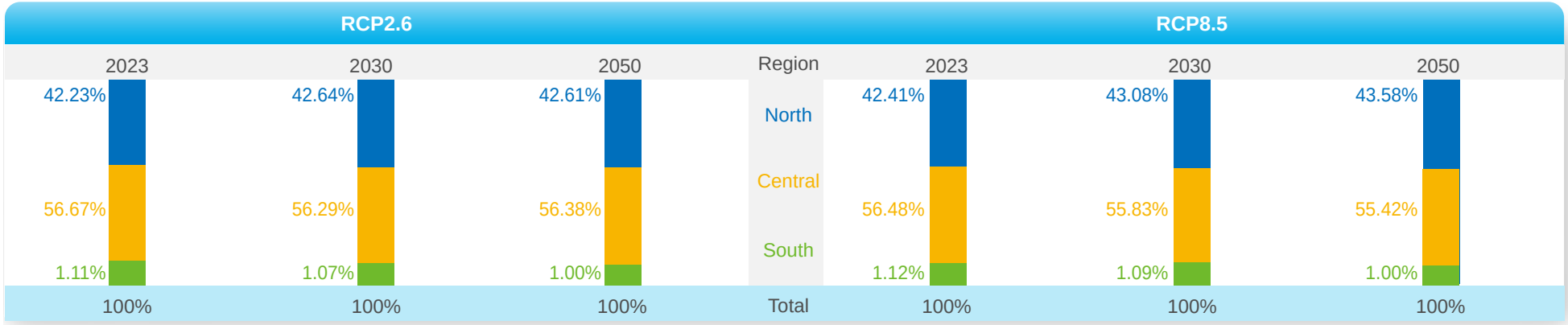
Total potential losses for investment properties



Distribution of Potential Losses in Investment Properties

The analysis results show that under the RCP8.5 scenario, the amount of total potential losses in investment properties increases with time. Under the RCP2.6 scenario, the amount of total potential losses in investment properties increases in 2030 compared to 2023, but decreases in 2050 compared to 2030. Under the RCP2.6 and RCP8.5 scenarios, the proportion of potential losses is the highest for the central region, mainly due to climate VaR and average replacement cost are higher for areas. Surface flooding posed the highest risk for investment properties, and Nan Shan will continue to monitor investment properties located in the high climate risk area to reduce potential financial risk and the risk of operational FP arising from physical risks.

Investment properties—Potential loss proportions for each region

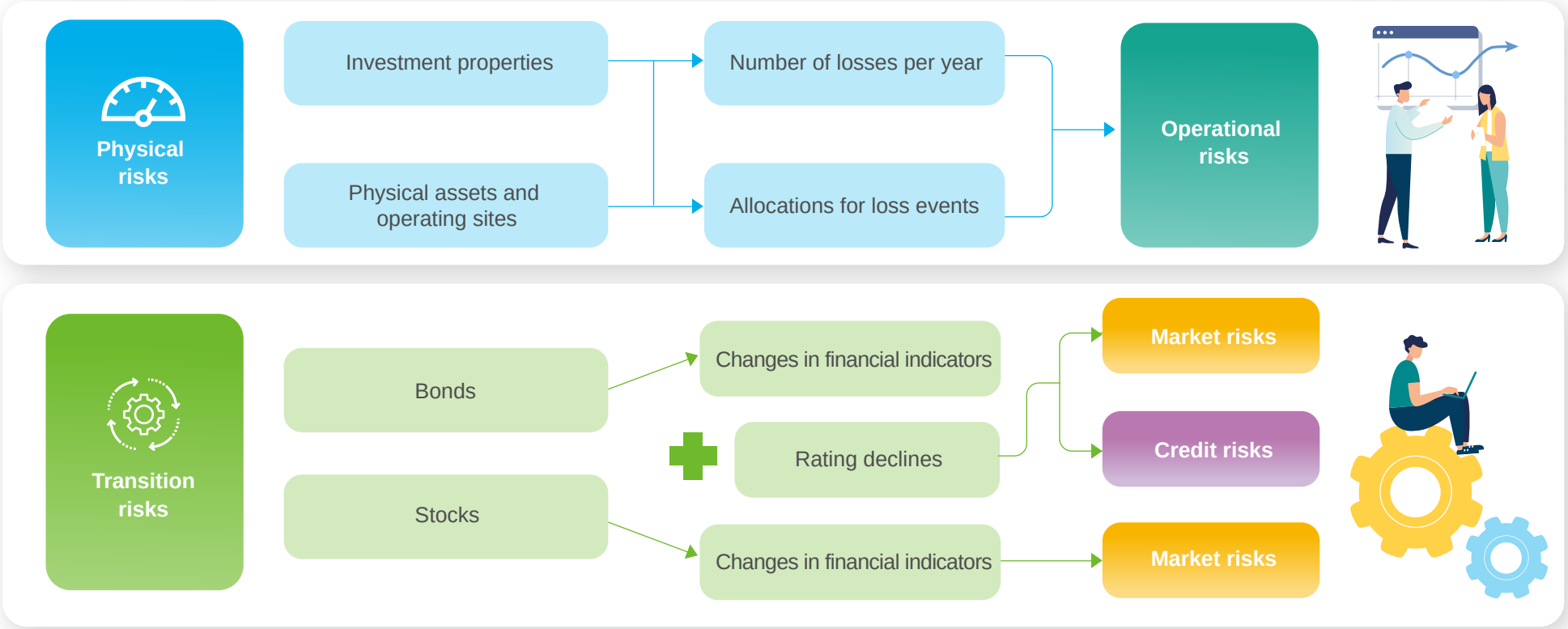


Note : As of the end of 2023, Nan Shan does not hold any investment properties in the Eastern Region.

2.4 Climate Resilience: Stress Tests for Climate-Related Risks

To better understand and verify the climate resilience of Nan Shan, after the above scenario analysis, Nan Shan's existing holdings were examined. Following the classification of credit risk, market risk and operational risk, the influence of stress test on the risks of expected credit losses, the market limits and expected operational losses in different scenarios were analyzed. For credit risks, the change in the credit rating and Probability of Default (PD) of the issuers of the Company's bonds investment in the carbon-intensive industries were assessed, and the expected credit losses under the NDCs and Net Zero 2050 scenario timelines were estimated. For market risks, the change in the credit rating of the issuers of the Company's bonds and stock investment in the carbon-intensive industries and the differences in financial figures were assessed, and the impact of climate-related risks on the evaluated value of bonds and stock investments under NDCs and Net Zero 2050 scenario timelines were estimated. For operational risks, the operational losses due to extreme climate conditions or weather incidents under the RCP2.6 and RCP8.5 stress scenario timelines were determined.

Schematic image of stress tests for climate-related risks



Stress test applications for climate risk models

Credit Risks

The aim of the test is to determine expected increases in credit losses from investments due to changes in issuer ratings under NGFS transition risk scenario timelines and to assess differences between expected credit losses calculated under stress scenarios and expected credit losses under current no-stress scenarios.

Scenario assumptions and models → Analysis of financial impacts → Default rate assumptions → Default rate changes

Market Risks

Current market risk management processes have set limits to control market risks. The main purpose of market risk stress tests is to determine expected incremental losses from market risks under specific climate stress scenario timelines.

Scenario assumptions and models → Analysis of financial impacts → Default rate assumptions → ΔPD applied to bond rating adjustments Financial impact analysis used to estimate equity prices under stress

Operational Risks

The main purpose of operational risk stress tests is to determine expected losses from operational risks under specific climate stress scenario timelines (RCP 8.5 and RCP 2.6).

Loss model → Expected losses and OP VaR

Summary of Stress Test Results for Climate-related Risks

Stress tests help us understand the degree of impacts on expected losses for credit risks, market risks, and operational risks from physical and transition risk scenarios so that corresponding measures can be taken in advance (for example, adjusting and establishing selection criteria for new investments and adjusting existing investments in portfolios as appropriate) to mitigate impact levels. Financial impacts from stress tests on climate-related scenarios are shown in the following table. Overall, Nan Shan's current investments and physical assets were not significantly affected under extreme stress tests for transition risk scenarios or physical risk scenarios. However, Nan Shan will continue to closely monitor climate scenarios and developments of discussions on climate-related risks, and regularly review related methodologies for climate scenarios and stress tests to ensure that we are assessing climate resilience in a rigorous manner.

Compilation of Impacts from Climate Risk Stress Tests

Asset Class	Climate Risk Category	Corresponding Existing Risks	Scenario	Financial Indicators	Timepoint	Level of Impact (Note)			
						Very Low	Low	Moderate	High
Physical Risks	Physical assets and real estate holdings	Operational risks	RCP 2.6	Proportion of the expected losses to the total value of physical assets	2024	●			
			RCP 8.5	Proportion of the expected losses to the total value of physical assets	2024	●			
Transition Risks	Bond investments in carbon-intensive industries	Credit risks	NDCs	Increase percentage in the expected credit losses	2030		●		
					2040		●		
					2050		●		
			Net Zero 2050	Increase percentage in the expected credit losses	2030		●		
					2040		●		
					2050			●	
		Market risks	NDCs	Proportion of the financial expected losses to the total bond investments	2024	●			
			Net Zero 2050	Proportion of the financial expected losses to the total bond investments	2024	●			
	Stock investments in carbon-intensive industries	Market risks	NDCs	Proportion of the financial expected losses to the total stock investments	2024	●			
			Net Zero 2050	Proportion of the financial expected losses to the total stock investments	2024	●			

Note 1: Less than 1 %- very low impact, 1-5%- low impact, 5-10%- moderate impact, higher than 10%- high impact. (Information Date: 2023/12/31).

Note 2: According to the 2023 stress test results, the financial impact of stock investments involving carbon-intensive industries has been reduced to very low level, the impact of credit risk in 2050 under the scenario Net Zero 2050 has risen to moderate level, and the other impacts remain no change.

Climate Resilience Verification Results

Verification Object	Items for Verification	Verification Method	Benchmark for Verification Results	Verification Results
Future Expected Financial Impact	Credit risk - increase percentage in the expected credit losses	Transition scenario analysis and stress testing	To assess the controllability or acceptability of expected future operational or financial impacts based on consideration factors such as operations, financial status and climate risk management	The risk of future financial impact is manageable
	Market risk - proportion of the financial expected losses to the total investment	Transition scenario analysis and stress testing		The risk of future financial impact is manageable
	Operational risk - proportion of the expected losses to the total value of physical assets	Physical scenario analysis and stress testing		The risk of future financial impact is manageable

2.5 Climate Strategies and Actions

2.5.1 Climate Opportunities Identification Results and Management

After completing questionnaires and conducting discussions with relevant departments, Nan Shan identified 10 climate opportunities, which were subsequently reported to the Corporate Sustainability Committee. The committee agreed to focus on eight opportunities as the direction for the Company to develop detailed opportunities and take measures to actively engage in climate change related actions, grasp market trends and connect to business opportunities.

Climate Related Issues

Opportunity Type	Timeline	Opportunity Issue	Opportunity Description
Products and services	Short term	New product development and innovation	• In response to government policies and market trends, the Company provides electric vehicles relevant insurance products, loss prevention services, active preventive products (e.g. spillover-effect insurance policy),and other products that enhance protection against environmental changes (e.g. medical/health/accidents) to enhance the health of policyholders and the resilience of corporate customer operations through the risk management mechanisms and other derived functions of insurance, so as to reduce climate change-related illnesses and claims.
Products and services	Short term	Increase low-carbon insurance products products	• In response to the growing market demand for low-carbon products, the Company incorporates the concepts about low-carbon emission,environmental protection, and energy conservation into its products (e.g. renewable energy industry insurance). The objectives of environmental and health protection can be achieved by reducing climate change-related illnesses and claims. The development and sale of low-carbon insurance products may also generate more revenue under growing market demands.
Products and services	Short term	Digital services	• Gradually transform operations into low-carbon operations, reduce carbon emissions and operating costs, by which to enhance the brand image, and drive the growth of business performance.
Resource efficiency	Short term	Resource Efficiency Improvement	• The Company improves energy efficiency,reduces internal equipment water and electricity consumption, and reduces operating costs by replacing low energy efficiency equipment in its business locations.
Resource efficiency	Medium term	Green Buildings	• Use green building materials in new buildings (investment and self-owned) or business location construction. Install photovoltaic facilities or purchase new energy-saving equipment to increase energy efficiency at business locations, reducing operating costs while achieving eco-efficiency.
Market	Short term	Green finance and sustainable investment	• Through periodic evaluation of thematic investments, we assist in promoting the development of industries such as human health and well-being, green energy, low-carbon, green energy technology, new agriculture and circular economy, and driving the progress of the society towards the era of low-carbon economy. • Evaluate the impact of the Company's investment portfolio holdings in carbon-intensive industries on overall fund utilization.
Operational resilience	Short term	Green procurement	• Purchase low environmental impact products such as energy-saving, power-saving,water-saving equipment with Eco Labels. This will reduce both the energy waste and operating costs.
Energy source	Medium term	Renewable energy and green lease	• Invest in the use of renewable energy and build solar power generation systems in self-owned buildings for self use and sale of surplus electricity, so as to achieve emission reduction and reduce operating costs. • Respond to the Ministry of Economic Affairs' Green Leasing Program 2.0 by helping lessee companies in commercial buildings or in similar congregate areas to obtain green power and renewable energy certificates through electricity transfer.

2.5.2 Low-Carbon Insurance and Services

Low-Carbon Insurance

Although the financial insurance industry does not directly pose a significant environmental impact, Nan Shan still regards itself as a low-carbon insurance pioneer. The Company strives to improve the carbon footprint of products and services, and develops insurance products with environmental spillover benefits and provide environmentally friendly solutions for the insured. Nan Shan internalizes ESG risk and opportunity issues in every aspect of its operations, services and product design, with a view to achieving the positive impact of sustainable finance through the provision of insurance products/services and investment activities.

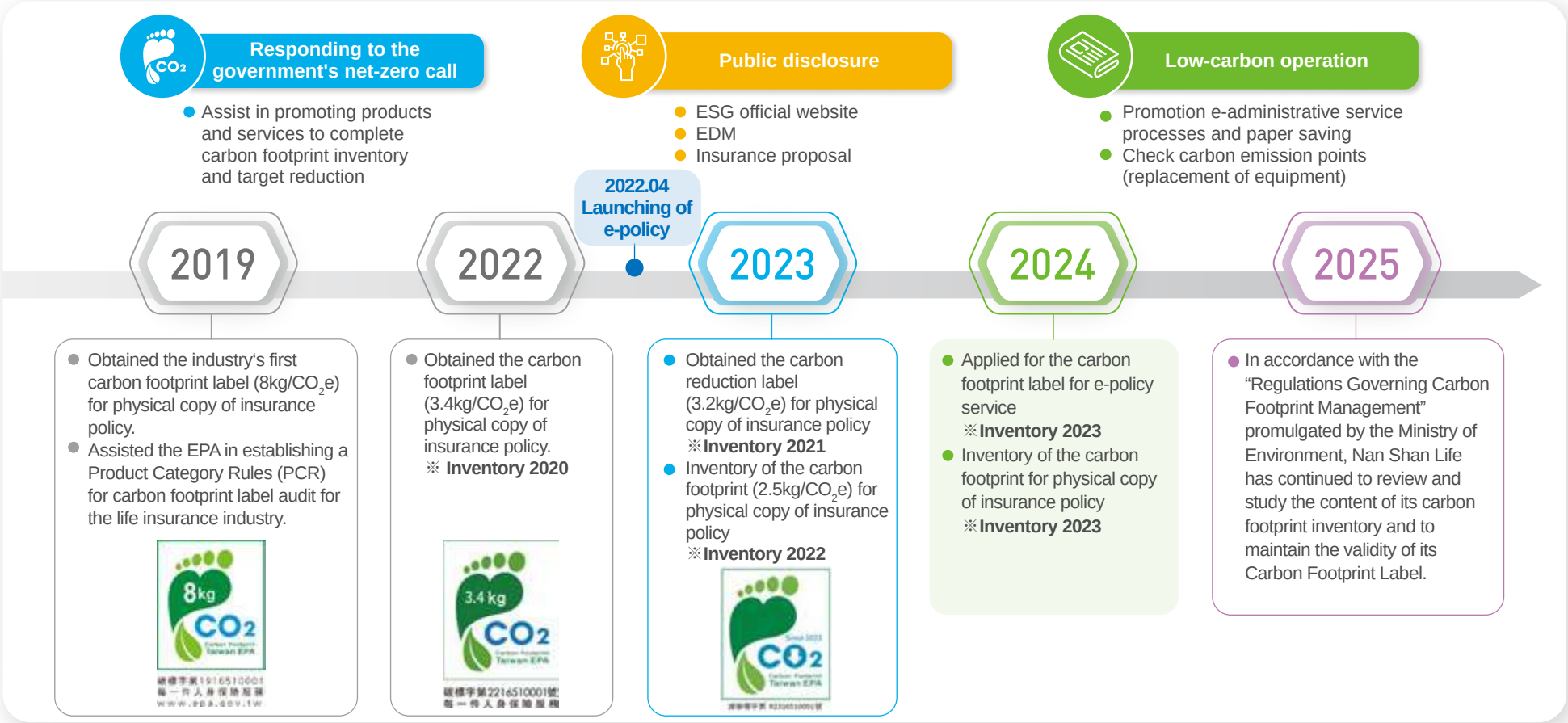
Carbon Footprint of Products

Since 2018, Nan Shan Life has introduced the ISO 14067 carbon footprint standard and conducted carbon footprint analysis for “life insurance service”. The Company has obtained carbon footprint label certificates from SGS-Taiwan and the EPA (upgraded to the Ministry of Environment in August 2023), becoming the first insurance company in the world to receive dual product carbon footprint certification. According to the results of the latest inventory (2022), Nan Shan Life's insurance policies have a carbon footprint of 3.16 ($kgCO_2e$/per policy).

In 2022, we not only passed the ISO14067 certification, but also established a specific and complete process and scientific calculation basis by defining reasonable scopes for “life insurance service” carbon footprint inventory. In addition to obtaining the Carbon Footprint Label issued by the Ministry of Environment, the Company has also adopted low-carbon operation transition: to significantly reduce the output of paper products, promote the application of electronic documents, electronic insurance policies and manpower division mode, and thus to achieve carbon footprint reduction of more than 3% in 5 years. In 2023, the Company obtained the Carbon Reduction Label.

Meanwhile, the subsidiary company Nan Shan General has also launched its carbon management operations in keeping up with the global trends for net zero carbon emission. After introducing the ISO 14067 carbon footprint standard in 2021, it has completed the “carbon footprint calculation for property insurance services” and obtained the SGS Inventory Verification. In 2022, Nan Shan General calculated the carbon footprint from e-policies and became the first general company in Taiwan to pass the carbon footprint verification for e-policies. After receiving the Carbon Footprint Label issued by the EPA, Nan Shan General has, since then, became the first financial insurance service provider in Taiwan to be dually certified by the “EPA Carbon Footprint Label for Property Insurance” and “EPA Carbon Footprint Label for E-policies”. According to the latest carbon footprint inventory results (property insurance services in 2021 and electronic policies in 2022), the carbon footprint of property insurance services is 1.3 ($kgCO_2e$/per policy) and that of electronic policies is 0.95 ($kgCO_2e$/per policy).

Nan Shan Life Carbon Reduction Labeling Process



In addition, Nan Shan General has also responded to the Financial Supervisory Commission's e-policy promotion by launching the "electronic insurance certificates" for compulsory insurance and the text message for the delivery of insurance policies to policyholders. It also communicates with policyholders to let them know the benefits of using e-policy documents, which not only saves paper, but also can be "stored easily" and "accessed at any time". Thanks to customers and agents for their efforts to promote e-policy, the number of Nan Shan General's electronic insurance policies accounted for 69.25% of all its insurance policies by the end of 2023.

Nan Shan Life and Nan Shan General have been actively implementing low-carbon operations with concrete actions. We hope to lead by example, raise the awareness of environmental sustainability, and work together with our stakeholders to create a low-carbon life. This is where we start with our determination to protect the planet and our promise to leave it better for the next generation.

Encouraging Low-carbon Consumption Behavior

Nan Shan Life expects to provide consumers with insurance protection while achieving environmental protection, and has therefore included specially designed protection in specific products (interest-sensitive (Note 1) life insurance or accident insurance). In the event of death of a policyholder in an accident while taking public transportation, Nan Shan Life will provide “double compensation” protection to encourage policyholders to make more use of public transportation. Encouraging customers to walk, exercise or use public transportation will not only help reduce carbon emissions, but also reduce air pollution, improve physical and mental health, and contribute to Taiwan's net zero emissions by 2050.

In addition, Nan Shan Life is committed to promoting the BAM App. (Note 2), which promotes health awareness and encourages policyholders to develop the habit of walking and exercising for better health. In addition to health promotion, the launching of BAM App. can also help reduce carbon emissions and air pollution. For example, a user walks 10,000 steps instead of using a car or a motorcycle, which can help reduce carbon emissions by 1.42 kg (Note 3). By the end of 2023, BAM App. users had accumulatively taken nearly 116.459 billion steps, which is equivalent to helping reduce approximately 16,537 metric tons of carbon emissions.

Assisting in adjusting to climate change

In addition, due to the abnormal climate caused by global warming, natural disasters such as earthquakes, typhoons, floods and debris flows occurred frequently in recent years. In response to the impact of climate change, Nan Shan Life has specially designed to include natural disaster related benefits in its accident insurance products. In the event of death or disability of the policyholder due to earthquakes, typhoons, floods or debris flows, it will provide "double compensation" to fight against the impact of natural disasters on humanity.

Note 1: The “interest-sensitive life insurance” has non-guaranteed declared interest rate in addition to the assumed interest rate. Based on the difference between these two interest rates, the feedback mechanism makes the change of beneficial interest, such as the insured amount and non-forfeiture value, as it shares the insurance company’s investment performance.

Note 2: BAM App. was developed and owned by ReMark, a subsidiary of SCOR. Nan Shan Life has established a cooperative relationship with ReMark based on promoting health management and other concept.

Note 3: The conversion is based on the press release of the Ministry of Health and Welfare with the title: “Smart eating, happy exercising. Eating one more bite of rice, walking one more mile, eating half a kilogram less meat, reducing weight and carbon emission, and saving the earth”.

Business Continuity Management Customer Services of Nan Shan General

Background and Project Content

To provide loss prevention service for companies that allow them to continue operations, Nan Shan General provides large-scale corporate customers with loss prevention services to reinforce the operational safety of the customers, and assist customers in effectively managing operational risks.

Nan Shan's Inputs

Nan Shan General provides large-scale corporate customers with loss prevention services including on-site risk inspection, risk identification workshops, safety workshops (such as company fire safety/fire survival/earthquake safety), or infrared thermal imaging inspection services for electrical equipment.

Benefits

In 2023, Nan Shan General provided 98 sessions of company services:

- Provided prevention advocacy for common risks and 23 loss prevention proposals.
- Provided 75 infrared thermal imaging inspection services, thereby assisting customers in identifying 159 risks that need to be tracked or immediately improved, and effectively reducing customer operational risks.

2.5.3 Green Real Estate Management

Nan Shan Life continues to increase its compliance with green building standards in the development process of future new construction projects. The real estate investment projects in the development stage in 2023 are involved in the right of superficies of Nan Shan A21 and A26 projects. Both projects are in Xinyi District, Taipei City. The products have been initially positioned as top-class commercial offices, so both projects are planned to obtain the EEWH Mark, LEED and WELL certifications, and it is expected that the A21 and A26 projects will obtain relevant certifications in 2029 and 2028 respectively. The project in Shalun, Tamsui is also involved in right of superficies, which is mainly for self-use. The project is divided into two areas for development: the cultural and creative area and the parking lot. It is expected to obtain the EEWH Mark in 2026 and the EEWH Mark in 2027 respectively. Furthermore, the Company invested over NT$17.97 million in 2023 to carry out energy-saving renovation projects on existing buildings, saving over 210,000 kilowatt hours of electricity.

Building Name	Engineering Content	Energy Saving (kWh)	Carbon Reduction (tCO_2e)	Engineering Cost (NT$)
Duenhua South Road Office Building	Replace the air handling units	186,016	85.381	17,670,000
	Replace LED lighting fixtures	7,019	3.222	61,000
HP Building	Replace LED lighting fixtures	17,696	8.122	130,000
Nan Shan Building	Replace LED lighting fixtures	7,675	3.523	113,000

Green Lease 2.0 of Taipei Nan Shan Plaza

Background and Project Content

The electricity ownership number of Taipei Nan Shan Plaza belongs to Nan Shan Life. The green electricity transfer contract will change the composition and cost of the electricity bill for building, thereby affect the lease agreement between landlord and tenant. When different tenants sign separate purchase and sales contracts with different electricity sales companies, different procurement models will cause difficulties in the distribution of green electricity.

Nan Shan's Inputs

By integrating the green electricity demand of different tenants, Nan Shan Life enhanced the negotiation leverage for electricity procurement, and solved the problem of physical transfer conditions, which significantly reduced the obstacles for tenants to purchase green electricity, and enabled tenants to use green electricity at more favorable prices and more flexible service.

Benefits

- Total conversion of renewable energy (green electricity) reached 225,300 kWh in 2023.
- According to the settlement in 2023, it is expected to assist tenants in obtaining total T-REC certificates of 225.
- Reduced carbon emissions of approximately 111.298 tCO_2e in 2023.

  (Calculated based on the emission factor of 0.494 $kgCO_2e$/kWh in 2023)

Risk Management

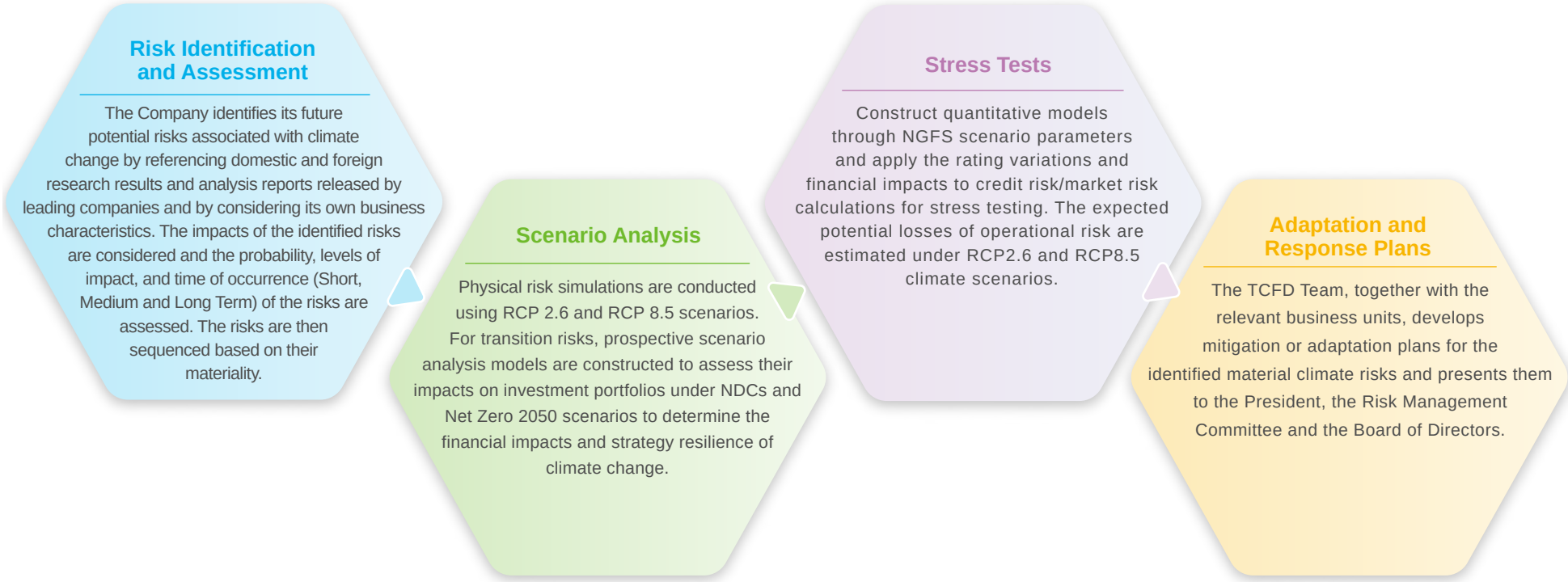
Three

3

Nan Shan ensures capital adequacy and solvency as well as sound business operations and development by formulating risk management policies, establishing risk management organizational structures, and setting up risk management mechanisms. In addition to developing risk management measures for traditional financial risks such as market risks, credit risks, and operational risks, the Company has also identified and assessed climate-related risks, and based on characteristics of risks, impact levels, and nature, scale, and complexity of its business, the Company has also formulated appropriate management mechanisms for climate-related risks to cope with the increasingly severe climate change conditions.

3.1 Climate-Related Risk Management Structure

In accordance with TCFD recommendations and Taiwan's "Guidelines for Financial Disclosure of Climate-Related Risks of Insurance Enterprise", Nan Shan has established management mechanisms for climate-related risks and opportunities. The Company regularly identifies climate-related risks and opportunities, assesses their potential impact on its business and finance, and develops relevant adaptation or mitigation measures. Nan Shan has also incorporated climate-related risks into its existing risk management framework and designated divisions of responsibilities based on the three lines of defense of internal control to ensure that climate-related risks are appropriately controlled.



Business units — **First line of defense**

Business units should identify and assess climate-related risks within their scope of business when conducting business matters, and should implement preliminary controls and related countermeasures.

Compliance, Risk Management, and Information Security units — **Second line of defense**

The second line of defense is distinct from the first line of defense. Apart from formulating management regulations for climate-related risks, the second line of defense also supervises and monitors management implementations and legal compliance for climate-related risks under the first line of defense. The risk management unit conducts climate scenario analyses and stress tests, and regularly reports management implementations for overall climate risks at the company to the Risk Management Committee and the Board.

Internal Audit — **Third line of defense**

The auditing unit serves as the third line of defense as they audit management implementations for climate-related risks within the company in accordance with current laws and regulations.

3.1.1 Management Policies for Climate-Related Risks

The Board of Directors of Nan Shan Life has approved its “Policy of Climate-Related Risk Management”, which defines the responsibilities of the Board and senior management, establishes monitoring and management mechanisms for climate-related risks and opportunities, and formulates a climate risk appetite statement. The supplementary document titled “Essentials of Climate-Related Risk Management” outlines the responsibilities and reporting processes of the responsible units under the governance framework for climate-related issues. Nan Shan Life has also adjusted its investment and real estate related risk management processes to take climate risks into consideration to ensure comprehensive management of climate-related risks.

Nan Shan Life has formulated business continuity plans for its self-owned and self-used operational sites based on physical risk analysis. For real estate property investments, procedures for domestic real estate property investment operations have been established, and relevant responses or adjustments are taken for investment targets developed on special geological conditions or coastal plain land after assessment.

3.1.2 Investment Management Mechanisms for Climate-Related Risks

In 2023, the Company established the investment management mechanisms for climate-related risks in Nan Shan Life's “Key Points of Investment Policies”, as the support to net-zero emission initiatives:

- When adding new investment underlyings, check if they are included in the list of the carbon-intensive industries. If so, check further for their carbon-reduction plans. They will not be considered for investment if no carbon-reduction plans in place.
- Annually review whether invested companies belong to carbon-intensive industries such as oil and gas, chemical engineering, chemical materials, construction materials, metal, steel, industrial machinery, air transportation, transportation manufacturing, electricity supply, and so on. If invested companies fall under mentioned carbon-intensive industries, their carbon-reduction plans need to be present, otherwise no additional investments can be made. If domestic listed stocks in the investment belong to the list of carbon-intensive industries and have not put forward a carbon-reduction plan, the Company should discuss with them and advise them to promote and enhance carbon-reduction measures.
- Before attending the shareholder meeting, the Company should assess whether the motions involve significant adverse climate risks. If the motions involve low-carbon transition projects, the Company should support them.
- The Company should at least once a year assess the impact of those investment holdings belonging to carbon-intensive industries on the Company’s overall use of funds to manage the changes in climate related risks.

3.1.3 Investment Engagement Principles

01 Continuously monitor the ESG development of invested companies and conduct related conversation and communication with them. In 2023, Nan Shan Life engaged with invested companies on different ESG topics, including improving corporate governance and implementing environmental and social responsibilities. After closely following up with invested companies, they all responded with positive feedbacks or specific actions.

02 Actively promote ESG issues to counterparties and intermediaries. Deliver advocacy materials to those counterparties and intermediaries who have not yet signed or practiced the international ESG standards and take it into consideration when conducting their periodic evaluation.

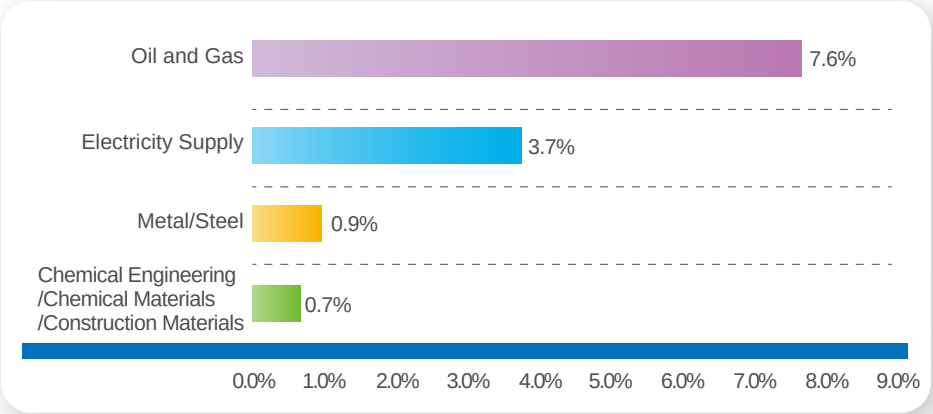
03 Establish mechanisms for advocating ESG to investment partners and methods of exercising the shareholder activism. Report the progress of each action item to the Responsible Investment Team on a quarterly basis for the timely review and revision. In 2023, the Company has reviewed all its investment partners for their ESG commitment and actively promoted ESG advocacy to those who haven’t met Nan Shan’s ESG expectations, with a 100% implementation rate.

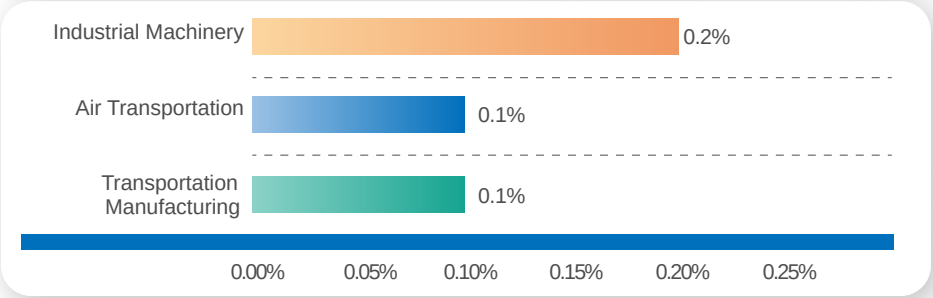
3.2 Climate Risk Monitoring

3.2.1 Description of Carbon-Related Risks

In the context of the global transition to net zero emission, carbon-intensive industries bear the brunt of the impact from net-zero transition related policies and regulations, and face more severe challenges in the use of funds and market competition. Nan Shan Life has established a list of "carbon-intensive industries" to monitor industries that are sensitive to transition risks. As of 2023, the main carbon-intensive industries in Nan Shan's investment portfolio were mainly oil and gas, electricity supply, metal/steel, and chemical engineering/chemical materials/ construction materials.

Proportion of Investment in Each Industry in 2023





3.2.2 Mitigation of Climate-Related Risks

Mitigation of climate-related risks mainly adopts the model of human intervention, which directly reduces GHG emissions to mitigate the impact of climate-related risks. For the mitigation and management of climate-related risks, Nan Shan Life has gradually expanded the capacity of solar installations in its own operations. In 2023, the capacity of solar installations of Nan Shan Life was 1,309.83kWp, with an estimated annual green electricity generation of about 1.68 million kWh. In line with its parent company's actions and the government's policy of actively promoting alternative energy, Nan Shan General has also begun to assess the business of solar and wind power projects for corporate insurance. In terms of investments, to minimize the impact of transition risks in carbon-intensive targets in the investment portfolio (e.g., the value of the investment targets may be negatively affected due to the poor environmental performance of the targets, or other climate-related risks that may cause a decline in the Company's revenue, cash flow and asset values, resulting in an impairment in the value of the investment targets), Nan Shan Life regularly assesses the impact of these holdings in carbon-intensive industries on the overall use of funds, with the aim to better manage climate-related investment risks.

3.2.3 Adaptation and Management of Climate-Related Risks

Climate-related risks adaptation refers to the use of appropriate adjustments and strategies in response to actual or expected impacts or influence to mitigate hazards or develop opportunities. Nan Shan has taken the following actions for adaptation of climate-related risks:

Managing Physical Risks in Real Estate Properties

For real estate properties owned by Nan Shan, Nan Shan Life has established relevant operating procedures which include related responses or adjustments for real estate properties with high climate risks. In addition, in the face of long-term risks (such as risks caused by rising sea levels), Nan Shan General reviews product losses and reinsurance status, and adjusts the product losses and reinsurance status when necessary.

Facing the increasingly severe climate disasters and physical risks, Nan Shan has increased the climate resilience of its operating sites through a number of actions to prevent physical risks. To cope with corporate asset losses caused by climate disasters, Nan Shan has analyzed the aforesaid risks and developed adaptation action plans for early disaster prevention preparations against typhoons and heavy rains (measures including installation of water barriers, cleaning of sinkholes, and deploying of sandbags). Meanwhile, Nan Shan has also implemented regular patrols and inspections for early prevention and handling of possible losses. To reduce the financial impacts of damages to self-owned real estate properties caused by typhoons and floods, Nan Shan continues to purchase insurance to cope with potential risks. For existing real estate properties, Nan Shan closely monitors the impact of extreme climate conditions on buildings, and reviews and adjusts building waterproofing and quake-proofing facilities as appropriate to reduce the impacts and losses caused by extreme weather events. To further understand the potential losses stemming from physical risks faced by self-owned operating sites and real estate investments, Nan Shan has imported external databases and climate disaster models, and used analysis results to better understand the probabilities of climate risk disasters faced by its self-owned operating sites. Other adaptation action plans include:

01 At the beginning of a new construction project, the architects incorporate risk factors such as soil liquefaction and earthquake resistance level of the buildings, as well as current regulations, into the assessment and design.

02 Apply the architectural design of a 200-year flood protection level to new buildings.

03 Continue to include physical risk factors (e.g. rainfalls) in the assessment based on the latest policies, laws, and architectural reports when buying or building a new real estate property.

04 If the business location is unable to operate for a short period due to climate reasons, the off-site office backup mechanism will be activated to ensure business continuity. If it is assessed that the operation will be unable to run due to long-term impact, the relocation of the business location and staff relocation plan will be evaluated.

05 Devise and rehearse contingency measures in compliance with the Company's Business Continuity Management (BCM) mechanism.

06 In cases of building equipment damage, the Company can quickly arrange equipment and materials for maintenance through timely reporting by dedicated personnel.

07 Establish a remote backup mechanism for computer facilities. In case of a major disaster, the Company can instantly start the disaster backup for its information system.

Underwriting Services

To prevent underwriting targets from being affected by climate risks, which can result in increased claims, Nan Shan General provides damage prevention services to major corporate customers, during which engineers provide customized loss prevention inspections and suggestions, which increase the reliability of equipment operation and industrial safety, to strengthen beforehand prevention and ensure business continuity of the enterprises.

3.2.4 Business Continuity Plans

As a leading financial insurance institution in Taiwan, Nan Shan always shoulders the responsibility of maintaining domestic financial stability. In view of the abnormal cancellation of insurance policies, huge loss of funds or serious lack of liquidity and other situations that may damage its solvency, Nan Shan Life has formulated the “Regulations Governing Contingency Measures for Handling Operational Crises” to ensure the sustainable operation of the enterprise. At the same time, the Company has also introduced the “Business Continuity Management (BCM)” mechanism, and in February 2022, Nan Shan Life obtained the ISO 22301:2019 International Standard Verification Certificate for BCM issued by the British Standards Institute (BSI), an internationally recognized third-party verification body. Through its Business Continuity Plan (BCP), the Company can build resilience in the event of a major force majeure disaster or other man-made disruption, and core businesses can be quickly restored to operational status while ensuring uninterrupted operations.

Metrics and Targets

Four

4

Facing severe climate-related risks, Nan Shan is committed to showing leadership in its field and calls on employees to incorporate climate-related risks into their work to address the challenges posed by climate-related risks. The climate management metrics adopted by Nan Shan generally cover the mitigation and adaptation of climate-related risks, including energy management, GHG, use of renewable energy, water consumption and waste management, and green procurement. These measures can effectively address climate-related risks and opportunities such as the potential losses of company assets caused by climate disasters, policy requirements for low-carbon economic transition, losses in operations or business caused by climate risks, and changes in customer preferences, etc. These measures also serve as Nan Shan's management of the low-carbon transition process.

4.1 Managing GHG Emissions from Investment Portfolios

To contribute to the global combat against climate change and to demonstrate its commitment as an investor to sustainable development, Nan Shan actively responds to the principles of the Partnership for Carbon Accounting Financials (PCAF), and follows its methodology to calculate the financed carbon emissions generated by its investment portfolio, which also serves as a tool for managing and accessing the climate-related risks for the Company's investment portfolio.

In 2023, Nan Shan's investment portfolio generated 14,395 $ktCO_2e$ of greenhouse gases, and the coverage rate of the verified assets to the total amount of investment and financing was about 78.9%.

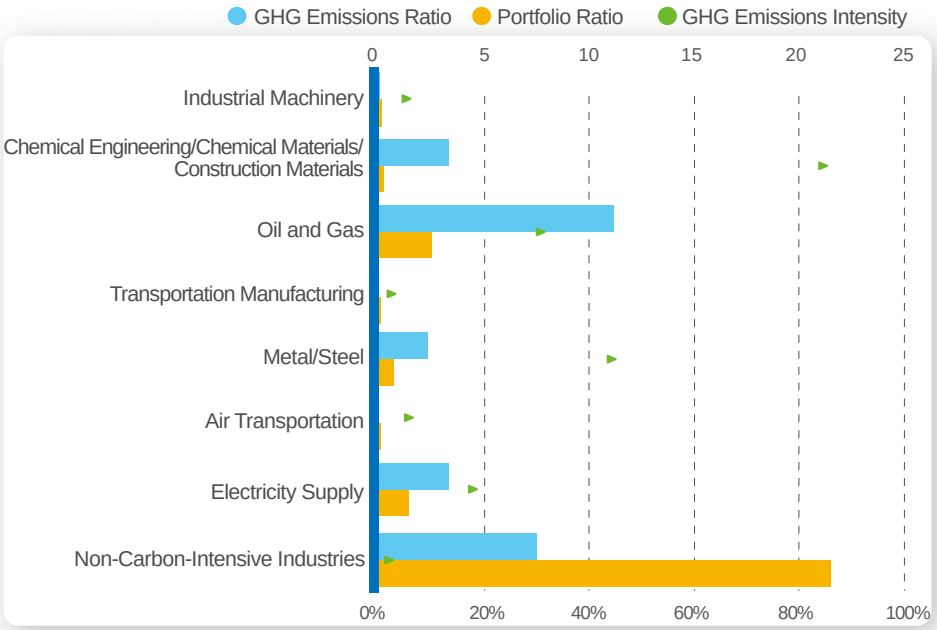
The status of carbon emissions of the various industries in the investment portfolio shows that the carbon emissions of the oil and gas industry, steel industry and electricity industry increased compared to 2022. With more and more domestic and foreign enterprises disclosing carbon emissions data, the data quality of investment portfolio has improved compared to 2022.

Scope 3 – Data of GHG Emissions of Nan Shan's Investments in 2023

Scope 3 Investment Asset Class	GHG Emissions (Note 1) ($ktCO_2e$)		GHG Emissions Intensity (Note 4)		Data Quality (Note5)	
	2022	2023	2022	2023	2022	2023
Equity	590	665	2.16	2.19	1.45	1.24
Bonds	3,107	3,246	1.30	1.35	1.63	1.53
Sovereign Bonds (Note 2)	-	10,478	-	9.14	-	2.00
Commercial Real Estate Investment (Note3)	91	6	0.08	0.06	4.00	4.00
Subtotal 1 (Equity +Bonds)	3,697	3,911	-	-	-	-
Subtotal 2 (Equity +Bonds + Sovereign Bonds)	3,697	14,389	-	-	-	-
Subtotal 3 (Equity + Bonds + Sovereign Bonds + Commercial Real Estate Investment)	3,787	14,395	-	-	-	-

Note 1: The asset categories for the verification of Nan Shan's Scope 3 investment portfolio include equity, bonds (including corporate bonds and financial bonds) and commercial real estate investments. Sovereign bonds have been included since 2023.
Note 2: The "national GHG emissions" and "gross domestic product at purchasing power parity" data used for sovereign bonds calculation are taken from the European Commission and the International Monetary Fund (IMF) respectively.
Note 3: The scope of commercial real estate investment was adjusted to include only commercial real estate investments without operational control in 2023 in accordance with the second version of PCAF document.
Note 4: GHG Emissions Intensity: metric tons of CO_2e/million NT$ for investment portfolio, and metric tons of CO_2e/ per square meter of floor area for commercial real estate investment.
Note 5: Data quality: a score of 1 indicates the best data quality, while 5 indicates the worst.

Industry Distribution of GHG Emissions in Investment Portfolios



Industry	GHG Emissions Ratio (%)	Portfolio Ratio (%)	GHG Emissions Intensity
Industrial Machinery	0.17	0.2	1.29
Chemical Engineering/Chemical Materials/ Construction Materials	10.87	0.7	21.62
Oil and Gas	41.60	7.6	7.89
Transportation Manufacturing	0.07	0.1	0.82
Metal/Steel	6.78	0.9	11.03
Air Transportation	0.25	0.1	3.49
Electricity Supply	11.46	3.7	4.52
Non-Carbon-Intensive Industries	28.80	86.7	0.48
Total	100	100	1.45

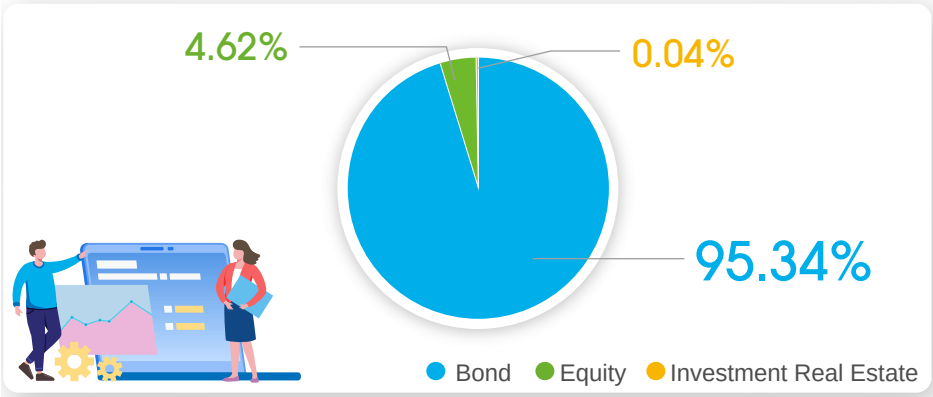
Note: The calculation of industry distribution covers equity and bonds (including corporate bonds and financial bonds).

Country Distribution of GHG Emissions in Investment Portfolio

Country/Region with Nan Shan Investment Asset	GHG Emissions Ratio (%)	GHG Emissions Intensity
America	41.7	3.10
Asia-Pacific	31.4	6.67
Taiwan	13.6	4.02
Europe	8.8	1.80
Africa	3.6	18.26
Other	0.9	8.26
Total	100	3.74

Note: The calculation of country distribution covers equity, bonds (including corporate bonds and financial bonds), and sovereign bonds.

Breakdown of Scope 3_GHG Emissions in Investment Portfolios in 2023



4.2 Climate-Related Metrics and Targets

To better monitor the management of climate-related risks, Nan Shan actively promotes the introduction of ISO14001 Environmental Management System, ISO 14064-1 GHG Inventory, ISO 50001 Energy Management System and other related action plans to its self-owned and self-used buildings. Through a comprehensive inventory, the Company can effectively understand the carbon emissions and energy efficiency of its operations. In addition, Nan Shan signed SBTi commitments and completed the target setting for carbon reduction, and in August 2024, the Company officially passed the validation of science-based targets. Nan Shan has set the following climate-related metrics and targets:

Category	Low-Carbon Operation		Low-Carbon Economy
Metric	Green Procurement	GHG Emissions	SBT Portfolio Coverage
Explanation of Metric	The proportion of green procurement amount for office and business equipment to the total procurement amount.	Reduction of GHG emissions in Scope 1 and 2 at the Company's business locations.	% of Scope 3 investment portfolios of the Company have set SBT (including listed equity, corporate bond, ETFs, mutual funds and REITs)
Unit	%	tCO_2e	%
Base Year	2023	2022	2022
Base Year Value	3%	21,679 tCO_2e	25.3%
Target	5% by 2030	Nan Shan Life commits to reduce absolute scope 1 and scope 2 GHG emissions 42% by 2030 from a 2022 base year.	Nan Shan Life commits to 50.2% of its listed equity, corporate bond, ETFs, mutual funds and REITs portfolio by invested value setting SBTi validated targets by 2028 from a 2022 base year.

Note 1: Based on the SBTi methodology, Nan Shan adopted the PC Method (SBT Portfolio Coverage) for target setting.
Note 2: Regarding the metric of green procurement, as the green procurement amount in 2022 already reached the target originally set for 2027, the metric has been replaced by the proportion of green procurement amount for office and business equipment to the total procurement amount. This change aims to strengthen target discrimination and facilitating the tracking of climate risk management performance.

4.2.1 Metrics and Targets for Low-Carbon Operations

Nan Shan regularly discloses GHG emissions on an annual basis and verifies the data of Scope 1 and Scope 2 emissions through the ISO 14064-1 GHG Inventory System. Through a comprehensive inventory, the Company can capture carbon emissions, set GHG emission targets and plan GHG reduction actions. At present, Scope 1 emissions of Nan Shan mainly include oil and natural gas for official vehicles, while Scope 2 emissions are dominated by outsourced electricity. To be in line with international standards, Nan Shan's coverage of inventory and verification was expanded to Scope 3 in 2021, and the coverage of inventory is expanded year by year. Although Nan Shan's operations do not have a direct and significant impact on the environment, the Company is still committed to promoting "low-carbon operations" and "green procurement" to mitigate climate-related risks as much as possible, while strengthening water resources and waste management. At the same time, the Company strives to enhance environmental awareness and guides employees to make changes in their behaviors, thus to further spread its influence.

	Direct GHG Emissions (Scope 1)	Indirect GHG Emissions from Energy Sources (Scope 2)	Total GHG Emissions (Scope 1+Scope 2)	Inventory Coverage	Floor Area	GHG Emissions Intensity
Unit	tCO_2e	tCO_2e	tCO_2e	%	Ping	tCO_2e/Ping
2022 (Life+General)	1,797.22	19,882.08	21,679.30	100	83,512.18	0.26
Nan Shan Life	1,766.86	18,757.86	20,524.72	100	78,784.35	0.26
Nan Shan General	30.36	1,124.22	1,154.58	100	4,727.83	0.24
2023 (Life+General)	2,231.43	19,857.68	22,089.11	100	80,951.11	0.27
Nan Shan Life	2,196.53	18,740.41	20,936.94	100	76,414.80	0.27
Nan Shan General	34.90	1,117.27	1,152.17	100	4,536.31	0.25

Note 1: GHG emissions data for 2022 is updated after verification.
Note 2: Scope 1, 2, and 3 emissions correspond to Category 1 GHG, Category 2 GHG, and Category 3 to 6 GHG respectively in the 2018 version of the GHG Protocol.
Note 3: The scope of inventory for 2022 and 2023 included all of Nan Shan 's operation sites, including Nan Shan General.
Note 4: There are 7 categories of GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). Nan Shan performs GHG inventory by adopting the operational control approach in accordance with ISO 14064-1.
Note 5: In 2022 and 2023, Nan Shan's Scope 2 GHG emissions were due to power usage, with an emission factor of 0.509 (2021), 0.495 (2022) $kgCO_2e$/kWh.
Note 6: Global Warming Potential (GWP) source: referring to the Global Warming Potential from the IPCC (2004) Fourth Assessment Report.

Compared with 2022, Nan Shan's Scope 1 emissions increased in 2023, which was mainly due to the increase in the number of employees and the addition of refrigerant equipment. Meanwhile, Scope 2 emissions in 2023, due to the increase in the volume (kWh) of self-generated and self-used renewable energy, the replacement of energy-saving lamps, the implementation of lunch break lights off, reduction of public lighting for different time periods, and other energy-saving measures, decreased compared with 2022. In addition, in 2024, some buildings have begun to purchase green electricity, and relevant units will continue to discuss and promote relevant carbon reduction measures.

4.2.2 Metrics and Targets for Low-Carbon Economy

Scope 3 Category 15 (Nan Shan Life + Nan Shan General)	2022 (based year)	2028 (target year)	2023
SBT Portfolio Coverage Targets	25.3%	50.2%	27.6%

Nan Shan's investment activities are carried out with the Principles of Responsible Investment. The Company will continue to expand its sustainable investments and establish relevant action plans in accordance with the sustainability vision and objectives set by the "Responsible Investment Team" under the Corporate Sustainability Committee.

In 2023, the Company established the investment management mechanism for climate-related risks in Nan Shan Life's "Key Points of Investment Policies", as the support to net zero emission initiatives. The Company also established investment rules in carbon-intensive industries and the mechanism to strengthen shareholder activism so that the Company can better understand the potential risks and opportunities posed by climate change when making investments in the future. At the same time, Nan Shan will also closely observe the potential investment targets in the context of the low-carbon transition economy, and continue to exert positive financial influence. The relevant units of the Company will continuously monitor the implementation of investment portfolio management.

4.3 Low-Carbon Operations

4.3.1 Usage of Renewable Energy

Nan Shan is a financial services company with low direct greenhouse gas emissions. Our main source of energy use consists of electricity used in office buildings. Nan Shan invested around NT$20 million in 2021 to install a rooftop solar power generation system at the"Nan Shan Education and Training Center" located in Wuri (Taichung), which began supplying electricity to the building beginning in 2022.

Furthermore, the Company continuously invested approximately NT$50 million in the development of a green power system in 2023. A solar power generation system will be built on the roof of the office building in Tainan Xinshi Science Park for self-use. Taiwan Power Company launched the system in July 2024, and the total power generation capacity of the system is estimated to be 1.1 million kilowatt hours.

In addition, in order to achieve SBT's carbon reduction goals, Nan Shan has planned to evaluate the purchase of green power year by year starting from 2024 and increase the use of renewable energy.

Renewable energy projects

Rooftop solar power generation system at the "Nan Shan Education and Training Center" in Wuri, Taichung

Project achievements in 2022

- Solar power generation system was completed in May 2022.
- Taiwan Power Company began metering electricity transmissions beginning in May.Our system accumulated 364,409 kWh of self-produced electricity,Including 212,781 kWh of electricity generated for self-use. We obtained 212 renewable energy certificates and reduced GHG emissions by 106 tons.

Project achievements in 2023

- Self-generate 530,000 kWh of solar power through-out the year.
- In August, converted original "wholesale of surplus electricity"contract into "transfer for self-use"contract, , of which approximately 330,000 kWh can be used by ETC for its own use, and the remaining electricity of approximately 250,000 kWh per year is transferred to the Nan Shan Building through the Taiwan Power Company power grid.Nan Shan Building is using green power from ETC. Additional 250 renewable energy certificates can be issued annually, and it is estimated that the green power used in ETC and Nan Shan Building will account for approximately 1.5% of the total electricity consumption.

Project benefits

Changed ETC solar power supply contract and transferred all generated solar power (renewable energy) for self-use in Nan Shan buildings; increased the number of renewable energy certificates obtained each year, as well as applications in greenhouse gas inventories and environmental labels; and helped us demonstrate our commitment as a green enterprise and quantify environmental benefits.

4.3.2 Energy and Carbon Reduction Measures

In order to reduce the environmental impacts of its operation and respond to green energy policies, Nan Shan Life actively carries out energy-saving and carbon reduction by setting up short-term, mid-term, and long-term goals for each environmental sustainability action plan. Some examples include office energy-saving, renewable energy system development, employees' energy efficient actions, paperless insurance policies and services. Nan Shan hopes to fulfill its commitment for environmental protection by reducing the amount of direct GHG emissions from its business operations. In 2023, Nan Shan Life invested nearly NT$43.35 million in operational energy-saving and carbon reduction. The estimated amount of carbon reduction was approximately 900 tCO_2e.

Energy-saving and Emission Reduction Projects and Results in 2023

Energy Conservation Project	Project Type	Amount of Investment (NT$)	Electricity Conservation (kWh)	Carbon Reduction (tCO_2e)	Annual savings (NT$)	Investment Payback Period (year)
Switch to energy-saving light bulbs (Nan Shan Life)	Building energy efficiency	2,798,343	235,679	116.661	732,963	3.82
Switch to energy-saving light bulbs (Nan Shan General)	Building energy efficiency	1,270,800	25,655	9.193	57,761	22
Use self-generated renewable energy	Low-carbon energy generation	Approximating 20,000,000	415,355	205.601	1,291,754	15
Participate in Earth Hour	Changes in company policies or behaviors	–	3,854	1.908	11,986	–
Video conference promotion	Changes in company policies or behaviors	1,220,000	–	22.677	–	–
Paperless conferences	Changes in company policies or behaviors	100,000	–	8.091	374,400	0.27
Energy-saving information facilities	Changes in company policies or behaviors	–	14,106	23.661	49,371	–
Paperless insurance policies and services	Changes in company policies or behaviors	–	–	431.051	11,477,500	–
Energy-saving repair of real estate	Building energy efficiency	17,970,000	218,406	100.248	–	–
Total		43,359,143	913,055	919.91	13,995,735	–

Note: The amount of energy conservation was calculated by: power consumption difference of old and new equipment (Watts) x number of work days in 2023 (248 days) x number of work hours (8 hours)/1,000.

Video Conference Promotion

Nan Shan's Inputs

Expanded the video conferencing system. It does not only reduce the risks from employee gatherings, but also saves the commuting time and vehicle power consumption.

Benefits

In 2023, the Company held a total of 15,357 video conferences,which reduced carbon emissions by approximately 22.677 tCO_2e.

Note: The reduction of carbon emission is estimated by the projected saving of the commuting vehicle power consumption caused by the number of attendees of online conferences (such as education training, online courses, seminars, etc.) in 2023.

Paperless Conference

Nan Shan's Inputs

Developed a "paperless conference system", which not only saved energy and papers, but also centralized the management of confidential documents. With the identity authentication and authority control mechanism, it reduced the risk of data leakage.

Benefits

In 2023, the Company held a total of 502 paperless conferences, which reduced the number of paper printouts by approximately 1.444 million sheets and reduced carbon emission by about 8.091 tCO_2e.

Note: The Company held 30 more conferences in 2023 and showed a positive effect of promotion compared with 2022.

Energy-Saving Information Facilities

Nan Shan's Inputs

To conserve energy and reduce carbon emissions from its operations,Nan Shan Life launched the "Energy-Saving Information Facilities"project, which mainly includes:

- Continue to improve the isolation of cold and hot channels in the IT facility room, and fill the cabinets or corner gaps with gaskets to block the mixing of air.
- Reduce host computer server procurement: through the technology of host computer/operating system virtualization, a hardware host computer can be shared with multiple virtual application system hosts, or single operating system can be shared with more application systems via containerization. This can reduce the procurement of hardware computers, saving energy and space at the same time. Moreover, the replacement of old, energy-consuming information appliances can effectively reduce energy consumption and carbon emission, which can decrease the temperature in the IT facilities room.

Benefits

1. In 2023, the power usage effectiveness (PUE) decreased from 1.86 to 1.85. The amount of energy conservation was 14,106 kWh, which reduced the amount of carbon emission by about 6.982 tCO_2e.
2. The replacement of old servers through virtualization and containerization has reduced carbon emission by 16.679 tCO_2e.

Carbon Reduction Practice

Other than implementing routine energy conservation and carbon reduction practices at the office, Nan Shan Life also proactively promotes the importance of eco-friendly actions at work and in commute.

Measures	Description
Better health with more stairs	Encourage employees to take the stairs in place of the elevators if it is within three floors. This enhances the company's collective effort in energy saving and carbon reduction for the planet and improve employees' health.
Reducing elevators in service during off-peak times	Arrange appropriate number of elevators in service during peak and off-peak times to reduce electricity consumption.
Promote and encourage employees to turn off lights whenever they are not needed	Announce to each department that lights must be kept off throughout the lunch break and that executive members must keep their office lights off whenever they are not in it.
Turn off work-related machines before leaving the office	Remind employees to turn off their personal computers, work-related machines, and air purifiers before leaving the office.
Adjust lighting modes in public areas such as stairwells and tea rooms	The LED lighting in the stairwells of each floor of the headquarters has been switched to on/off mode, and induction type LED lighting fixtures were installed in the tea room to reduce power consumption.
Reduce the consumption of paper towel	The paper towels in public areas are replaced with environmentally friendly recycled paper, which is placed in a slot paper rack. Paper is replenished in a fixed frequency (once in both the morning and the afternoon) to reduce consumption.

"Earth Hour" to Reduce Carbon and to Love the Earth

Project Context and Contents

Nan Shan Life cares about global warming problems caused by climate change and has been responding to the "Earth Hour" activity to turn off the lights launched by the World Wide Fund for Nature (WWF) Since 2018.

Nan Shan's Inputs

During Earth Hour in 2023, we arranged to turn off the lights on the external walls for 25 buildings owned by Nan Shan Life, including Taipei Nan Shan Plaza, for an hour as our contribution to reducing GHG emissions. We hope to promote the concept of electricity and energy conservation through practical actions, and through the benefits of collective action to promote carbon reduction together with our employees and agents.

Benefits

According to calculations, by shutting off the lights for 1 hour at buildings owned by Nan Shan Life,we saved approximately 3,854kWh of electricity, which was approximately 1.908 tCO_2e*.

Note: Emission factor for electricity consumption in Scope 2 is 0.495 (2022) $kgCO_2e/kWh$.

4.3.3 Paperless Policy and Services

Nan Shan Life has developed the Mobile Insurance Application Platform. With this platform, customers can buy insurance by signing on a tablet, reducing the use of paper. Meanwhile, the Company is making an effort to replace hardcopy documents with electronic forms and insurance policies. Instead of arranging traditional mail delivery, many receipts, notification letters, and insurance policies are now sent out electronically to achieve sustainability.

Performance Results	Description	Performance Results	Description
Carbon Reduction Amount Reduced 431.051 tCO_2e	**Results of the special project to establish e-administrative processes**： ● The number of policyholders applying for the e-document service increases each year. As of the end of 2023, over 1.805 million policies had adopted the e-document format. ● Up to the end of 2023, the Company has sent out a total of 355,000 electronic life and travel insurance policies.	**Paper Saved** 45.91 million pieces of paper	**Reductions to carbon footprints of policies**： ● Each policy involves sending seven documents each year. With an estimated 3 sheets of A4 paper for each mail (including the envelope), Nan Shan Life saved approximately 37.924 million pieces of A4 paper each year due to its policyholders changing to the use of e-documents. ● On average, every life and travel insurance policy takes up 40 and 10 sheets of paper respectively. The electronic delivery of these insurance policies was estimated to save 7.99 million sheets of A4 paper every year.

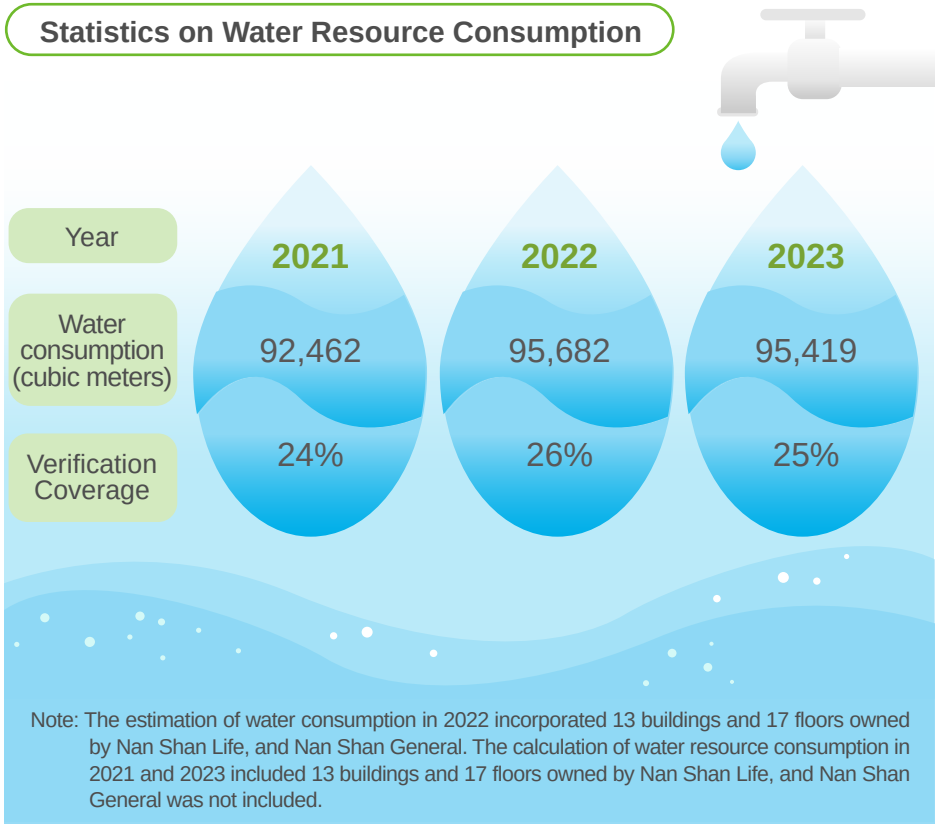
Note 1: Calculated based on the consumption of 3.8 $kgCO_2e$ per pack of A4 paper (500 sheets) (Source: Product Carbon Footprint Information Network), the company reduced carbon emissions nearly by 348.917 tCO_2e.
Note 2: According to the IPCC calculation method, the delivery of one printed billing produces about 6.32 (±0.09) gCO_2e; Nan Shan Life has mailed 12.996 million documents per year, indicating that the implementation of e-document and electronic insurance policies has saved the company 82.134 tCO_2e in the mailing process alone. Totally, the company reduces 431.051 tCO_2e of carbon emissions each year.

4.3.4 Water Resource and Waste Management

Water Resource

Water resources at Nan Shan Life are mainly consumed by daily employee usage for cooling and air-conditioning. In response to possible changes in rainfall patterns that may be caused by climate change, Nan Shan Life implemented a number of measures such as prioritizing procurement of products that comply with water-saving label criteria, promoting water saving measures, and replacing low-efficiency aged air-conditioners and water-consuming equipment, using procurement source management and promotion to respond to green office policies and reduce water consumption. In 2023, the water consumption in self-use buildings amounted to 95,419 cubic meters, a decrease of 0.27% comparing to 2022.

Statistics on Water Resource Consumption



Note: The estimation of water consumption in 2022 incorporated 13 buildings and 17 floors owned by Nan Shan Life, and Nan Shan General. The calculation of water resource consumption in 2021 and 2023 included 13 buildings and 17 floors owned by Nan Shan Life, and Nan Shan General was not included.

Waste Management

Nan Shan Life advocates waste reduction and continues to promote water conservation measures including waste classification and food waste recycling, repeated use of envelopes for official documents, and double-sided printing. We constantly encourage employees to always incorporate environmental protection actions; promote waste classification and resource recycling using the 3R (Reduce, Reuse, Recycle) principles; and also encourage actions such as environmental protection promotions, resource recycling and waste classification, smoking bans, management of drinking water, use of electronic documents, and use of videoconferencing. We expect to bring these good habits and specific practices into families and communities by reducing resource consumption. The total weight of general business waste was 731,357kg, a decrease of 1.3% comparing to 2022. Nan Shan Life did not receive any fines or non-monetary penalties for violation of environmental regulations in 2023.

Regarding office and daily waste, we adopt the following management measures:

Reduced consumption of photocopying and fax paper:
Utilized electronic files, used email for communication, stored files in public servers, and actively promoted paperless presentations and double-sided printing while also setting up reuse collection areas for general document use. We also control the number of color printing sheets in daily operations of employees by black and white/double-sided printing, and promote paper reduction and reuse to reduce equipment energy and paper consumption.

Recycling of iron and aluminum cans, PET bottles, plastics, waste batteries, and waste paper to reduce waste generation:
In 2023, a total of 183,955kg of waste paper and 77,053.8kg of iron and aluminum cans, PET bottles, plastic and waste batteries were recycled.

Environmental protection promotion:
Implemented non-periodic promotion of waste reduction management measures (such as paperless promotions) to employees, building management, and cleaning companies through a variety of environmental protection training activities.

Statistics on Resource Handling, Recycling and Reuse

Handling Method	General Business Waste (Unit)	2021	2022	2023
Incineration for power generation	Daily waste (kg)	358,219	299,109	269,329.5
Recycle or reuse (construction materials, light tubes, water, electricity or gas devices, trash and recycling)	Computer asset write-offs in Taiwan (pc)	1,527	2,680	2,123
	Waste paper recycling from document files (kg)	142,074	200,190	183,955
	Waste paper recycling from filing cabinet (kg)	173,690	195,120	198,660
	Furniture and equipment reuse (pc/kg)	181	140	236
	Recycling: iron and aluminum cans, PET bottles, plastic, etc. (kg)	65,348	81,015.7	77,053.8
Total (kg)		879,564	741,039	731,357

Note: The estimation of daily waste and resource recycling only incorporated 13 buildings and 17 floors owned by Nan Shan Life. The coverage rate of business locations was 26%.

4.3.5 Green Procurement

Nan Shan set “integrity management,” “environmental protection,” and “sustainable development” as supply chain management elements; in future, we hope to leverage the influence of the financial and insurance industry, encourage suppliers to jointly fulfill corporate social responsibilities, promote sustainability concepts, and build sustainable supply chains. Nan Shan Life has introduced sustainable procurement guidelines and standards, and identified and analyzed material sustainable issues of supplier sustainable risks to developed risk control methods. Through education and training, document revisions and other procedures, the Company gradually revised and formulated sustainable procurement policies to reduce the risks of procurement process, and achieved engagements with suppliers for the concept of sustainable procurement, including the signing of a sustainable commitment letter by the supplier. The following points are critical for implementing supplier management through strict review and management procedures:

01 Before conducting business with suppliers, we must thoroughly understand their background, financial situation, and operational status. We must inspect their stakeholders, efforts in anti-terrorism and sanctions lists to ensure that they meet Nan Shan Life's legal compliance to prevent risk from commercial trades.

02 According to the relevant company assessment regulations in the Nan Shan Life Procurement Application Operation Regulations, we have established a comprehensive assessment system. We must follow a review system that is fair, impartial, and open in reviewing suppliers and selecting outstanding partners for collaboration.

03 Before adding new suppliers, we review their ESG implementation status, and we incorporate ESG into the assessment items of annual qualified suppliers.

04 We invite suppliers to sign the Supplier/Contractor Commitment and to follow corporate social responsibility commitments related to integrity management, labor and human rights, and environmental sustainability. In the first quarter of 2023, the Company sent supplier commitment agreements to 491 suppliers who had business relationship with Nan Shan in 2022 for ethical management and communication. With 210 suppliers signing back, the ratio of communication was 42.77%.

05 Before leasing a location, we evaluate whether that property has energy-saving equipment/devices or whether the equipment/devices are old. We prioritize leasing properties with energy-saving equipment and devices or properties where the landlords are willing to replace the old equipment/devices with new models that conserve energy.

Nan Shan Life's Declaration on Sustainable Procurement

The Company is committed to becoming a benchmark enterprise in implementing ESG and sustainable business strategies. To respond to climate change and environmental protection, we will strengthen our sustainable procurement practices by purchasing goods that are energy-saving, carbon and waste reducing, and recycling products to reduce impact on the environment and make greater contributions to environmental protection.

The Company introduced the ISO 20400 Sustainable Procurement Guidelines in 2023. We review and integrate critical sustainable factors in procurement practices, and implement sustainable procurement to achieve our corporate sustainable supply chain responsibility. By implementing sustainable procurement,the Company strengthens its competitiveness in the market, and becomes more influential. This is a communal journey, and we look forward to join hands with everyone to achieve a more sustainable and responsible future.

Green and Local Procurement

Sources of procurement for services and products	Proportion of procurement from local suppliers in Taiwan (%)	Green procurement amount (NT$)
	93	148,352,874

Note: In 2023, the scope of statistics was expanded to include information facilities with the Energy Star label.

Green Procurement of Information Appliances

Project Context and Contents

Through energy-saving equipment procurement and ESG supplier management, the Company facilitates the green procurement of information appliances.

Nan Shan's Inputs

Since the production and operation of all information equipment would generate massive carbon footprints, the Company has designed three principles for green procurement:

- Electronic Product Environmental Assessment Tool (EPEAT) for green products: priority will be given to information appliances that have been certified to be made by an eco-friendly process.
- Energy Star for energy efficiency: priority will be given to information appliances that have been certified to be energy-saving.
- ESG suppliers: suppliers must comply with the ESG regulations.Currently all primary suppliers are ESG-certified as they continue to work toward zero carbon emissions.

Benefits

In 2023, the total amount of "Green Procurement of Information Appliances" amounted to NT$23.05 million.

Future Outlook

Nan Shan continues to promote sustainable countermeasures and used systemic management to establish short, medium, and long term targets for various environmental sustainability action plans for mitigation and adaptation of climate change impacts, taking practical actions to achieve our commitment to environmental protection. Nan Shan signed SBTi (Science Based Targets initiative) commitments and completed the target setting for carbon reduction. Officially passed the validation of our submitted science-based targets in August 2024. In future, Nan Shan will not only continuously work to reduce operational GHG emissions, but will also continue to monitor the risks of carbon-intensive industries within investment portfolios and GHG emissions from investment and financing. Based on the principles of responsible investment, Nan Shan will continue to expand sustainability-themed investments and make contributions to the transformation of the global low-carbon economy.

Nan Shan closely monitors discussions of impacts on the insurance industry from climate-related risks, and also reviews analysis and management processes for climate-related risks as appropriate to ensure climate resilience and maintain financial stability. As a responsible corporate citizen, Nan Shan actively supports national Net Zero targets, engages with investment companies, and maintains sensitivity to climate-related business opportunities to truly align with low-carbon transition trends. Nan Shan continues to prudently monitor other known and unknown natural risks, as well as study industrial, government, and academic research related to biodiversity risks and their potential impacts on the economy, the society, and the Company. Nan Shan pledges to exert positive financial influence on the path to sustainable development of real economies.

Five

5

Appendix

TCFD Index

TCFD Index

The four main themes of the Task Force on Climate-related Financial Disclosures (TCFD) released by the Financial Stability Board (FSB), in 2017 and corresponding public disclosures are shown in the table below:

Aspect	Guidance for All Sectors	Corresponding Sections
Governance	Describe the board's oversight of climate-related risks and opportunities.	1.1 Climate Governance Framework
	Describe management's role in assessing and managing climate-related risks and opportunities.	1.1 Climate Governance Framework
Strategy	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	2.1 Climate-Related Risks and Opportunities 2.2 Transmission Pathways for Climate-Related Risks
	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	2.2 Transmission Pathways for Climate-Related Risks 2.5 Climate Strategies and Actions
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	2.3 Scenario Analysis 2.4 Climate Resilience: Stress Tests for Climate-Related Risks
Risk Management	Describe the organization's processes for identifying and assessing climate-related risks.	2.1 Climate-Related Risks and Opportunities
	Describe the organization's processes for managing climate-related risks.	3.1 Climate-Related Risk Management Structure 3.2 Climate Risk Monitoring
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	
Metrics and Targets	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	4.1 Managing GHG Emissions from Investment Portfolios 4.2 Climate-Related Metrics and Targets 4.3 Low-Carbon Operations
	Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	

Aspect	Supplemental Guidance for Insurance Companies	Corresponding Sections
Governance	The board of directors and senior management should ensure companies consider identified climate-related risks when formulating risk appetites, strategies, and operating plans, and should continue to monitor management and disclosure of climate-related risks.	1.1 Climate Governance Framework
	Committees subordinate to the board of directors may be established, with clear division between the responsibilities of the board of directors, committees subordinate to the board of directors, and senior management:	1.1 Climate Governance Framework
	The board of directors and committees subordinate to the board of directors: (1) The board of directors hold ultimate responsibility for management of climate-related risks. (2) Approve and monitor management frameworks and policies for climate-related risks. (3) Confirm climate-related risks are incorporated into qualitative or quantitative indicators for risk appetites. (4) Ensure that directors have a clear understanding of climate-related risks and opportunities, regularly review implementations by senior management, and also ensure that senior management have received sufficient training.	
	Senior management: (1) Formulate management frameworks and policies for climate-related risks. (2) Confirm effectiveness of management frameworks and policies for climate-related risks. (3) Establish internal management processes for climate-related risks. (4) Ensure that necessary measures are adopted for identified climate-related risks. (5) Designate appropriate personnel for management of climate-related risks and provide necessary training. (6) Regularly report management of climate-related risks to the board of directors or committees subordinate to the board of directors.	
Strategy	Identify financial impacts to finances, businesses, products, and investments from climate-related risks and opportunities.	2.1 Climate-Related Risks and Opportunities
	Prioritize climate-related risks based on materiality standards.	2.2 Transmission Pathways for Climate-Related Risks
	Consider impacts from climate-related risks and opportunities when formulating annual operating goals as well as business, product, and investment strategies.	2.5 Climate Strategies and Actions
	Review and adjust management policies for climate-related risks based on scenario analyses and stress test results.	2.3 Scenario Analysis 3.1 Climate-Related Risk Management Structure

Aspect	Supplemental Guidance for Insurance Companies	Corresponding Sections
Risk Management	Risk management and monitoring: (1) Formulate assessment methodologies for identifying departments, counterparties, and clients with climate-related risks (including existing and potential counterparties and clients), and assess impacts. (2) Formulate management and continued monitoring mechanisms for climate-related risks. Establish relevant mechanisms for departments, counterparties, and clients with significant climate-related risks to manage identified climate-related risks, and encourage said counterparties and clients to adopt necessary measures to reduce their climate-related risks. (3) Implement risk management for climate risks identified by the company in accordance with the “Three Lines of Defense for Internal Control in the Insurance Industry.”	3.1 Climate-Related Risk Management Structure 3.2 Climate Risk Monitoring
	Scenario analyses and stress tests: (1) Develop capability to conduct qualitative or quantitative scenario analyses and stress tests that assess the impacts of climate-related risks. (2) Establish baseline and severely adverse scenarios with qualitative and quantitative risk indicators, as well as long-term and short-term scenarios for strategic planning and risk management purposes.	2.3 Scenario Analysis
	Investment management: (1) Establish appropriate procedures to assess and manage climate-related risks associated with investment targets. Investment targets with higher climate-related risks should have additional review mechanisms. (2 Regularly assess changes in climate-related risks associated with investment targets to serve as a basis for adjusting investment positions.	3.1 Climate-Related Risk Management Structure 3.2 Climate Risk Monitoring 4.1 Managing GHG Emissions from Investment Portfolios
Metrics and Targets	Set indicators for assessing and managing climate-related risks.	4.1 Managing GHG Emissions from Investment Portfolios 4.2 Climate-Related Metrics and Targets 4.3 Low-Carbon Operations
	Set management targets for climate-related risks.	
	Set indicators for determining climate-related risks based on materiality rankings.	
	Consider incorporating management of climate-related risks into performance measurement indicators.	


Nan Shan Life