



02 Towards Net-zero and Nature Positive

E.SUN is turning its commitment into action by steadily increasing its green assets. This includes supporting renewable energy projects, phasing out of coal-related companies, offering green building loans, and implementing internal carbon pricing. We remain dedicated to achieving net-zero emissions by 2050.

[2.1 Climate & Nature Governance Structure](#) [2.2 Climate & Nature Risks and Opportunities](#) [2.3 Opportunity Identification and Management](#)
[2.4 Risk Identification and Management](#) [2.5 Sustainable Operating Environment](#) [2.6 E.SUN's Emissions Structure](#)
[2.7 Nature and Biodiversity Preservation](#)

48.6 %

reduction in Scope 1 & 2
emissions compared to baseline

First FI

in Taiwan to receive the highest
level TNFD conformity from BSI

\$ 646 Million

in green procurements

Cover Story

A Decade of Dedication

E.SUN Malavi Project 10th Anniversary

E.SUN initiated the "E.SUN Malavi Project" in 2014 out of our love for the beauty of this land. This project is grounded in the United Nations Sustainable Development Goals (SDGs) and has further expanded into the realms of net-zero sustainability, ecological conservation, and sustainable procurement. This project promotes the transition to organic farming in Namuan Village, Hualien County, advocating for the use of nature-based solutions and integrates traditional knowledge from the local aboriginal Bunun people to protect the environment and enhance biodiversity of the area, aiming to achieve the vision of "Living in harmony with nature" as outlined in the United Nations Convention on Biological Diversity. The E.SUN Malavi Project not only achieves the goal of organic transition but also unites the efforts of businesses, government, and academia gradually restoring the biodiversity of Namuan.

The project is named "Malavi", the Bunun word meaning "come along" or "go together," in hopes of promoting harmony

between humanity and nature through the collaboration of corporate and public support. The project introduces public-private partnerships (PPP) and collaborates with various stakeholders, with E.SUN providing funding support, Yushan National Park Management Office inviting Tse-Xin Foundation for guidance, and Yin-Chuan Organic Farm for purchasing and marketing the rice. The project creates a positive impact on the local environment, aligning closely with the goals of the Forestry and Nature Conservation Agency. By encouraging local farmers to transition to organic-friendly farming and maintain ecological habitats, biodiversity in the Namuan farming area has gradually recovered, with species such as pangolins, the Chinese box turtle, and the endangered fish species Kikuchi's Minnow returning, in addition to helping farmers improve rice quality. Conservation fields and a community seed bank have also been established in Namuan to help preserve traditional crops, including the collection of various traditional Bunun beans and

grains, to preserve climate resilient crops for the future.

In the summer of 2024, E.SUN returned to Namuan to hold a harvest festival with the group of organic pioneers, commemorating the fruitful outcomes of a decade of hard work. The Chairman, together with E.SUN founder Mr. Yung-Jen Huang, led E.SUN's leadership team and volunteers back to the fields they pledged to protect so many years ago, experiencing the joy of harvesting rice firsthand. The golden stalks of rice contrast beautifully with the green field ridges, creating a stunning backdrop for the celebration. Farmers happily pointed out all the flora and fauna to the community children, passing on their knowledge of the land to the next generation.

With everyone's support over the

years, sustainable agriculture has successfully taken root in Namuan.

E.SUN continues to showcase our ESG spirit through the promotion of the Malavi Project, sharing this invaluable experience domestically and taking it to the international stage. At the World Biodiversity Summit during New York Climate Week in 2024, we presented Taiwan's beauty and achievements to the world. To further promote sustainability to other agricultural areas, E.SUN leverages the successful experiences from the Malavi Project to develop a series of financial products under the "Leopard Cat Loan Project." E.SUN hopes that through continuous cooperation, the Malavi Project can not only progress into the next decade but also lead Taiwanese agriculture toward a bright and sustainable future. 🌱



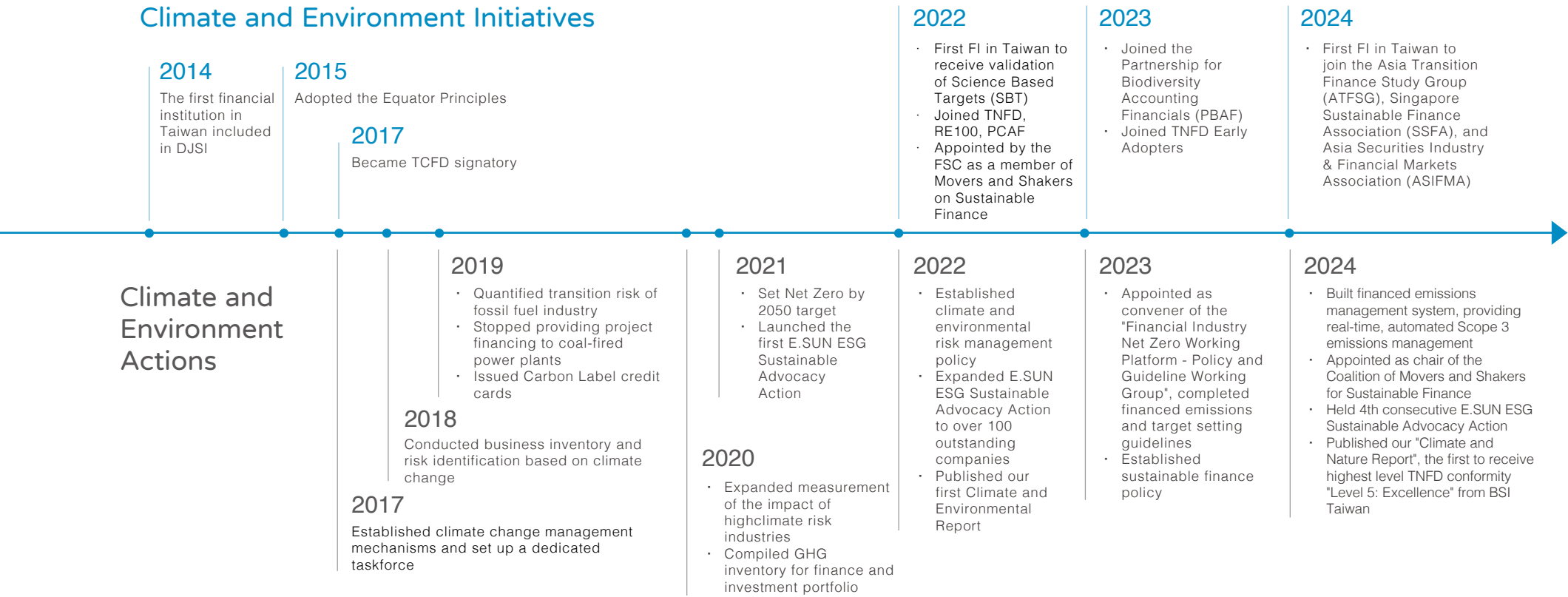
E.SUN Climate Transition Actions

■ Our Vision for Climate and Nature

E.SUN adheres to the TNFD disclosure framework, which encompasses four major areas: Governance, Strategy, Risk and Impact Management, and Metrics and Targets. We have established a vision of achieving nature-positive growth by 2030 and the goal of reaching net zero by 2050. Through scientific methodologies and robust risk management, we are making steady progress toward net-zero emissions and fostering harmonious coexistence with nature. E.SUN has made a promise of becoming a world-class corporate citizen since its founding. We are determined to become the best-performing and most respected company.



Climate and Environment Initiatives



■ International Climate and Nature Advocacy

Organization	E.SUN's Actions	Organization	E.SUN's Actions
The Equator Principles	E.SUN adopted the Equator Principles in 2015 for project finance risk classification, carefully assessing whether projects fulfill environmental and social responsibilities and setting monitoring and improvement plans. Each financing case is reviewed for key issues like climate risks, pollution, and biodiversity.	PCAF	In 2020, E.SUN FHC performed greenhouse gas (GHG) accounting for major investments using the PCAF standard, based on investee reports and CDP data, and joined PCAF officially in 2022.
TCFD	E.SUN FHC is Taiwan's first company to sign the Task Force on Climate-related Financial Disclosures (TCFD). We have established a climate governance system based on governance, strategy, risk management, and metrics.	RE100	E.SUN FHC joined RE100 in July 2022 as Taiwan's first financial institution approved as a "low electricity-consuming enterprise." We aim to use 100% renewable energy at all sites domestically and abroad by 2040.
SBTi	In 2021, E.SUN FHC set carbon reduction targets and by February 2022 became Taiwan's first and Asia's second financial institution validated by the Science Based Targets initiative (SBTi). This guides us toward limiting global warming to 1.5°C by 2050.	TNFD	In 2022, E.SUN FHC joined the Taskforce on Nature-related Financial Disclosures (TNFD) and published our first report combining TCFD and TNFD frameworks. The report was praised by TNFD and highlighted as a financial sector example. In 2024, E.SUN FHC joined TNFD Early Adopters and released Taiwan's first Climate and Nature Report to pass BSI's TNFD review, featured on the TNFD website.

■ Contributions & Expenditures for Climate Change & Biodiversity

Topic	Description of Lobbying Activities	Total contributions for FY2024 (\$NTD)
Climate Change	<ul style="list-style-type: none"> Serve as the convener of the "Financial Industry Net Zero Working Platform - Policy and Guidelines Working Group" of Taiwan Financial Services Roundtable (TFSR), as well as the convener of the "Banking Industry Financing and Investment Portfolio Carbon Emission Practice Manual" project team of the Banking Association. We collaborate with both public and private sectors to discuss and develop policies and regulations for the financial industry in Taiwan, including the "Financial Industry Financial Carbon Emission (Scope 3) Calculation Guidelines", the "Financial Industry Carbon Reduction Target Setting and Strategy Planning Guidelines," and the "Reference Guide for Transition Lending Review " to ensure their alignment with the Paris Agreement. Support and participate in climate-related forums and events organized by industry associations and NGOs to share experiences with leaders across sectors. 	\$6,490,392
Biodiversity	<ul style="list-style-type: none"> Support and participate in events such as the World Biodiversity Summit, collaborating closely with government, business, financial institutions, and civil society leaders worldwide to address critical issues like biodiversity loss, restoration, and investment in nature-based solutions, aiming to achieve the Global Biodiversity Framework and the Paris Agreement. Partner with the Taiwan Wild Bird Federation to promote citizen science and biodiversity, supporting long-term monitoring of bird populations, habitat changes, and the effectiveness of conservation strategies. Collaborate with Yushan National Park Headquarters, the Tse-Xin Organic Agriculture Foundation (TOAF), and Yin-Chuan Sustainable Farm to advance the "E.SUN Malavi Project," enhancing habitat creation and ecological conservation through nature-based solutions to boost biodiversity and improve the environment of Nan'an rice fields. 	\$2,902,945

2.1 Climate & Nature Governance Structure

E.SUN established a top-down management mechanism, establishing a tight-knit governance structure from the Board of Directors through high-level management to executive units. The Board evaluates and supervises policies related to climate and environmental risks, while the Sustainable Development Committee is responsible for overseeing and formulating strategic directions related to sustainability. The Risk Management Committee manages and measures the associated risks. High-level management is closely linked to sustainability performance, and executive units carry out actions and risk management to ensure that targets are achieved. Regular and ad-hoc reports are made to management to maintain transparency in strategy execution.

Board of Directors and Functional Committees

Board of Directors

- Approve climate-related and environmental risk management policy, major decision making, and supervision of climate risk
- Approve action plans and ensuring effective operation of climate-related and environmental risk management

Sustainable Development Committee

Guide and supervise climate management policies, formulate annual plans and strategic direction, track and review the effectiveness of project and activity plans. Meetings are held at least twice a year.

Audit and Risk Management Committee

In charge of risk management, risk measurement, risk supervision, deliberating on risk management and execution, tracking compliance with risk management policies, and promoting risk management culture

High-level Management

Chief Executive Officer (President)

Strategic development incentive link (20%): Includes developing E.SUN's long-term leading strategy and establishing E.SUN as the preferred brand for sustainable development. Climate-related targets include annual SBT targets, annual RE100 targets, and selfcommitted Scope 1 and 2 reduction targets among others

Chief Sustainability Officer

- Outline sustainable development strategies, oversee the progress of various projects and goals by dedicated sustainability units. Ensure overall sustainable development compliance with laws and regulations and further managing long-term risks
- Incentive link (30%): Scope 1, 2, and 3 reduction Implementation of IFRS S1/S2, expanding E.SUN's positive influence

Chief Risk Officer

- Integrate planning for risk management, supervise the promotion and execution of risk management related work, and handle overall risk-bearing capacity and risk status.
- Incentive link (10%): CDP performance, Assist in IFRS S2 implementation

Executive Units

Dedicated Sustainability Teams

- Measure the impacts of physical risks and transition risks on the business and further developing management mechanisms for mitigation and adaptation.
- Seize opportunities for the transition to a net-zero economy and develop financial products to meet

Risk Management Division

- Plan and implement climate risk management mechanisms, evaluate and consolidate climate risk management information, and report to the board of directors.
- Assist in the development of data, methodologies, and management tools to effectively identify and assess climate risks for relevant units.

First Line of Defense

- Identify business risks
- Assess and measure business risks
- Manage risks generated by business

Second Line of Defense

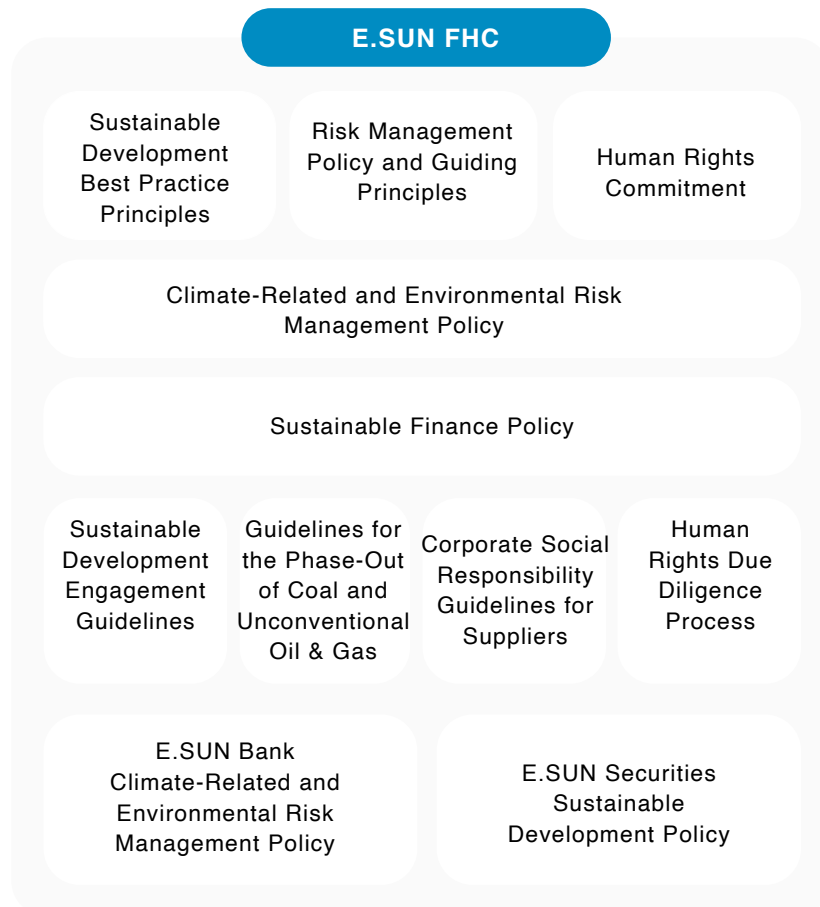
- Plan and implement risk management mechanisms
- Consolidate risk management information and report to the board of directors and risk management committee
- Assist in developing data, methodologies, and management tools

Third Line of Defense

- Perform independent audits on climate related risks

■ Policy and Culture Building

To better integrate climate and nature sustainability considerations into organizational decision-making, management, and business operations, E.SUN FHC starts from the governance level, committing to put our climate and environmental culture into practice, formulating a long-term sustainability blueprint, and embedding it into our daily operations. We emphasize nurturing talent and align our development strategies to support our climate and nature vision. E.SUN supports the Universal Declaration of Human Rights and the UN Declaration on the Rights of Indigenous Peoples. Human rights issues are incorporated into our governance policies to ensure communication and participation with Indigenous peoples, local communities, and affected stakeholders, creating a just and sustainable society for the future.



Establish a Climate & Nature Management Culture

- Established the Sustainable Development Committee with the Chairman as convener.
- Established climate and environment-related policies and procedures, and regularly report on progress¹.
- Arrange external climate and nature education training for the Board and Senior Management annually, such as the transformation of the world economy driven by environmental challenges and sustainable finance, discussions on sustainable risk trends and response strategies, trends in sustainable development and governance, and sustainable finance management certifications².

Governance Unit	No. of members with competence on nature-related issues	Total
Strategy Committee	12	12
Sustainable Development Committee	9	10
Board Risk Management Committee	5	5



Cultivate Climate & Nature Finance Talent

- Collaborated with TAISE to hold the "Sustainable Finance Manager Development Program" to enhance ESG and climate-related skills, with a total of 237 participants across three years.
- Internal education and training integrate ESG-related topics by introducing climate and environment risk management courses in a hierarchical training program that covers senior managers, mid-level managers, specialists in all divisions, and new employees. Additionally, environmental consensus is fostered through online courses and monthly educational materials.
- Members of relevant project teams have accumulated international certifications such as SCR, CFA ESG, ISO 14064-1,2,3, ISO 14067, PAS 2060, etc.³



Enhance Climate & Nature Risk Assessment Capability

- Collaborate with external consultants to establish nature-related risk assessment methodologies, evaluating dependencies and impacts through quantitative and qualitative measures, and building a nature-related scenario analysis to explore financial impacts from declines in nature
- Establish an internal financed emissions management system, automating data processing according to PCAF methodology and providing real-time management capabilities.

Note 1: For information on climate-related government results for the Board and senior management, please see E.SUN FHC 2024 Annual Report pg.35-43.

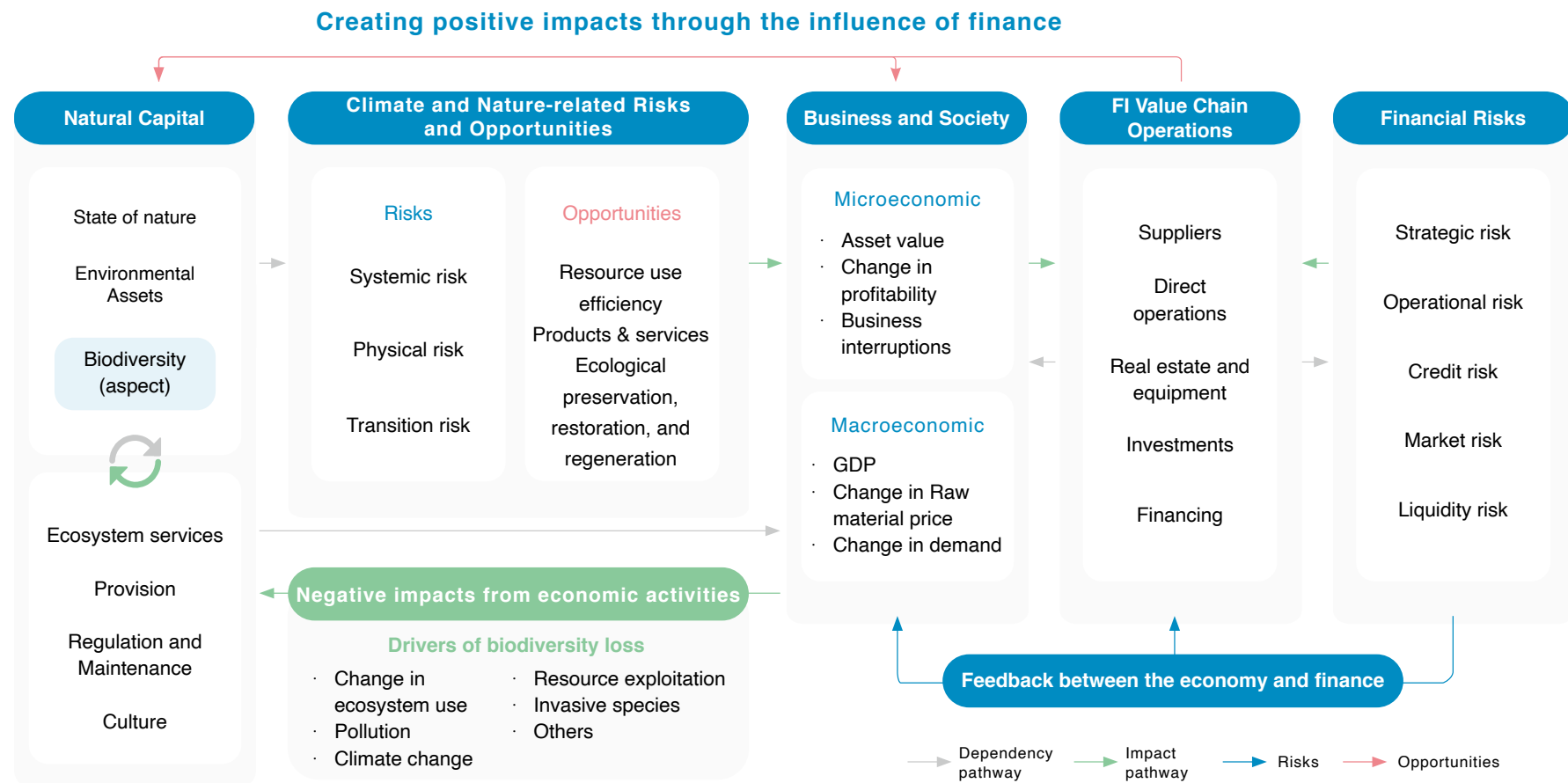
Note 2: For information on climate-related education training for the Board and high-level management, please see E.SUN FHC 2024 Annual Report pg.73-80.

Note 3: SCR*, Sustainability and Climate Risk. CFA ESG*, Certificate in ESG Investing.

2.2 Climate & Nature Risks and Opportunities

■ Dependency, Impact, Risk, and Opportunity Transmissions Pathways

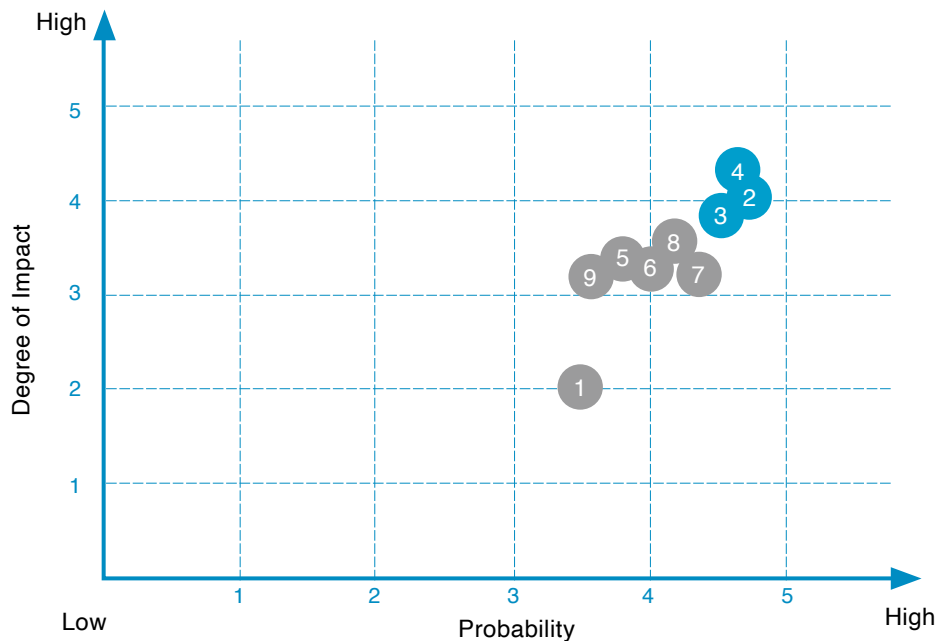
The business activities of companies depend on and impact natural capital and ecosystem services, encompassing the entire value chain from procurement to investment and financing. Financial institutions, in addition to their own commercial activities, also participate in the activities of customers and their value chains through investments and loans. Therefore, E.SUN needs to understand its customers' dependencies on and impacts regarding natural capital and ecosystem services, enabling the management of the climate and nature-related risks that arise. There exists a complex interaction between climate change and the natural environment. E.SUN aspires to approach environmental issues with a broader perspective, addressing risks while also seizing opportunities for sustainable transition and green finance.



2.3 Opportunity Identification and Management

GRI : 201-2

In addition to addressing climate and environmental risks, E.SUN actively seeks opportunities for climate transition. These climate-related opportunities encompass multiple aspects, including resource use efficiency, products and services, market expansion, and operational resilience. As a key driver of market forces, the financial industry must exert a positive influence to establish a virtuous cycle within the sustainable finance ecosystem. E.SUN is committed to collaborating with the government and enterprises to jointly promote net-zero transformation. We strive to guide private capital flows toward economic activities that benefit the environment and society, advance the development of sustainable infrastructure as well as low-carbon industries and technologies, assist customers in their net-zero transition, and enhance resilience against ESG-related risks to ensure sustainable growth potential in the face of future challenges.



Note: ● are items considered to be more material

	Opportunities	Potential financial impact(s)	Impact Period
Resource use efficiency	1 Green, low-carbon operation	Green buildings and environmentally friendly measures save water, conserve energy, minimize waste, and reduce operating costs.	Medium
	2 Process digitalization	Digitalization of processes enhances operational efficiency, reduces the consumption of natural resources, and minimizes environmental impacts.	Short
Products and Services	3 Green products and services	Develop green financial products and services to direct funds into sustainable sectors, assist clients in transition, and create business opportunities.	Medium
	4 Digitalized customer service	Digitalized financial services reduce paper use, increase customer satisfaction, and lower service costs.	Medium
Market	5 Expand sustainable client base	Expand the client base through innovative green financial products, engagement, and assistance in low-carbon transition, such as helping businesses adopt circular economy models.	Medium
	6 Capital market participation	Diversify financial assets (such as green loans, sustainability-linked loans, and sustainability bonds) and identify related investment and capital acquisition opportunities.	Medium
Operation Resilience	7 Enhance influence of finance	Establish systems to enhance ESG performance, meet stakeholder expectations, promote environmental sustainability, and improve reputation and long-term performance.	
	8 Cultivate sustainability talent	Cultivate sustainable finance talent to enhance climate and environmental change response capacity	Long
	9 Operation resilience management	Strengthen supply chain management, increase sustainable procurement, and establish climate disaster response measures to enhance operational resilience.	

Note 1: Time period definitions: less than 1 year is considered short-term, up to 2030 is medium-term, and up to 2050 is long term.

Note 2: Assessment of opportunity materiality includes ratio of sustainability assets, decreased operational costs, and the percentage of affected employees, among other factors, that exhibit higher levels of impact and probability

Note 3: Credit products are categorized as follows: short-term (maturity of less than 1 year), medium-term (more than 1 year but less than 7 years), and long-term (more than 7 years). Mortgage loans typically have a maturity period of 30 years, while corporate banking provides suitable products based on customers' needs. The product strategy operates on a 5 to 10-year cycle, with annual management reviews and adjustments made depending on management needs.

2.3.1 Opportunity Response Strategy

E.SUN has developed strategies and action plans for operations, products, and financial planning by identifying significant climate- and nature-related opportunities. These efforts align with both domestic and international policies, including the Paris Agreement, Taiwan's 2050 Net-Zero Emissions Pathway, and the TCFD framework. Additionally, we have set financial performance targets for climate- and nature-related products (see [page 46](#) for details), along with environmental targets for our direct operations. Resources are being actively allocated to support a green and low-carbon future.

Opportunities	Internal strategies and targets		Current actions
	Medium Term(5-10 Years)	Long Term (10+ Years)	
1. Green, low-carbon operation	<ul style="list-style-type: none"> Reduce Scope 1 and 2 emissions 42% by 2030 from a 2020 baseline Reduce water usage 30 % by 2030 from a 2020 baseline Reduce waste generation 78% by 2030 from a 2016 baseline 	<ul style="list-style-type: none"> 100% renewable energy use at all of E.SUN's operating locations by 2040 	Resource allocation <ul style="list-style-type: none"> Install rainwater recycling and water-saving devices, and promote the concept of correct water usage to conserve water resources. Implement waste sorting and recycling management, and promote a paperless environment. Replace high-energy consumption air conditioning and lighting equipment. Implement ISO 50001 standard to strengthen energy management. Purchase green energy and install solar panels on E.SUN-owned buildings to increase the proportion of renewable energy use. E.SUN's direct operational expenditures for energy-saving and carbon reduction measures in 2024 totaled NT\$126 million.
2. Process digitalization			
3. Green products and services	<ul style="list-style-type: none"> E.SUN aims to be the choice sustainability partner for enterprises and other customers by 2030 	<ul style="list-style-type: none"> Continue to deepen scope and scale of green products in line with Taiwan's 2050 net-zero emissions pathway and strategies. 	Capacity Utilization <ul style="list-style-type: none"> Support customers that have a positive impact on the environment and society, including green projects such as renewable energy, as well as enterprises with clear ESG development goals. Deepen connections with customers and sustainable partners through engagement, ESG sustainable initiatives, and consulting services.
4. Digitalized customer service	<ul style="list-style-type: none"> Target NT\$130 billion in green loans by 2030 		
5. Expand sustainable client base	<ul style="list-style-type: none"> Target Sustainability Linked Loans account for 13% of all corporate loans by 2030. 		
6. Capital market participation			
7. Enhance influence of finance	<ul style="list-style-type: none"> Actively participate in government and international organizations' sustainability and climate and nature related initiatives to strengthen response capabilities Collaborate with TAISE to establish a Sustainable Finance Manager certification to enhance ESG and climate-related skills Internal education and training incorporates ESG related issues, and climate risk management training is introduced into the orientation program 	<ul style="list-style-type: none"> Benchmark international standards (such as CDP, DJSI, etc.) and continuously improve, reaching net-zero emissions by 2050 	Resource allocation <ul style="list-style-type: none"> Establish a financed carbon emissions management system to enhance management capability. Build a physical risk database to improve physical risk identification and management capabilities of real estate collateral. Achieve green building certification through new construction and improvements to existing buildings. Cultivate internal talent in sustainability and climate change, and plan support for related certifications.
8. Cultivate sustainability talent	<ul style="list-style-type: none"> Establish internal management systems to strengthen risk and opportunity management 		Capacity Utilization <ul style="list-style-type: none"> Establish mechanism to revise internal management climate and environment-related regulations, integrating them into daily operations and business development, enhancing risk and opportunity management. Participate in climate-related projects with regulatory bodies and associations to help establish relevant standards. Collaborate with NTU on "E.SUN-NTU ESG Centenary Project", setting a goal to plant 100,000 trees over 10 years. Develop a no-net-deforestation commitment, promoting and encouraging suppliers and customers to participate in biodiversity and forest conservation.
9. Operation resilience management			

Note 1: For latest achievements towards our targets, please see [CH2.5 Sustainable Operating Environment](#)

2.3.2 Climate & Environment related Products and Services

Personal Finance

Carbon Footprint Labeling Credit Cards

- E.SUN Bank's entire range of credit cards have received "Carbon Footprint Labeling Certificate"
- 7.47 million cards have been issued cumulatively

Innovative Inclusive Financial Services

- E.SUN promotes going paperless and reducing GHG emissions by switching to online platforms and electronic bills/ statements

Low-carbon and Energy Saving Series Loans

- Individuals who purchase energy-saving home appliances, electric vehicles, and install green energy power generation equipment, etc., are offered financial service discounts
- For mortgage collaterals that have the Green Building Mark issued by the Taiwan Architecture and Building Center, interest rates or fees are discounted. A total of 1,411 loans with a balance of approximately NT\$21.98 billion have received these incentives. The target for average annual growth rate of disbursed funds is 8% over 3 years

Corporate Finance

Green Loans

- Assisting in the development of green projects, such as renewable energy, energy storage, green buildings, and energy-saving equipment; total balance reached NT\$107.2 billion at the end of 2024
- Target balance NT\$130 billion by 2030

Sustainability Linked Loans

- Encouraging companies to establish and achieve ESG development goals by providing financial service incentives; total balance reached NT\$76.8 billion at the end of 2024
- Target to reach 13% of total corporate loans by 2030

Sustainability Advocacy

- Inviting like-minded corporate partners to focus on sustainability and jointly reduce carbon emissions, building a sustainable ecosystem through practical action
- From 2021 to 2024, the "E.SUN ESG Sustainability Initiative" was held with 379 companies joining the initiative

Sustainability Consulting Services

- Combining internal expert teams with external professional consultants to provide advisory services that assist corporate clients in ESG development
- As of 2024, engaged with a total of 260 companies on sustainability and climate-related issues, including recommending steps for carbon reduction and connecting clients with external consultants to conduct GHG inventories

Medium and Large Enterprises / Financial Institutions

Sustainable investments

- Investments in certified green bonds, social bonds, and sustainability bonds; total balance reached NT\$43 billion at the end of 2024
- The target balance is NT\$45 billion by 2025

Sustainable Development Bond Issuance

- Channeling funds to environmentally and socially friendly industries
- E.SUN Bank's total issuance reached NT\$26.3 billion

Sustainable Development Bond Underwriting

- Supporting companies in raising funds for sustainability causes and assisting them in issuing sustainability bonds.
- E.SUN Bank's total underwriting balance reached NT\$27.2 billion at the end of 2024

Sustainability-related Bond Underwriting

- In 2024, E.SUN Securities acted as a co-underwriter for 3 cases, with a total underwriting amount of NT\$103 million

Hedging and Consultation Services for Sustainability-related Projects

- Supporting environmentally friendly projects by providing hedging and consultation services for sustainability-related projects, such as offshore wind power projects and solar power projects.
- Encourage clients to implement sustainable development principles through ESG-linked financing and hedging transactions.
- The hedging services provided amounted to NT\$23.6 billion at the end of 2024

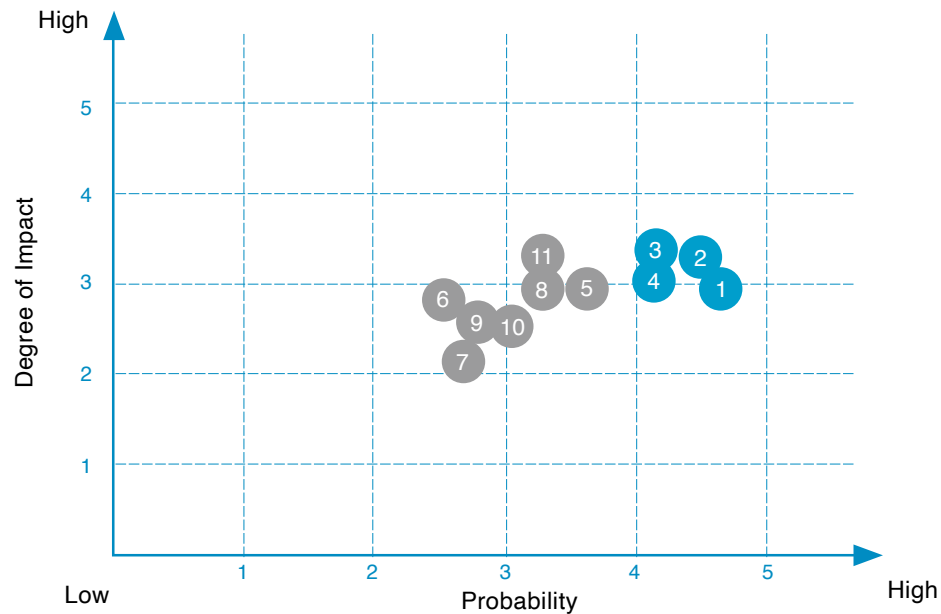
Financial Opportunities from Climate Change

E.SUN FHC estimates that our financial opportunities arising from climate change amount to approximately NT\$3.24 billion annually. This estimate is derived from the current outstanding balances of our climate and environment-related products and services, adjusted by our Net Interest Margin. The costs to realize these opportunities are projected to be around NT\$15 million per year, primarily reflecting anticipated increased management personnel expenses.

2.4 Risk Identification and Management

GRI : 201-2

The 2025 World Economic Forum (WEF) Global Risks Report indicates that climate and environmental risks are expected to intensify significantly over the next decade, with an increasing frequency of extreme weather events and worsening environmental pollution issues. Climate and environmental risks not only impact E.SUN's own operations but also pose greater challenges to investment and financing. For example, customers' operations may be affected by climate change-related risks, leading to the deterioration of E.SUN's asset credit quality or price volatility. As climate change and societal low-carbon transitions progress, different degrees of credit risk, market risk, and operational risk may arise at various times, which could ultimately impact economic stability in the long term. Taking into account practical business management mechanisms and product life cycles, E.SUN conducts climate change-related risk assessments for the short, medium, and long term. These assessments are integrated into the existing risk management framework, with regular reviews and response plans developed accordingly.



Note: ● are items considered to be more material

	Risks	Potential financial impact(s)	Impact Period
Policy and Regulation	1 Carbon tax / Fee	Financial impacts on the company and clients from carbon taxes and fees.	Short
	2 Stricter climate and nature regulations	Environmental regulations and supervision become more stringent, increasing compliance and production costs.	Short
Technology	3 Climate and nature sensitive assets	Replacement of existing products and services with low carbon and environmentally friendly products may increase the uncertainty of operations and investment and financing assets	Medium
Market	4 Raw material prices	Rising prices of water, electricity, and raw materials, which rely on natural capital, increase costs.	Medium
	5 Changing consumer preference	Changes in consumer preferences requires consideration of climate and nature impact factors in business decisions, in response to climate and environmental issues	Medium
Reputation	6 Negative news / Litigation risk	Negative behaviors related to its direct operations or those of customers may generate negative news and even pose litigation risks	Medium
Liability	7 Penalty risk	Tightening anti-greenwashing and environmental regulations increases compliance costs and the risk of penalties.	Short
Acute	8 Natural disasters	Natural disasters such as typhoons, floods, and earthquakes can cause operational disruptions, leading to impairments in value	Medium
	9 Depletion and deterioration of natural capital	The depletion or deterioration of natural resources relied upon, such as water, forests, and biodiversity impacts operations	Long
Chronic	10 Deterioration of climate and natural environment	Climate change and the loss of biodiversity impact the economy, affecting the operations of the company and its customers, resulting in costly asset impairments or premature replacement	Long
Systemic	11 Irreversible degradation of the climate and environment	Global warming exceeding 1.5 or 2°C leads to irreversible degradation of nature, causing significant larger-scale impacts on the economy, resulting in systemic risks	Long

Note 1: Time period definitions: less than 1 year is considered short-term, up to 2030 is medium-term, and up to 2050 is long-term.

Note 2: Assessment of risk materiality includes potential losses or cost increases, revenue growth margins, and the percentage of affected employees, among other factors, that exhibit higher levels of impact and probability

Note 3: Credit products are categorized as follows: short-term (maturity of less than 1 year), medium-term (more than 1 year but less than 7 years), and long-term (more than 7 years). Mortgage loans typically have a maturity period of 30 years, while corporate banking provides suitable products based on customers' needs. The product strategy operates on a 5 to 10-year cycle, with annual management reviews and adjustments made depending on management needs.

2.4.1 Risk Assessment

■ Correlation between Physical Risks and Traditional risks

Business Category	Primary Risk Category	Impact Description	Risk Impact Level		
			Short-term	Medium-term	Long-term
Investment and financing products and services	Credit risk	<ul style="list-style-type: none"> Climate change or natural environmental factors (such as typhoons, heavy rain, landslides, and water stress), leading to impairments in the value of collateral or disruptions in the supply chain that impact customer operations. 	Low	Moderate	Moderate
	Market risk	<ul style="list-style-type: none"> The degradation of climate and natural resources affects macroeconomic factors (such as GDP, unemployment rate, and shortages of natural resources) or physical risk events, which can result in adverse impacts on investment targets (such as revenue decline, additional operational costs, and supply interruptions), causing price volatility in the investment portfolio 			
Direct Operations	Operational risk	<ul style="list-style-type: none"> Operational locations affected by extreme weather and natural resource factors (such as typhoons, heavy rain, and water stress), leading to damage to facilities and equipment, or negative impacts on operations. 	Low	Low	Moderate
Suppliers	Operational risk	<ul style="list-style-type: none"> Natural disasters and environmental factors may affect the operation of infrastructure (such as electricity and internet), potentially impacting service delivery. 	Low	Low	Moderate

■ Correlation between Transition Risks and Traditional risks

Business Category	Primary Risk Category	Impact Description	Risk Impact Level		
			Short-term	Medium-term	Long-term
Investment and financing products and services	Credit risk	<ul style="list-style-type: none"> The imposition of carbon taxes/fees and carbon tariffs negatively impacts the finances of high-carbon industries, companies unable to reduce carbon emissions, and their related supply chains. Environmental assessment factors may affect the development or operation of production sites, or companies may face boycotts. 	Low	Moderate	Moderate
	Market risk	<ul style="list-style-type: none"> Environmental assessment and land use regulations may restrict the development and operation of facilities near sensitive areas, increasing costs associated with the use of natural resources and waste processing. Nature related Regulations and policies, such as the EUDR and the Nature Restoration Law, may increase operational costs for companies or expose them to penalties, impacting finances, and potentially affecting the reputation of investment and financing institutions 			
Direct Operations	Operational risk	<ul style="list-style-type: none"> The imposition of carbon-related costs and increase in investments for energy conservation and carbon reduction will require greater resource allocation. Stricter energy efficiency standards may apply to residential and commercial buildings, including mandatory disclosure obligations for carbon emissions. When assessing policy and regulatory risks, it is essential not only to consider the potential direct impacts on operations but also to further evaluate the indirect impacts on the supply chain. Reputation risk is closely related to customers' or the general public's perception of whether a company is committed to low-carbon transition and its environmental sustainability commitments. If a company fails to fulfill its commitments, it may affect perceptions of the company, leading to impacts on reputation, which could result in losing support from customers, consumers, or suppliers, and may even affect the company's ability to secure funding or recruit and retain employees. 	Low	Low	Moderate
Suppliers	Operational risk	<ul style="list-style-type: none"> Vendors may pass on the investment and carbon-related costs arising from their low-carbon transition, or may need to adjust their service models due to regulatory restrictions, resulting in increased costs 	Low	Low	Low

Note:

Low Risk: The risk causes a slight decrease in net income or a slight increase in costs/expenses, with minimal overall financial impact.

Moderate Risk: The risk leads to a decrease in net income or an increase in costs/expenses, affecting revenue growth.

High Risk: The risk results in a significant decrease in net income or a substantial increase in costs/expenses that severely impact overall operations, causing revenue decline.

2.4.2 Risk Management Measures

To mitigate the potential impacts caused by climate and environmental risks and to enhance the organization's operational resilience in responding to climate and natural resource changes, a summary of key management measures and resource investments has been formulated based on the comprehensive assessment results of climate and environmental risks, as well as climate change and natural environment scenario analyses. The key points are summarized in the table below.

Scope	Material Risks	Risk Factors	Management Measures
Low-carbon Transition	1. Carbon tax / fee 3. Climate and nature sensitive assets	Reduce operation and portfolio related carbon emissions	Resource allocation <ul style="list-style-type: none"> Inventory Scope 1 and 2 carbon emissions, and plan mitigation measures (such as installing solar panels, using renewable energy, etc.). Follow the PCAF methodology for carbon inventory of investment and financing activities. Set targets and reduce carbon emissions according to the SBTi.
Investing	5. Changing consumer preference 11. Irreversible degradation of the climate and environment	Bond and equity investments	Capacity utilization <ul style="list-style-type: none"> Fulfill responsibility as asset owners or managers by considering the ESG performance of investees. Avoid investing in companies with direct or potential environmental and social impacts, such as coal companies, and implement responsible investment. Promote or assist companies in raising sustainability awareness and implementing ESG actions through engagement.
Financing	1. Carbon tax / fee 2. Stricter climate and nature regulations 3. Climate and nature sensitive assets 9. Depletion and deterioration of natural capital	Corporate loans	Capacity utilization <ul style="list-style-type: none"> Support companies in transitioning and responding to climate risks by providing green financing for renewable energy projects, green buildings, and other sustainable expenditures. Link loan terms to performance in ESG or sustainability indices to encourage companies to invest in sustainability. Resource allocation <ul style="list-style-type: none"> Refer to the guidance of the Banker Association's Equator Principles 4.0 for corporate credit approval process. Include ESG considerations in the credit approval process to prevent funds from flowing into high-carbon emitters such as coal-fired power projects. The estimated annual cost of managing financial risks from regulatory changes is NT\$9 million over 25 years (total is NT\$225 million), covering management personnel expenses.
	3. Climate and nature sensitive assets 8. Natural disasters 10. Deterioration of climate and natural environment	Real estate collateral loans	Capacity utilization <ul style="list-style-type: none"> Regularly assess and monitor the potential risk of real estate value impairment caused by climate change and continuously improve the database of physical risks, analysis methods, and scenario testing. Incorporate flood risk factors - hazards (e.g., heavy rainfall, increased typhoon frequency) and vulnerability (e.g., whether the area is prone to flooding) into the real estate collateral zoning standards and set lending limits and LTV ratios according to the zoning to control risks. Regularly manage specially tagged high flood risk cases and thoroughly assess collateral located in high climate risk areas with high LTV ratios. Strengthen processes and conditions for collateral on high-risk slope land. Refuse collateral labeled as pollution-related sites or those announced by government agencies as subject to the "Soil and Groundwater Pollution Remediation Act." The estimated cost of managing physical climate risks for real estate collateral is NT\$119.5 million, covering management personnel expenses, physical risk training, and database maintenance.
Direct Operations	8. Natural disasters 10. Deterioration of climate and natural environment	Disaster response	Resource allocation <ul style="list-style-type: none"> E.SUN utilizes the third-generation flood risk map from the Water Resources Agency to analyze potential flood depths. To prevent disruption due to flooding, waterproof barriers have been installed at branches where potential flood depths exceed 0.5 meters. The expected cost for future flood prevention measures is estimated to be NT\$1.37 million. Implement sustainable procurement standards for supplier management. The provision of green-related financial products and services is guided by the "Guidelines for Financial Institutions to Prevent Greenwashing," which outlines design and measures to avoid greenwashing, as well as establishes internal mechanisms for effective management.
	4. Raw material prices 8. Natural disasters	Supplier management	
	2. Stricter climate and nature regulations 6. Negative news / Litigation risk 7. Penalty risk	Compliance and reputation	Capacity utilization <ul style="list-style-type: none"> Develop the "Emergency Response and Crisis Management Measures" based on the "Financial Institution Disaster Emergency Response Measures Manual Template" and operational overview to ensure operational continuity and organizational resilience. The "Continuous Information Service Management Regulation" takes into consideration power supply interruption and regional flooding recovery.

2.4.3 Climate Scenario Analysis

Scenario analysis identifies and assesses potential future impacts, including climate-related risks, through quantitative and qualitative methods like stress testing and sensitivity analysis. These insights inform governance and risk management. Climate and environmental changes affect not only physical and transition risks but also ecosystem resilience. This process enhances risk management and disclosure transparency, enabling better evaluation of climate and nature-related risks and opportunities.

■ Assessment Structure and Scenario Settings

Upstream: Suppliers

Source of Risk	Transition risks (Carbon tax / Carbon fee)		Physical risks (Flooding and Heavy rain)
	Short term	Medium-long term	Long term
Assessment period	2025	<ul style="list-style-type: none"> • 2030 • 2050 	<ul style="list-style-type: none"> • 2030 • 2050 • 2090
Scenario Setting	Domestic carbon fee imposed under the Climate Change Response Act	<ul style="list-style-type: none"> • IEA- Net Zero 2050 • NGFS-Net Zero 2050 	<ul style="list-style-type: none"> • IPCC SSP1-2.6 • IPCC SSP2-4.5 • IPCC SSP5-8.5
Response strategies	The assessment indicates that physical risks have a relatively low impact on the upstream supply chain. E.SUN will continue engaging with upstream suppliers through site visits and supplier meetings, and will establish secondary procurement sources when necessary to mitigate the impacts of climate change.		

Midstream: Direct Operations

Source of Risk	Physical risks (Flooding and Heavy rain)	
	Long term	
Assessment period	<ul style="list-style-type: none"> • 2030 • 2050 • 2090 	
Scenario Setting	<ul style="list-style-type: none"> • IPCC SSP1-2.6 • IPCC SSP2-4.5 • IPCC SSP5-8.5 	
Response strategies	In response to extreme climate changes, E.SUN uses internal systems to alert all staff to remain vigilant against risks such as typhoon-induced flooding, power outages, and falling objects.	

Downstream: Domestic and international corporate credit, domestic and international bonds, equity investments, and personal loans

Source of Risk	Transition risks (Carbon tax / Carbon fee)		Physical risks (Flooding, Heavy rain, Drought, Landslides, Heat waves)	
	Short term	Long term	Short term	Long term
Assessment period	Upcoming year	<ul style="list-style-type: none"> • 2030 • 2050 	Upcoming year	<ul style="list-style-type: none"> • 2030 • 2050
Scenario Setting	Assuming Taiwan imposes carbon fees across all sectors (NTD\$1,000/tCO ₂ e)	<ul style="list-style-type: none"> • NGFS-Net Zero 2050 • NGFS- Delayed Transition • NGFS- Fragmented World 	Assuming a 2°C temperature rise, and historical Typhoon Morakot event reoccurs with increased intensity.	<ul style="list-style-type: none"> • IPCC SSP1-1.9 • IPCC SSP2-2.6 • IPCC SSP5-4.5
Response strategies	A financial carbon emission management system has been established to enhance the identification of transition risks in investment and financing portfolios. Efforts are made to increase the proportion and revenue of green finance assets, thereby strengthening portfolio resilience. Through engagement, we raise customers' climate and environmental awareness, assisting their transition and reducing risks.		A physical risk database has been developed and integrated with Geographic Information System (GIS) technology to improve physical risk identification and management, strengthening the management of physical risks related to real estate collateral loans.	

Value Chain Scenario Analysis

1. Supplier Climate Scenario Analysis

To quantitatively assess the impact of supplier climate risks on E.SUN, we analyzed both transition and physical risks. The transition risk assessment shows that if suppliers fully pass carbon costs to E.SUN, the increase in procurement costs is highest under the NGFS Net Zero 2050 scenario, with carbon costs accounting for about 1.89% of procurement expenditure. The physical risk assessment indicates that domestic suppliers face low to low-medium risk levels across all scenarios in 2030. E.SUN will continue to promote awareness and communication through engagement and training, encouraging suppliers to establish early response strategies to reduce costs and drive mutual sustainable development.

Analysis Process

	Climate Scenarios	Impact Pathway	Potential Financial Impacts
Transition Risk	<div>• Short-term Scenario (Carbon Fee)</div> <div>• NGFS Net Zero 2050</div> <div>• IEA Net Zero 2050</div>	Suppliers transfer additional carbon costs	Increased procurement costs
Physical Risk	<div>• IPCC SSP1-2.6</div> <div>• IPCC SSP2-4.5</div> <div>• IPCC SSP5-8.5</div>	<div>• Extreme rain probability increase</div> <div>• Flood depth increase</div>	Suppliers flood risk increase

Analysis Results

Domestic suppliers transition risk analysis results

Unit: \$NTD thousands

Scenario Setting	Short term	NGFS Net Zero		IEA Net Zero	
		2030	2050	2030	2050
Other Manufacturing	844	17,730	45,772	12,919	23,069
Services (finance, service, real estate)	1,247	26,179	67,583	19,075	34,062
Construction	24	495	1,277	360	644
Total	2,114	44,404	114,632	32,354	57,774
Carbon cost ratio of total procurement expenditure	0.03%	0.73%	1.89%	0.53%	0.95%

Domestic suppliers physical risk analysis results

Units: Percentage of suppliers (%)

Scenario Setting	SSP1-2.6		SSP2-4.5		SSP5-8.5	
	2030	2050	2030	2050	2030	2050
High risk	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Medium-high risk	0.00%	0.69%	0.69%	0.69%	0.00%	1.39%
Medium risk	1.39%	2.08%	0.69%	0.69%	1.39%	1.39%
Medium-low risk	2.78%	1.39%	2.78%	2.78%	2.78%	1.39%
Low risk	95.83%	95.83%	95.83%	95.83%	95.83%	95.83%

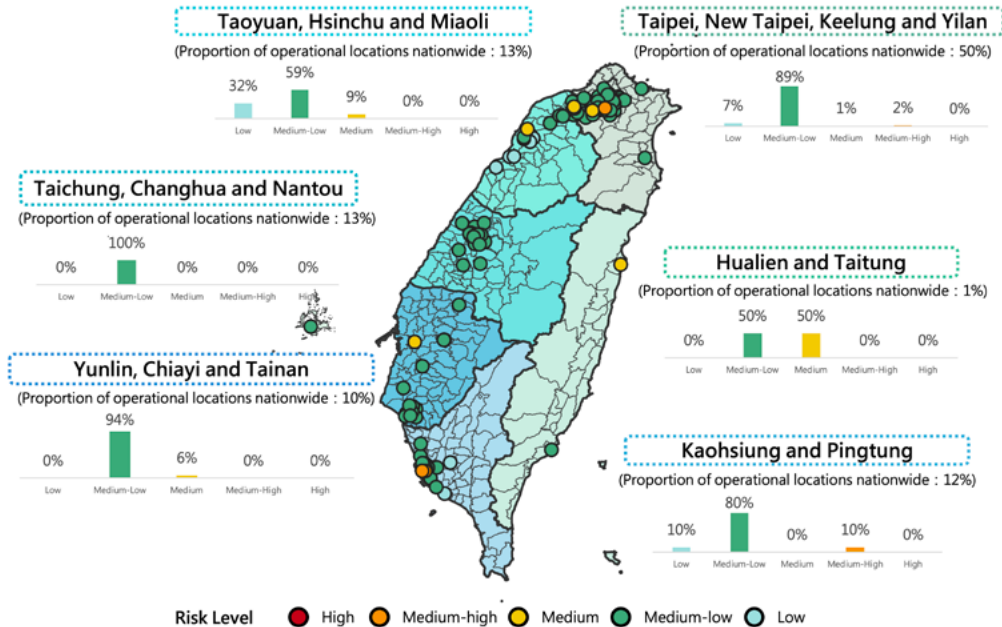
2 Direct Operations Scenario Analysis

Based on the severity, vulnerability, and exposure of physical risks, and referencing the IPCC Sixth Assessment Report (AR6) scenarios SSP1-2.6, SSP2-4.5, and SSP5-8.5, E.SUN assessed the flood hazard risk levels of its own operating sites at the target years 2030, 2050, and 2090. The analysis shows that under all scenarios for 2030 and 2050, there are no high-risk sites. However, under the 2090 SSP5-8.5 scenario, 2.98% of operating sites are classified at a higher flood risk level.

Analysis Process

	Climate Scenarios	Impact Pathway	Potential Financial Impacts
Physical Risk	<div>• IPCC SSP1-2.6</div> <div>• IPCC SSP2-4.5</div> <div>• IPCC SSP5-8.5</div>	<div>• Extreme rain probability increase</div> <div>• Flood depth increase</div>	Impacts on operational stability, customer service and revenue

Analysis Results



Investment and Financing Portfolio Scenario Analysis

Our climate change scenario analysis is based on the FSC's "Domestic Bank's Application of Climate Change Scenario Analysis" guidelines and methodology. We conduct separate analyses for our subsidiaries, E.SUN Bank and E.SUN Securities, focusing on domestic and international corporate credit, domestic and international bonds, equity investments, and personal loans. The analysis employs advanced methodologies to assess the spatial potential impacts of climate-related risks based on the geographical coordinates of the investment and financing portfolios, allowing for a more accurate identification of the potential financial impacts of climate change.

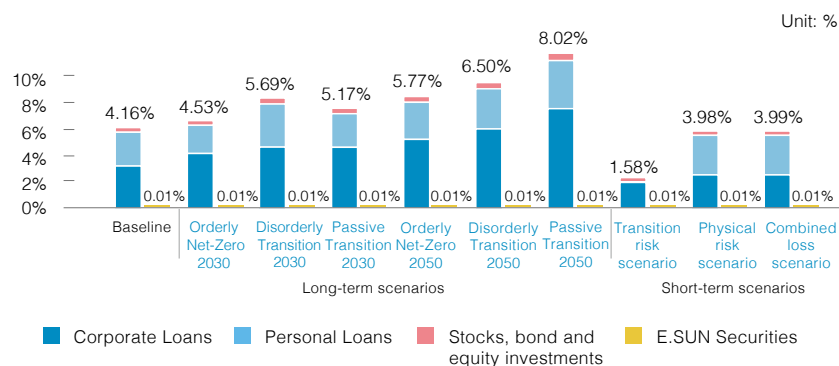
Analysis Methods

Risk Source	<ul style="list-style-type: none"> Transition Risk (Carbon tax/fee) Physical Risk (flooding, heavy rain, drought, landslide, heatwave)
Affected Targets	<ul style="list-style-type: none"> Corporate credit Bonds and equity investments Personal credit
Scenario Analysis Models	<ul style="list-style-type: none"> Long-term scenarios (Orderly Net-Zero, Disorderly Transition, Passive Transition) Short-term scenarios (Physical risk scenario, Transition risk scenario, Combined loss scenario)
Assessment Items	<ul style="list-style-type: none"> Impact on borrowers' revenue Borrowers' credit ratings Collateral coverage of secured loans
Risk Component Evaluation	<ul style="list-style-type: none"> Probability of Default (PD) of borrowers Loss Given Default (LGD) of borrowers

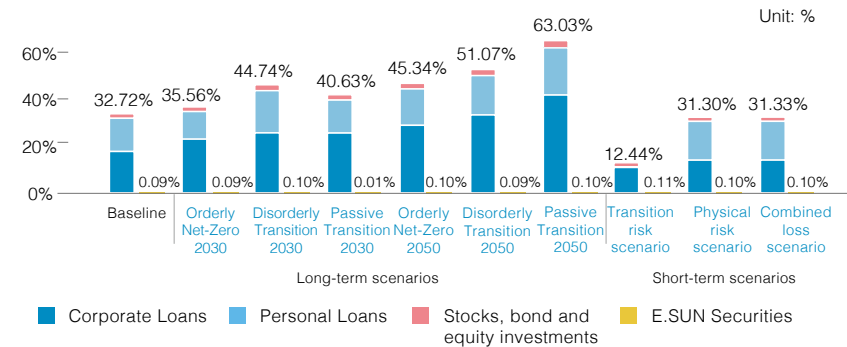
Analysis Results

The analysis shows that the largest expected losses for E.SUN Bank and E.SUN Securities occur under the 2050 Passive Transition scenario, with E.SUN Bank's expected loss totaling NT\$20.3 billion and E.SUN Securities' expected loss amounting to NT\$35.96 million, accounting for approximately 8.02% and 0.01% of E.SUN FHC's baseline net worth in 2024, respectively. Among these, E.SUN Bank represents about 96.64% of E.SUN FHC's assets, while E.SUN Securities accounts for approximately 0.85%.

Expected loss as percentage of FHC net value



Expected loss as percentage of FHC pre-tax income



1. High energy consumption and high carbon emission industries analysis

The Ministry of Economic Affairs identifies six major energy-intensive and high carbon-emission industries—semiconductors, electronics, steel, cement, textiles, and paper—based on the Energy Administration Act and the Directorate-General of Budget, Accounting and Statistics classification. With global targets for Net Zero by 2050 and various carbon reduction policies, these industries face significant operational and revenue impacts, increasing default risks. Analysis results of credit exposures of domestic and international enterprises are summarized in the table below. 11.10% of E.SUN FHC's portfolio is in these sectors, with electronics accounting for 8.04%. Under different scenarios, the highest expected loss relative to E.SUN FHC's 2024 baseline net value is 0.65% in the 2050 Passive Transition scenario.

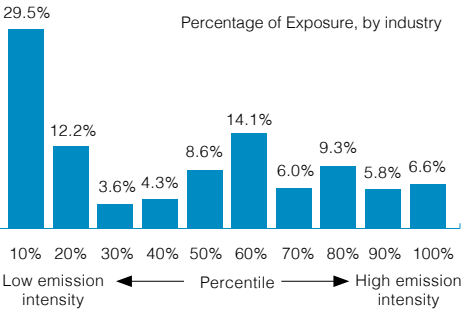
Six Major Energy-consuming Industries

Unit: Percentage (%)											
Industries	Exposure percentage	Expected loss as percentage of FHC net value									
		Base-line	Long-term scenarios-2030			Long-term scenarios-2050			Short-term scenarios		
			Orderly Net-Zero	Disorderly Transition	Passive Transition	Orderly Net-Zero	Disorderly Transition	Passive Transition	Transition risk scenario	Physical risk scenario	Combined loss scenario
Petrochemicals	0.78	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.02	0.02	0.02
Electronics	8.04	0.29	0.35	0.41	0.35	0.41	0.45	0.48	0.17	0.17	0.17
Steel	0.76	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02
Cement	0.09	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01
Textiles	0.61	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01
Paper making	0.82	0.01	0.03	0.02	0.03	0.03	0.06	0.08	0.01	0.01	0.01
Total	11.1	0.35	0.43	0.49	0.45	0.5	0.57	0.65	0.22	0.23	0.23

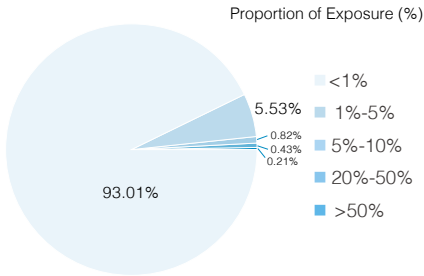
2. Transition Risk Financial Impact Analysis

Transition risk is mainly influenced by the carbon emission intensity of investment and financing targets, their industry sectors, and the decarbonization policies of their respective countries. E.SUN utilized the Advanced Approach using actual carbon intensity data of the targets to assess the financial impacts of transition risks on investment and financing portfolios. The analysis results are shown below. We estimate the financial impact to be NT\$14.03 billion. Nearly 30% of E.SUN's domestic investment and financing exposures fall within the low carbon intensity category (below the 10th percentile). Under various scenarios considering carbon tax implementation and industry decarbonization, the 2050 Orderly Net-Zero scenario shows the most significant impact on corporate revenue, with impact ratios exceeding 50% for about 0.21% of exposures. However, the majority of exposures experience minor effects, with approximately 93% of them seeing revenue impacts below 1%.

Distribution of Carbon Emission Intensity in Domestic Loans and Investments



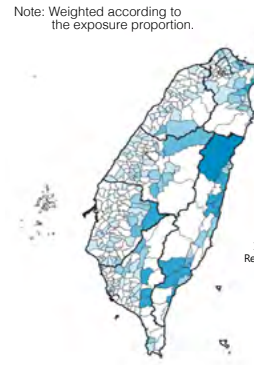
Distribution of carbon price impact as percentage of revenue



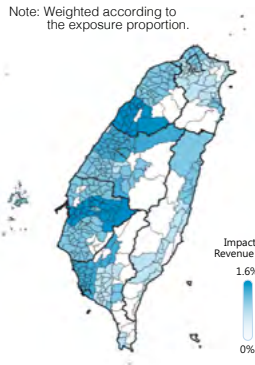
3. Physical Risk Financial Impact Analysis

Physical risk mainly evaluates whether the operating locations of investee companies and the locations of collateral are in high climate-risk areas, analyzing the potential impacts of extreme weather events on operational continuity and asset value. The analysis results are shown below, with darker colors indicating higher risk levels and larger exposure ratios. We estimate the financial impact to be NT\$2.64 billion. Under the highest expected loss 2050 Passive Transition scenario, the impact of flooding and landslides on corporate revenue is more pronounced in the Hualien-Taitung region, with losses reaching up to 55%. The effects of heavy rain and drought are generally lower, with the highest impact on corporate revenue around 1.6%, notably in Miaoli and Chiayi. For real estate collateral, the assessment of physical risks on collateral depreciation shows the northern region is more significantly affected, mainly due to higher exposure in that area.

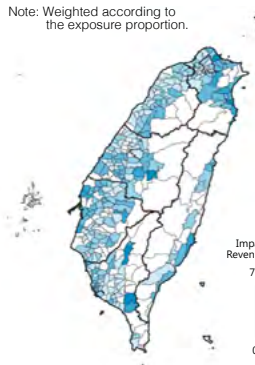
Impacts on Domestic Corporate Loan Clients from Flood and Landslide



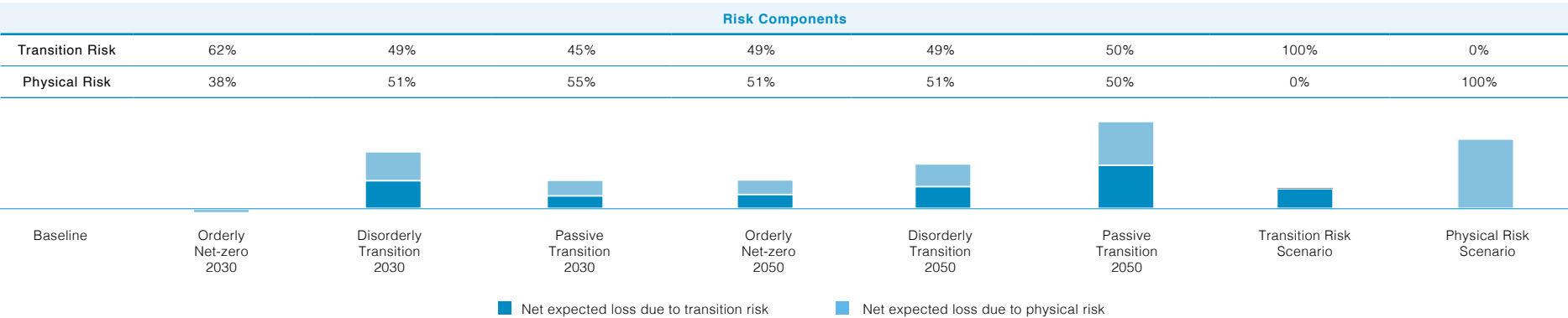
Impacts on Domestic Corporate Loan Clients from Heavy Rain and Drought



Collateral Value Impacted By Flood



Note: the evaluation includes domestic corporate loans, stocks, bonds, and equity investments.



2.4.4 Risk Management Procedure

1. Identify

- Regularly monitor relevant laws, guidelines, and publications to enhance the integrity of identifying climate-related risks that may impact business and operations.
- Establish the materiality of climate and environmental risks and opportunities through the indicators recommended by TCFD and TNFD, relevant laws, guidelines, literature, and internal experts.
- Incorporate climate change-related risks and opportunities into the management and decision-making processes for investment and underwriting, and enhance identification of enterprises with high climate and nature risks in lending.

4. Report and Response

- Present climate and environmental risk reports to the board of directors at least every six months and conduct regular risk reporting for senior management to assess the exposure and management of climate and natural environment-related risks.
- If climate and environmental risk impacts threaten overall operations or business conditions, take appropriate management actions immediately and report to the board of directors.
- Follow regulatory authorities' climate change-related guidelines for information disclosure.
- Introduce IFRS S2 standards, and report progress to the board regularly.
- Respond to identified risks, establish or adjust internal policies, business strategies, and set climate-related metrics and targets to reach E.SUN's climate vision.



3. Monitor

- Establish indicators that connect climate and nature factors and monitor.
- Implement Science-Based Targets (SBT).
- Adopt risk-based and differentiated management measures based on the results of climate and nature related risk assessments.

2. Measure

- Inventory greenhouse gas emissions of investments and financing activities.
- Assess the proportion and potential impacts of climate and nature-sensitive assets.
- Regularly conduct scenario analysis and stress tests on physical risks, transition risks and systemic risks to inform strategy development and risk management.

2.4.5 Climate Sensitive Assets

E.SUN refers to relevant domestic and international risk management guidelines, such as UNEP-FI and SASB, and aligning with the industry classifications of the Directorate-General of Budget, Accounting and Statistics, we have identified 108 industries that are more susceptible to climate change impacts. Based on industry characteristics, these are categorized into eight major climate-sensitive asset classes suggested by the TCFD: fossil fuels, power facilities and utilities, transportation, petrochemicals/chemicals, metal manufacturing/smeltering, cement and glass, agriculture and animal husbandry, and paper making. As of the end of 2024, the proportion of climate-sensitive industries and exposures is shown in the table below, with climate-sensitive industries accounting for 5.71%. E.SUN is committed to ambitious sustainability goals, including a complete phase-out of coal by 2035 and achieving net-zero emissions by 2050.

Climate-sensitive Assets

Classification		Percentage of Investment and Financing
Energy and Utilities	Fossil Fuels	0.22%
	Power Facilities and Utilities	1.30%
Transportation Industry	Transportation	1.24%
Materials and Construction	Petrochemical/ Chemicals	2.01%
	Metal Manufacturing/ Smelting	0.39%
	Cement and Glass	0.11%
Agriculture, Food, and Forestry Products	Agriculture, Forestry, Fishing, and Animal Husbandry	0.16%
	Paper making	0.28%
Climate-sensitive assets		5.71%
Non-climate-sensitive assets		94.29%
Total		100%

Note: Climate-sensitive asset positions include that of E.SUN Bank, Securities, and Venture Capital.

2.4.6 Differentiated Management

E.SUN prioritizes material locations and industries with high environmental sensitivity or natural dependence, adopting differentiated management strategies, as summarized in the table below. E.SUN actively manages the carbon emissions of financial assets, increases green assets, and reduces gray assets within its portfolios. E.SUN will continue to improve its differentiated management based on spatial characteristics.



Management Measures	Description
Avoid	<ul style="list-style-type: none"> According to "E.SUN Financial Holding Co., Ltd. Sustainable Finance Policy," companies involved in illegal logging, harming endangered wildlife, developing coal mines, or setting up new coal-fired power projects should be avoided. According to "Guidelines for the Phase-Out of Coal and Unconventional Oil & Gas of E.SUN Financial Holding Company," enhance management and set plans to phase-out of high GHG emitting coal companies and unconventional oil & gas companies. Real estate collateral listed in the "Soil and Groundwater Pollution Remediation Act" should be avoided.
Enhanced Management	<ul style="list-style-type: none"> Companies involved in tobacco, gambling, mining, and leather and fur-related activities should be carefully evaluated and regularly monitored. E.SUN has signed the Equator Principles, and according to Equator Principles 4.0, climate change has been designated as a necessary item for project financing assessments. For project financing tied to power, oil and gas, petrochemicals, and infrastructure projects above a certain scale, implement risk classification management under the Equator Principles, carefully assessing whether project development processes are fulfilling social responsibilities and properly establishing monitoring and improvement plans for environmental and social impacts. Analyze climate-related physical and transition risks, environmental pollution, biodiversity, and other material issues for each project financing case. Develop specific differentiated measures in enhanced due diligence process to address industry-specific climate and environmental risks, including carbon emissions, climate risks, biodiversity, toxic substance management, and water resources. Incorporate the hazard and vulnerability of climate risk factors into real estate collateral zoning standards to manage credit business climate risks within jurisdiction divisions. Strengthen the review process for cases in areas with high landslide risk. Establish mechanisms to encourage customers with environmental pollution penalties to address their issues.
Actively Support	<ul style="list-style-type: none"> Support social innovation and local economic revitalization industries by providing customized financial services, financial counseling, and marketing resources, thereby enhancing the drive towards SDGs in Taiwan. Increase investment and financing in forward-looking economic activities aligned with the key strategies outlined in the National Development and Reform Commission's 2050 net-zero emission pathway. This includes sectors such as renewable energy, hydrogen energy, power systems and energy storage, energy conservation, carbon capture utilization and storage, vehicle electrification and decarbonization, resource recycling and zero waste, and natural carbon sinks.

2.5 Sustainable Operating Environment

GRI：302-1、302-3、303-1、303-3、305-1、305-2、305-3、305-4、306-3

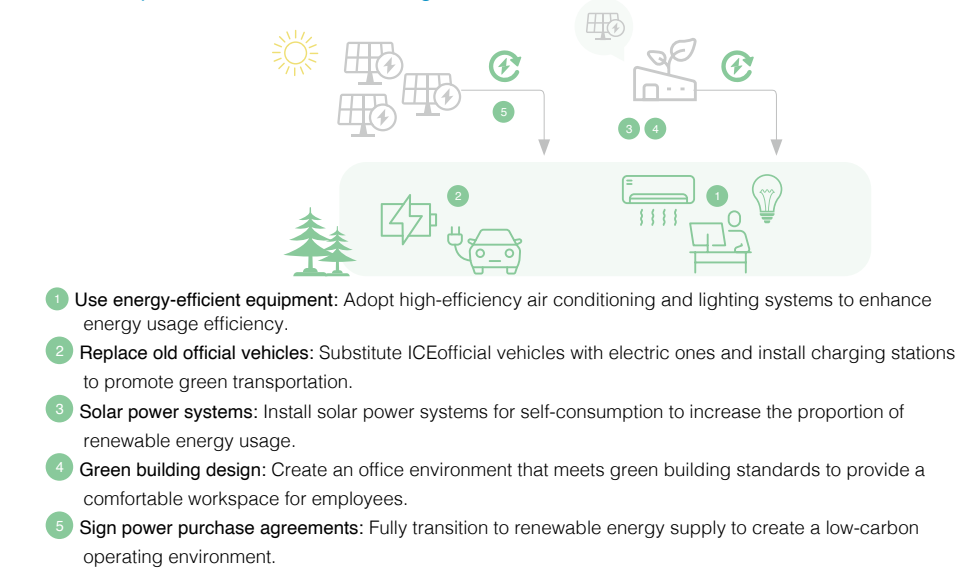
2.5.1 Self-Operation Management

Faced with the urgent crisis of climate change, governments and businesses around the world are actively formulating relevant climate adaptation strategies. E.SUN is also proactively promoting its own carbon reduction, water conservation, and waste reduction initiatives. Internally, in addition to promoting environmental conservation and energy-saving policies, advocating for environmental education, establishing a culture of environmental conservation and energy efficiency, and implementing energy-saving measures, E.SUN has also set medium- and long-term goals for various environmental aspects externally.

■ Sustainable Operating Environment Targets

- Based on the 2020 baseline, E.SUN aims to reduce its Scope 1 and 2 carbon emissions by 42% by the year 2030.
- Based on the 2020 baseline, E.SUN aims to reduce its Scope 3 carbon emissions from fuel- and energy-related activities by 42% by the year 2030.
- Based on the 2020 baseline, E.SUN aims to achieve 100% utilization of renewable energy for domestic locations by the year 2030.
- Based on the 2020 baseline, E.SUN aims to reduce its water usage for revenue generation by 30% by the year 2030.
- Based on the 2016 baseline, E.SUN aims to reduce its waste generation for revenue generation by 78% by the year 2030.

Green Operations Framework Diagram



Solar power systems



Commit to installing solar panels on all owned buildings domestically by 2025, with 31 locations completed in 2024, achieving a completion rate of 89%.

Green building (EEWH & LEED)



Commit to transforming all owned buildings domestically into green buildings by 2027, with 27 locations completed in 2024, achieving a completion rate of 77%.

Achieve green building certification in 2024

Objective	Project	Project Features
KAOHSIUNG OFFICE	LEED v4.1 ID+C PLATINUM	The entire office building has been remodeled through the introduction of green building principles to obtain LEED ID+C Platinum certification.
QIXIAN BRANCH	LEED v4.1 O+M PLATINUM	The building, which is over 50 years old, has achieved LEED O+M Platinum certification through energy-efficient improvements.
DONGGANG BRANCH	LEED v4.1 O+M PLATINUM	
PINGTUNG BRAN	LEED v4.1 O+M PLATINUM	It is a significant milestone for E.SUN as the 10th location to achieve LEED Platinum certification.

■ Carbon reduction measures

GRI: 302-1, 302-3, 305-1, 305-2, 305-3, 305-4

Governments and enterprises worldwide are increasingly focusing on the issue of carbon emissions. With the advent of an era where carbon emissions have monetary value, reducing carbon emissions is no longer just a slogan. The European Union and other countries have introduced carbon tax mechanisms. The EU plans to officially implement the Carbon Border Adjustment Mechanism (CBAM) in 2026, while the UK's carbon border tax is scheduled to start in 2027. Taiwan's Ministry of Environment will, uniquely in the world, begin imposing a carbon fee in 2025, encouraging people globally to take responsibility for their own carbon emissions through this levy.

Implement Scope 1 & Scope 2 internal carbon pricing

In response to Taiwan's 2050 net-zero transition governance framework and to accelerate energy saving and carbon reduction efforts, E.SUN Bank began planning and implementing internal carbon pricing for Scope 1 and Scope 2 emissions in 2023. The initial step was setting a carbon fee price, integrating the concept of carbon fees into the cost-effectiveness of energy-saving measures. Through greenhouse gas inventories, the bank analyzed carbon emissions and carbon fee data across different units. In 2024, internal carbon pricing was promoted at all domestic locations, incorporating the cost of carbon emissions into daily operations. This approach aims to raise awareness among departments that carbon emissions should be treated as a cost, thereby guiding them to establish carbon management practices.



Replace energy-consuming equipment

E.SUN primarily aims to reduce its operational carbon emissions by lowering energy consumption. In the fourth quarter of 2023, E.SUN bank launched the "Plan to Completely Replace All Lighting Fixtures at Domestic Bank Operation Sites with LED Lamps by 2025." The plan is being proactively advanced to replace all lighting fixtures across the bank's locations with LED lamps in 2024. It is estimated that this initiative will save approximately 4.87 million kWh of electricity annually, accounting for about 10.4% of the bank's total electricity consumption.

Actively promote renewable energy

E.SUN is committed to using 100% renewable energy at all its domestic and international locations by 2040. In addition to continuously installing solar photovoltaic systems for self-generation on the rooftops of its own buildings, the company has been signing renewable energy power purchase agreements (PPAs) since 2021. As of the end of 2024, the total purchasing volume reached 34.15 million kWh, with a coverage rate of 72.9%. The renewable energy usage ratio for 2024 reached 56.4%. Furthermore, starting from January 2025, E.SUN Securities will fully adopt green electricity across its headquarters, 17 branches throughout Taiwan, and its subsidiary E.SUN Investment Trust, demonstrating its full commitment to achieving the 2050 net-zero carbon emission goal.

Ahead of the 2030 target

2024 Target

Reduce Scope1 and 2 carbon emissions by **16.8** %
 Reduce Scope3 carbon emissions from fuel-and-energy-related activities by 16.8 %
 Renewable energy procurement ratio reaches 40%

2024 Outcome

Reduce Scope1 and 2 carbon emissions by **48.6** %
 Reduce Scope3 carbon emissions from fuel-and-energy-related activities by 53 %
 Renewable energy procurement ratio reaches 61.2%

2025 Target

Reduce Scope1 and 2 carbon emissions by **21** %
 Reduce Scope3 carbon emissions from fuel-and-energy-related activities by 21 %
 Renewable energy procurement ratio reaches 50%

2030 Target

Reduce Scope1 and 2 carbon emissions by **42** %
 Reduce Scope3 carbon emissions from fuel-and-energy-related activities by 42 %
 Renewable energy procurement ratio reaches 100%

Note 1: In 2020, the carbon emissions for Scope 1& 2 amounted to 24,698 metric tons, serving as the baseline.

Note 2: For detailed information on E.SUN's greenhouse gas emissions, please refer to Appendix 12 - Greenhouse Gas Emissions Summary Table.

■ Water Usage Reduction

GRI: 303-1, 303-3

E.SUN Financial Holding and its subsidiaries source all operational water from the water supply company, which is categorized as domestic water, ensuring that it does not negatively impact water resources. Furthermore, all discharged water is household wastewater, and its treatment complies with relevant regulations, including the Water Pollution Control Act.

Expanding the Implementation Scope of ISO 46001 Certification

E.SUN Bank implemented the ISO 46001 Water Resources Efficiency Management System in 2021, conducting a thorough review of water improvement measures at its locations under the framework of water footprint assessment. In 2023, the scope of assessment was expanded to include 15 locations, increasing the implementation ratio to 28%. This includes both operational sites and office buildings. Moving forward, E.SUN will continue to expand its management boundaries and implement various water use and wastewater reduction measures. The bank promotes awareness of proper water usage and encourages employees to establish good personal habits to minimize unnecessary daily waste. Monthly water usage analyses are conducted to manage and track any abnormal consumption, while also encouraging branches to provide creative input and showcase their achievements. In addition, rainwater harvesting systems have been installed at key office buildings—E.SUN Hope Campus, Human Resources Development Center, and the Second Headquarters Building. The first step involves using permeable paving to increase soil water retention, while the remaining rainwater and surface runoff are collected through drainage pipes installed along the surrounding gutters. The collected rainwater is treated through sedimentation and filtration systems for recycling, primarily used for landscape irrigation to achieve water conservation benefits. In 2024, a total of 7.82 kilotonnes (megaliters) of rainwater will be collected and utilized. Furthermore, rain sensors have been installed to detect current rainfall levels, ensuring that irrigation does not occur during rainfall. Old water fixtures are also being replaced with water-saving appliances that carry water-saving labels.



2024 Target

Reduce water usage per unit revenue by **12** %



2024 Outcome

Reduce water usage per unit revenue by **34** %



2025 Target

Reduce water usage per unit revenue by **15** %



2030 Target

Reduce water usage per unit revenue by **30** %

Note: In 2020, water usage per unit revenue was 4.71 metric tons/NT\$ million, and this is used as the baseline.

■ Waste reduction

GRI: 306-3

Implement a circular economy by recycling employee uniforms to produce fuel rods

In response to the international trend toward the ultimate goal of "Zero Waste," E.SUN continues to innovate. E.SUN not only aims to avoid the use of water resources and chemicals during the garment manufacturing process to reduce environmental harm, but also implements initial waste reduction measures through "resource sharing." This involves recycling uniforms that are ill-fitting, replaced, or no longer needed by employees. Usable items are processed and made available for other employees to apply for redistribution or converted into shared public uniforms for reuse. Currently, public uniforms are available at our Headquarters, Hope Campus, Technology Building, and Bo'ai Building for lending to employees who have not received their official uniforms.

In 2022, considering the long hours employees spend in their uniforms and to enhance their comfort, E.SUN initiated a uniform style replacement across the organization. Approximately 13 tons of uniforms were collected, sorted, and categorized for the first trial of fuel rod production. The company partnered with a solid recovered fuel plant for professional processing, converting fabric scraps and cotton into waste fuel rods to replace coal and carbon as fuel for industrial boilers. By 2024, a total of 2,580 kilograms of old uniforms will have been collected and 100% converted into fuel rods.

In 2024, in accordance with the "Recycling Procurement Guidelines for Textile Wear of Government and Public Units" issued by the Environmental Protection Administration, E.SUN is actively negotiating with vendors. In the future, after collecting and sorting the clothing, the company will determine whether the materials are recyclable, proceeding with either regranulation and filament manufacturing or recycling into fuel rods.



2024 Target

Reduce waste per unit revenue by **44.6** %



2024 Outcome

Reduce waste per unit revenue by **48.7** %



2025 Target

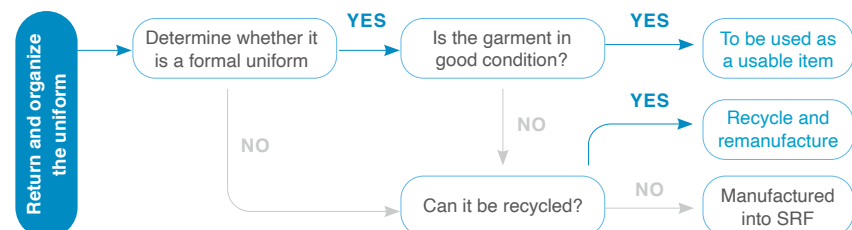
Reduce waste per unit revenue by **50.1** %



2030 Target

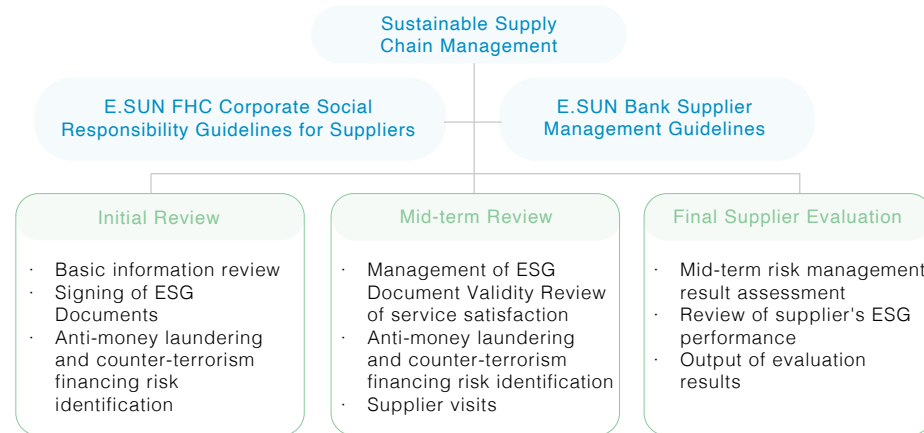
Reduce waste per unit revenue by **78** %

Note: In 2016, waste per unit revenue was 13.39 kg/NT\$ million, and this is used as the baseline.



2.5.2 Supply Chain Management

GRI : 204-1 、 205-2 、 308-1 、 403-7 、
408-1 、 409-1 、 414-1



E.SUN carefully selects suppliers that meet standards and requires suppliers with cumulative transaction amounts exceeding a certain threshold^{Note 1} to complete the "Supplier Corporate Social Responsibility Self-Assessment Form" and sign the "Statement of Commitment to Human Rights and Environmental Sustainability." In 2024, the response rate of suppliers required to sign is expected to reach 100%. The evaluation will clearly outline E.SUN's requirements and expectations of suppliers in areas such as corporate operations, safety and hygiene, environmental protection, and human rights and labor standards. In terms of human rights and labor requirements, we also verified that there is no instances of child labor employment among our suppliers. We also adhere to the principle of equal pay for equal work, safeguarding employees' fundamental labor rights, including ensuring that wages can maintain a decent living standard in compliance with labor regulations. These regulations include measures to pay a living wage, avoiding or reducing overtime or excessive working hours, setting maximum working hours, equal remuneration for men and women, paying workers for annual leave, and setting minimum consultation or notice periods before mass terminations. For suppliers found to be in violation of labor regulations, we will arrange for on-site inspections. Additionally, to monitor potential risks among suppliers, we will implement a review mechanism at each stage of the transaction process. The relevant outcomes are shown in the table below:

Unit: Number of supplier

Item	2024	2023	2022
Number of suppliers attended supplier conference	46	47	36
Number of suppliers visited	12	15	39
Number of suppliers discussed in supplier evaluation meetings	73	11	NA ^{Note2}
Number of suppliers that signed the Supplier Corporate Social	427	248	415

Note 1: The threshold amount is NTD 0.5 million. In 2024, among new suppliers, 30% meet the aforementioned criteria.
Note 2: This is a new system implemented in 2023, so there is no data for 2022.

Sustainable Procurement

In order to establish a supply chain that safeguards the environment, human rights, and safety while promoting sustainable development, E.SUN continues to implement the ISO 20400 Sustainable Procurement Standards. This involves adhering to both common procurement guidelines and specific regulations, as well as conducting regular assessments of suppliers based on various qualitative and quantitative performance indicators. We have also developed related action plans that include transitioning from green procurement to circular procurement, expanding our sustainable social impact, and replacing conventional lighting with energy-efficient alternatives. These initiatives are aimed at creating a sustainable influence, which is evaluated through external audits to ensure compliance with standard requirements.

Responsible Procurement

Prioritizing local suppliers aligns with the Sustainable Development Goals (SDGs) and emphasizes the commitment to local vendors in all procurement activities. In 2024, the procurement ratio from local suppliers reached 94.5%. To achieve SDG 12, "Responsible Consumption and Production," E.SUN actively participates in government-led initiatives promoting green lifestyles and consumption, adhering to principles of sustainable consumption and environmentally friendly purchasing. We continue to engage in the "Green Procurement Implementation Plan for Private Enterprises and Organizations" promoted by the Ministry of the Environment, having been recognized for 14 consecutive years with the "Outstanding Benchmark for Green Procurement" award. In 2024, the reported amount for green procurement was approximately 0.64 billion, with a cumulative total procurement amount exceeding 2.9 billion. We aim to influence supply through procurement demands, facilitate the formation of a green supply chain, and leverage our impact to create sustainable development opportunities alongside our supplier partners. In response to government policies promoting circular economy and the procurement of socially innovative products and services, we have incorporated the principles of circular procurement into our purchasing regulations, assessing product lifecycle opportunities. We received the first prize and the Diversity Response Award of The Buying Power - Social Innovation Products and Services Procurement Award, with a cumulative transaction amount of nearly 6.5 billion.

Sustainable Supply Chain Engagement

In 2024, we continued to hold supplier conferences to leverage our influence, inviting energy management experts to share insights on corporate sustainable supply chain evaluations. We aim to guide suppliers in reflecting on evaluation aspects and collaborating with E.SUN to make contributions to sustainability. Additionally, we will explain the mechanisms for circular procurement and the components of green procurement, jointly creating sustainable value with our suppliers. To promote responsible production and facilitate responsible consumption, we will utilize advisory support mechanisms in 2024 to successfully assist suppliers in joining social innovation organizations, thereby helping them implement sustainability practices.



2.6 Carbon Emissions Structure

The primary source of emissions in the financial industry is investment and financing activities. E.SUN's carbon emissions from investment and financing are audited based on the second edition of the guidelines issued by the Partnership for Carbon Accounting Financials (PCAF). A financial carbon emission calculation system has been established and was officially launched in July 2024. The frequency of inventory was increased from once a year to once a month, allowing for real-time monitoring of monthly carbon emissions. Additionally, the automated calculation mechanism of the system helps reduce errors and time associated with manual operations. Simultaneously, E.SUN has formulated inventory management guidelines to ensure consistent calculation logic, clear division of labor, and effective management. The methodology and data are documented to enhance overall audit consistency. The inventory results are independently verified (see Appendix 18). By systematizing carbon emissions information, E.SUN closely monitors changes in the carbon-related indicators of its assets and continues to work toward its mission of achieving Net Zero.

GHG Emissions Timeline

Unit: t-CO₂e

	2021	2022	2023	2024	Third Party Verification
Scope 1	1,857	1,844	2,161	2,403	SGS Taiwan
Scope 2	22,105	20,294	17,959	10,291	
Scope 3: Financed Emissions	3,672,612	4,945,550	5,355,042	5,508,602	PwC Taiwan
Scope 3: Others	49,475	56,015	46,436	37,495	SGS Taiwan
Total (t-CO₂e)	3,746,049	5,023,703	5,421,598	5,558,791	

Note 1: Scope 2 emissions are calculated using the market-based method
 Note 2: For detailed emissions breakdown please see Appendix 12 and 13

Scope 3 Portfolio Emissions Inventory

E.SUN FHC

Unit: t-CO₂e

	2021	2022	2023	2024
Financed Emissions (t-CO ₂ e)	3,672,612	4,945,550	5,355,042	5,508,602
Carbon Footprint (t-CO ₂ e/\$M)	1.73	2.10	2.14	1.99
Weighted Average Carbon Intensity (t-CO ₂ e/NT\$1M)	6.23	4.77	5.09	5.03
Inventory Coverage (%)	75.27%	76.53%	77.62%	78.61%

Subsidiaries

Unit: t-CO₂e

	Bank	Securities	Venture Capital
Financed Emissions (t-CO ₂ e)	5,501,355	3,226	4,021
Carbon Footprint (t-CO ₂ e/\$M)	1.99	1.17	1.66
Weighted Average Carbon Intensity (t-CO ₂ e/\$M)	5.04	2.62	3.04

Note 1: Emissions from investment and financing activities for 2024 have been estimated based on the changes in our total assets reported in our financial statements.

Note 2: Carbon Footprint = GHG emissions from investment and financing companies / inventoried balance of investment and financing companies

Note 3: The Weighted Average Carbon Intensity is calculated based on the carbon emissions per unit of revenue from the financed and invested entities, accounting for the proportion of E.SUN's financing and investment.

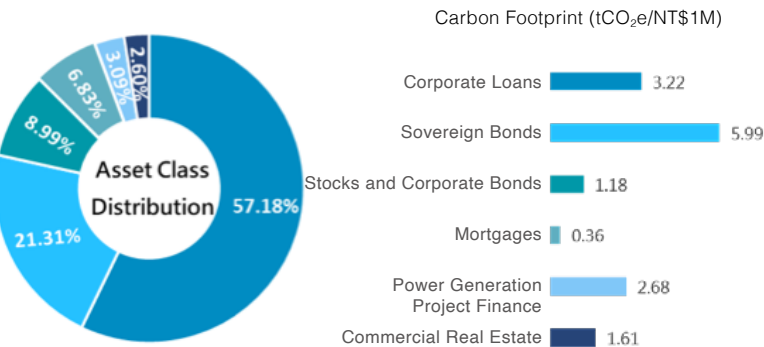
Note 4: Inventory Coverage = inventoried balance of investment and financing companies / sum of FVPL, FVOCI, AC, loans, and discounted items.

Note 5: Inventory coverage refers to the proportion of investment and financing activities that have been assessed in accordance with the PCAF methodology, relative to the total investment and financing portfolio. For 2024, E.SUN FHC's proportion of relevant investment and financing activities aligned with the PCAF methodology is 100%.

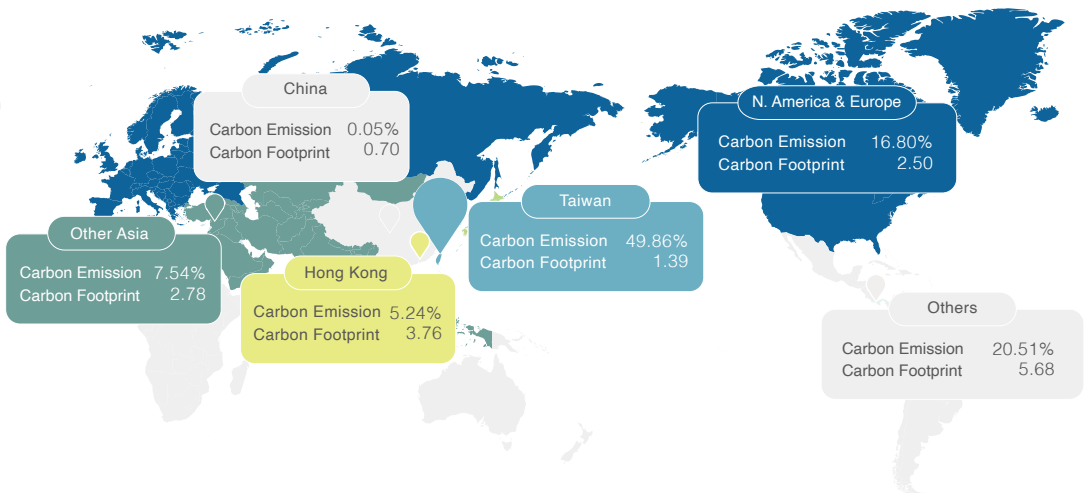
2.6.1 Financed Emissions Analysis

E.SUN analyzes the greenhouse gas emissions of its investment and financing portfolio by asset class, region, and industry. The results are shown in the following chart. The carbon emissions of each asset class are primarily from corporate loans, accounting for 57.18% of the total carbon emissions. The carbon footprint is highest for sovereign debt investments. Since Taiwan is the main region for investment and financing, it accounts for nearly half of the carbon emissions. In terms of industry, manufacturing and transportation are the main sources of carbon emissions, ranked by carbon emission proportion. The carbon footprint is significantly highest in the cement and glass industries, indicating the high emission characteristics of these sectors. Based on the Science Based Targets (SBT), E.SUN sets carbon reduction targets for different asset classes, plans control mechanisms for high-carbon industries, and engages with customers.

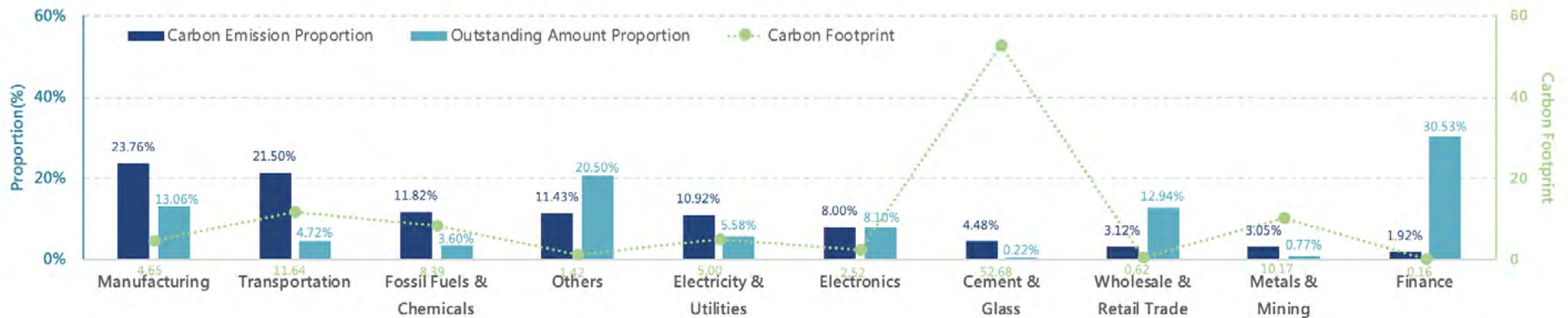
Asset Class Distribution



Geographical Distribution



Industry Distribution



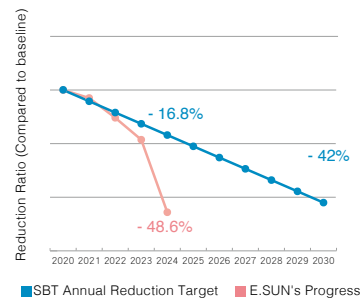
Note: Unit of Carbon Footprint: tCO₂e/NT\$1M

2.6.2 Science Based Targets (SBT) 2024 Progress

E.SUN FHC announced its "Net Zero Emissions 2050" target and publicly committed to seek validation to the NetZero target by SBTi in 2021. We formally set our science-based carbon reduction targets (SBTs) which passed official review in 2022. Our Scope 1&2 SBT uses 2019 as the base year, with a target coverage rate of 100%; Our Scope 3 portfolio SBT uses 2019 as the base year, with a target coverage rate of 11% of the total portfolio. E.SUN has set carbon reduction strategies to drive disciplined transition actions and regularly reviews progress towards our SBTs, with progress towards 2024 SBTs set out below:

Direct Operation (Scope 1&2)

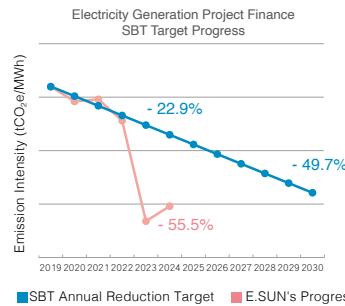
Target	Reduce absolute scope 1 and 2 GHG emissions 42% by 2030 from a 2020 base year.
Progress	Reduced absolute scope 1 and 2 GHG emissions 48.2% from a 2020 base year, meeting our 2024 target.



Investment & Financing Portfolio (Scope 3)

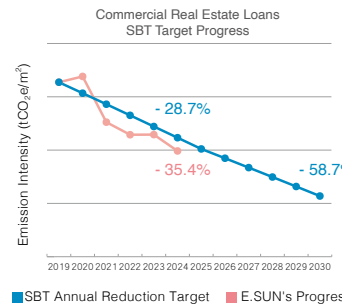
1. Power Generation Project Finance

Target	Reduce electricity generation project finance portfolio GHG emissions 50% per MWh by 2030 from a 2019 base year.
Progress	Reduced electricity generation project finance portfolio emissions by 55.5% per MWh from a 2019 base year, meeting our 2024 target.



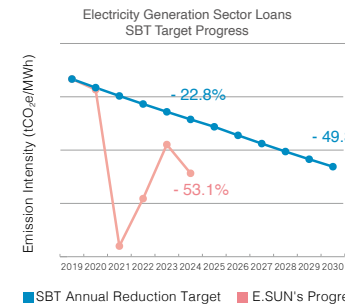
2. Commercial Real Estate (CRE) Loans

Target	Reduce GHG emissions from CRE within E.SUN's corporate loan portfolio 58.7% per m ² by 2030 from a 2019 base year.
Progress	Reduced emissions from CRE within corporate loan portfolio 35.4% per m ² from a 2019 base year, meeting our 2024 target.



3. Power Generation Sector Loans

Target	Reduce GHG emissions from electricity generation sector within our corporate loan portfolio 49.3% per MWh by 2030 from a 2019 base year.
Progress	Reduced emissions from electricity generation sector within our corporate loan portfolio 53.1% per MWh by 2030 from a 2019 base year, meeting our 2024 target.



Transition Actions

- Committed to no longer supporting financing for coal-fired power generation projects since July 2019, and has had no related balances since 2021.
- Announced in 2022 a gradual phase-out of coal-related and unconventional oil & gas extraction-related business activities. By the end of 2023, we have completely phased out of unconventional oil & gas-related investments and financing, and will no longer provide support in the future. No new coal-fired power generation and related coal mining exposures will be added. Existing exposures within OECD countries will be phased out by 2030, with the complete phase out of all positions by 2040.

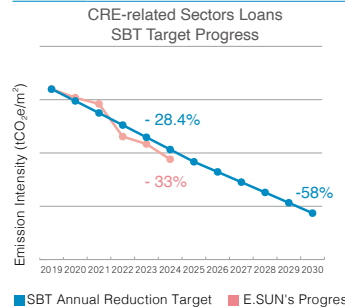
Transition Actions

- Join SBT in 2021 and set 1.5°C aligned Scope 1 & 2 carbon reduction targets.
- Install solar power on 100% of domestic owned buildings by 2025.
- 100% green building certification for all owned buildings. Replace old lighting and AC equipment with energy efficient products.
- 100% renewable energy use for domestic locations by 2030, 100% for global locations by 2040. Purchase renewable energy certificates in cooperation with government policy.
- Officially implemented Scope 1&2 internal carbon pricing in 2024.

Note 1: Finance, retail, service, food and lodging, real estate development sectors
Note 2: Fossil fuel, electrical & electronic equipment, iron and steel, pulp and paper and cement sectors. The target covers 100% fossil fuel corporate loans.

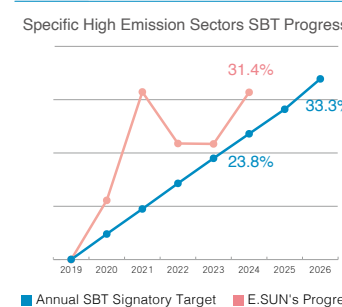
4. Non-manufacturing Sector¹ Loans

Target	Reduce GHG emissions from Non-manufacturing sectors within the corporate loan 58% per m ² by 2030 from a 2019 base year.
Progress	Reduced emissions from Non-manufacturing sectors within the corporate loan 33% per m ² by 2030 from a 2019 base year, meeting 2024 targets.



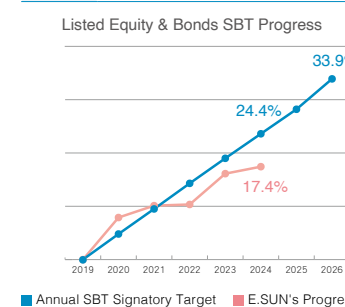
5. Specific High Emission Sectors² Loans

Target	E.SUN FHC commits that 33.3% of the corporate loan portfolio by loan value within specific high emission sectors will have set SBTs by 2026 from a 2019 base year.
Progress	31.4% of the specific high emission sectors within our corporate loan portfolio have set SBTs from a 2019 base year, meeting our 2024 target.



6. Listed Equity & Bonds Investment

Target	E.SUN FHC commits to 33.9% of its listed equity and bonds portfolio by total assets setting SBTi validated targets by 2026 from a 2019 base year.
Progress	17.4% of our listed equity and bonds portfolio by total assets have set SBTi validated targets from a 2019 base year, which did not meet our 2024 target. This is due to several major global corporations exiting SBT commitments because of political uncertainty starting in 2023.



Unit: TWD million

Portfolio Exposure	2023	2024
Coal-related	15,505	13,374
Unconventional Oil & Gas-related	0	0

- Since 2022, an internal carbon pricing mechanism has been introduced in the credit process, referencing international carbon prices to serve as a reference basis for business development.
- Continuously supports the development of renewable energies, and assists companies in low-carbon transition through advocacy, sustainable consulting services, and diverse sustainable financial products such as green loans and sustainability-linked loans.

2.7 Nature and Biodiversity Preservation

2.7.1 In Harmony with Nature

E.SUN supports global biodiversity conservation and is committed to Nature Positive growth by 2030 and Net Zero emissions by 2050. As a financial services provider, our biodiversity impact mainly comes through client investments and loans; our operations do not involve access and benefit-sharing regulations. Recognizing ecology's key role in climate mitigation, we embed environmental protection in our policies and governance to contribute responsibly to the planet.

■ Policies to halt and reverse biodiversity loss

Biodiversity-related policies and commitments	Description / Scope
E.SUN FHC Biodiversity & No Deforestation Commitment	E.SUN values biodiversity and forest conservation, committing to ecological restoration and achieving No Net Loss through our operations and investments.
E.SUN FHC Sustainable Development Best Practice Principles	E.SUN promotes sustainability by adhering to environmental laws, improving energy use, utilizing renewables, and assessing climate risks throughout our operations. Our environmental management system and education efforts aim to minimize impacts on nature and biodiversity.
E.SUN FHC Climate-Related and Environmental Risk Management Policy	E.SUN emphasizes protecting natural environments and biodiversity by implementing risk management to address climate change effects on ecosystems, reducing systemic risks, and ensuring sustainable development.

■ Identification of biodiversity impacts

E.SUN applies the TNFD-LEAP framework and references international guidelines such as PBAF and ENCORE, integrating domestic natural data to systematically assess dependencies, impacts, risks, and opportunities related to nature within our supply chain and operations. We identify whether our activities and economic engagements are near ecologically sensitive areas or involve products and services with actual or potential negative impacts on biodiversity. Due to data availability and quality limitations, our analysis currently focuses on our main area of operation within Taiwan.

Locate	Interface with Nature <ul style="list-style-type: none"> Collect geographic and industry data of E.SUN's suppliers, operations, and investee companies. Define priority areas and conduct spatial overlay analysis.
Evaluate	Dependencies and Impacts <ul style="list-style-type: none"> Gather data from international public databases, company disclosures, and open platforms. Analyze indicators using geospatial metrics (e.g., Key Biodiversity Areas1 and Freshwater Resource Areas2) and industry operational characteristics. Identify dependencies and impacts using localized data to determine if companies operate in ecologically sensitive areas in Taiwan.
Assess	Material Risks and Opportunities <ul style="list-style-type: none"> Assess significant risks and opportunities through scenario analysis and stress testing. Develop long-term transition plans based on findings.
Prepare	Response and Reporting <ul style="list-style-type: none"> Internally: Enhance information disclosure, improve training, and strengthen assessment capabilities. Externally: Raise awareness among customers and society through products, advocacy, and engagement.

Note 1: "Key Biodiversity Areas" is defined using national ecological focus areas, significant wildlife habitats, and biodiversity hotspots
Note 2: "Freshwater Resource Areas" is defined as the regions covered by the national primary regulated groundwater areas, reservoir catchment areas, and river zone maps.
Note 3: For a more detailed LEAP analysis of E.SUN's value chain, please see our "2023 Climate and Nature Report"

■ Overview of E.SUN's Natural Environment Initiatives

E.SUN is committed to supporting the global Convention on Biological Diversity and advancing sustainable ecological development in alignment with the United Nations Sustainable Development Goals (SDG 13: Climate Action; SDG 14: Life Below Water; SDG 15: Life on Land). Our natural environment and biodiversity strategy is centered on three core pillars: species conservation, habitat preservation, and environmental sustainability. Taking initiative from within, we proactively respond to both international and domestic environmental sustainability advocacies.

In 2022, we voluntarily joined the Taskforce on Nature-related Financial Disclosures (TNFD) and, in 2023, joined the TNFD Early Adopters. In November 2024, E.SUN released the "2023 Climate and Nature Report", which is the first report in Taiwan to achieve the highest grade of "Level 5: Excellence" from the British Standards Institute (BSI) for TNFD conformity, demonstrating our continued progress toward realizing the vision of living in harmony with nature.



Key Achievements in 2024:

"Formosan Black Bear Conservation Project"

95 events held over **13 consecutive years** in partnership with Taipei Zoo.



"Beautiful Taiwan, Smile E.SUN "Environmental and Beach Cleanup Activities"

In central Taiwan, events were held at locations including Holiday Forest in Miaoli County and Wenliao Fishing Port in Taichung City, with **over 400 participants**.

"Polar Bear Environmental Education Project"

events held with **over 5,000 participants** since project began.

"E.SUN-NTU EG Centenary Project"

Cultivated and planted **30,000** Taiwan endemic native cypresses.

"Adopting trails in Yushan National Park"

For **16 consecutive years**, we have dedicated efforts to maintaining approximately 260 kilometers of hiking trail facilities and ensuring environmental cleanliness.

"Beautiful Taiwan, Smile E.SUN "Environmental and Beach Cleanup Activities"

In southern Taiwan, events were held at Guanshi Platform in Tainan and Qijin Seaside Park in Kaohsiung, with over **1,100 participants**.



"Sea Turtle Conservation Project"

Nursed **86 turtles** to health and released **13 turtles** back to the wild in total since project began.

"Plant a tree, Plant a life"

A cumulative total of over **60,000 native Taiwanese tree** seedlings have been planted.

"Beautiful Taiwan, Smile E.SUN "Environmental and Beach Cleanup Activities"

In northern Taiwan, events were held at locations including Shallow Water Bay and Feicui Bay in New Taipei City, as well as Zhuwei Fishing Port in Taoyuan City, attracting over **2,500 participants**.

"E.SUN Malavi Rice"

Assisting in organic transformation and local revitalization while safeguarding biodiversity, we have converted **18 hectares** of farmland and cumulatively procured **420,000 kilograms** of rice.



"Beautiful Taiwan, Smile E.SUN "Environmental and Beach Cleanup Activities"

In eastern Taiwan, events were held at the beach beside Huoshui Lake in Taitung City, Beibin Coast in Hualien City, and Yongzhen Seaside in Zhuangwei Township, with over **100 participants**.

- Northern Taiwan
- Central Taiwan
- Eastern Taiwan
- Southern Taiwan

■ Nature and Biodiversity Mitigation Hierarchy

E.SUN's strategy for the natural environment and biodiversity development focuses on four main pillars: Species Conservation, Habitat Preservation, Environmental Sustainability, and Employee Participation. We also reference the AR3T1 corporate nature action framework proposed by SBTN to align our activities accordingly. Together with like-minded partners, we strive to contribute to the beautiful nature of Taiwan.

Positive Impacts on Nature	Avoid	Reduce	Restore	Regenerate ²
Sea Turtle Conservation & Education Project			√	
Polar Bear Environmental Education Project	√	√		
Formosan Black Bear Conservation Project	√		√	
E.SUN–NTU ESG Centenary Project	√	√	√	
Plant a tree, Plant a life Tree Planting Project			√	
E.SUN Malawi Project	√	√	√	
Millet Cultivation Revival Plan	√		√	
Beautiful Taiwan, Smiling E.SUN Environment Cleanup	√		√	
Adopting trails in Yushan National Park	√		√	
Earth Hour / 130 Days Lights Out	√	√		

Note 1: The AR3T framework, proposed by SBTN, aims to achieve transformation through four levels: Avoid, Reduce, Restore, and Regenerate.

Note 2: Since Regenerate involves complex elements that typically require multi-faceted collaboration and long-term commitment, E.SUN's biodiversity initiatives currently focus on Avoiding, Reducing, and Restoring negative impacts on the natural environment, laying the groundwork for future Regenerate efforts.

2.7.2 Species Conservation

■ Sea Turtle Conservation Project

We collaborated with the National Museum of Marine Biology and Aquarium (NMMBA) for six consecutive years on the "Sea Turtle Conservation Project." A total of 86 turtles were treated and 13 turtles were released back into the wild over the course of the project as well. Wildlife Released Turtles in the past six years:

Turtle Species	Year	2019	2020	2021	2022	2023	2024
Green turtle		3	1	1	2	1	-
Hawksbill turtle		1	-	-	-	-	-
Olive ridley sea turtle		2	-	-	-	-	2
Total		6	1	1	2	1	2



Lead the students to visit the Sea Turtle Rescue and Medical Center and introduce the man-made objects found in the bodies of sea turtles.



Participants had the opportunity to closely observe the care and rehabilitation of injured sea turtles within the facilities of the rescue center.



During the sea turtle rescue course, veterinarians provided participants with detailed instructions on how to respond appropriately when encountering stranded or injured sea turtles.



Conducted a sea turtle release event at the conservation beach in Houbihu.

■ Polar Bear Environmental Education Project

Every year on February 27th, which is International Polar Bear Day, E.SUN collaborates with the National Museum of Natural Science to launch a series of polar bear conservation activities. Over the past 5 years, we have organized a total of 43 events, with nearly 5,000 people participating. The activities in 2024 include the "Mission to Save Polar Bears" seminar, the interactive "Polar Bears and friends fun challenge", and guided tours of the National Museum of Natural Science. Through these events, we aim to encourage public reflection, foster environmental awareness, and promote proactive actions to mitigate global warming.



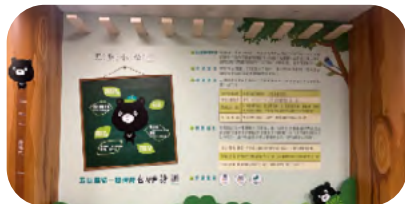
We invited Bai Hsin-Yi, a natural ecology program producer and host, to serve as the speaker for the "Mission to Save Polar Bears" seminar, where she shared her experiences filming polar bears in the Arctic.



We invited teachers and students from E.SUN Seed School at Qiaorong Elementary School in Taichung City to visit the National Museum of Natural Science. Through observing polar bear specimens, the program aimed to guide students in understanding the environmental impacts of climate change.

■ Formosan Black Bear Conservation Project

The Formosan black bear is Taiwan's sole native bear species. The preservation of this species in Taiwan not only means their survival, but also implies protecting the integrity of Taiwan's forest ecosystems and overall biodiversity. Since 2012, E.SUN FHC has been working with Taipei Zoo to promote a series of black bear conservation activities. In 2014 we launched the Black Bear Affinity Card and invited our customers to support the conservation of Taiwan's native species. E.SUN Bank's Hualien Branch utilizes the first animal conservation specialty branch in Taiwan "Black Bear Branch" dedicates its efforts to promoting animal conservation and biodiversity.



The lobby of E.SUN Bank's Hualien Branch features the Black Bear Learning Corner, providing customers with access to conservation knowledge while they conduct their financial transactions.

2.7.3 Habitat Conservation

■ "E.SUN-NTU ESG Centenary Project"

In collaboration with NTU, we will plant native conifers such as the Taiwan Red Cypress, Formosan Hinoki, Cryptomeria-like Taiwania, Taiwan Incense Cedar, and Formosan China-fir in the Yushan mountain range. 100,000 trees are expected to be planted within 10 years beginning in 2022, totaling 50 hectares in area. The forest is expected to absorb 242,000 tons of CO₂ over the course of a century. After selective thinning, 25,000 trees will be kept to grow over a century, laying the foundation for soil and water conservation, with carbon sequestration and circular economy benefits. In 2024, a total of 15,925 saplings of native tree species were planted.



■ "Plant a tree, Plant a life" E.SUN plant trees project

E.SUN has been jointly promoting the "Plant a tree, Plant a life" for 6 consecutive years in collaboration with the Ministry of Agriculture. In 2024, we adopted 4.58 hectares of national and coastal forests and planted 10,050 native tree saplings, such as Formosan Ash, Formosan Sweet Gum, Formosa Acacia, and Taiwan Gordonia etc.

"E.SUN Visa Signature," Taiwan's first charitable card with an emphasis on environmental awareness

E.SUN introduced the first charitable credit card with an emphasis on environmental awareness, the E.SUN Visa Signature card. We continue to invite cardholders to participate in the "Plant a tree, Plant a life" project, and give back to this land through tree planting. We encourage Visa card members to apply for electronic bills or mobile bills, and donate 0.2% of each transaction amount to tree planting programs, resulting in a total of over 60,000 trees being planted through this project.



■ E.SUN Malawi Rice

E.SUN has been supporting the "E.SUN Malawi Rice project" for 11 consecutive years along with Yushan National Park Services, Yinchuan Sustainable Farm and Tse-Xin Organic Agriculture Foundation, encouraging local farmers to adopt organic agriculture for sustainable food production and protect biodiversity, which saw the endangered native fish species "Kikuchii's Minnow" return to the paddies. E.SUN has transformed 18 hectares of farmland into certified organic fields and has acquired 420,000 kg of Malawi Rice in total.

■ Millet Revitalization Project

In collaboration with National Taiwan University, we jointly initiated the three-year "Millet Revitalization Project," aimed at the restoration of 28 local millet varieties. The project involves establishing millet cultivation demonstration zones, producing illustrated storybooks about millet, organizing millet planting promotion activities, and partnering with Jiumei Elementary School on the "Millet Conservation Land" project. This initiative provides agricultural and cultural education to students through millet-related rituals and planting activities on campus. The project aspires to convey the significance of species preservation, education, cultural heritage, and the promotion of millet cultivation.



■ "Beautiful Taiwan, Smile E.SUN" "Environmental and Beach Cleanup Activities"

For 15 consecutive years, we have organized the "Beautiful Taiwan Smile E.SUN" environmental cleanup and beach cleanup activities. In response to World Cleanup Day in 2024, over 7,790 E.SUN volunteers and their families participated across 147 business locations and 15 coastal areas throughout Taiwan. Through these concrete actions, we actively contribute to plastic and waste reduction and safeguard our beautiful homeland.

■ Adopting trails in Yushan National Park

We have adopted and maintained 260 km of trails in Yushan National Park trail for 16 consecutive years. We use this opportunity to promote conservation and environmental education, and encourage E.SUN employees to participate and work together to protect the environment.

■ Taiwan New Year Bird Count

For two consecutive years, we have participated in the "Taiwan New Year Bird Count," jointly organized by the Chinese Wild Bird Federation, Taipei Wild Bird Association, Kaohsiung Wild Bird Association, and the Biodiversity Research Institute of the Ministry of Agriculture. This event serves as a critical data source for monitoring changes in Taiwan's winter migratory bird populations, to which we are committed to contributing for ecological documentation.

2.7.4 Environmental Sustainability

GRI G4 Financial Services Sector: FS4

■ Earth Hour

For 13 consecutive years, we have participated in Earth Hour, the world's largest international carbon reduction campaign. Voluntarily extending the lights-off duration, from March 22 to 24, we turned off all signage and exterior lighting at 170 domestic and overseas business locations for three consecutive nights.

■ 130 Days Lights Out

For the past 8 years, we've turned off our lights during peak energy hours in summer. From June 5st to October 13th, 2024, all 139 branches across Taiwan shut down their signage lights, exterior wall lights, and television displays for the entire day. Over the past 8 years, a total of 560,018 kWh has been saved, equivalent to reducing 276.6 metric tons of carbon emissions.



■ Resource Circulation and Charity Auction

For 13 years in a row, we have held the "Resource Circulation Charity Auction," which amassed 10,000 donated second-hand and brand new items in 2024. This year, over 5,200 colleagues participated, raising over NT\$10 million in proceeds that were all donated to the "E.SUN Care for Schoolchildren Program." The program supports economically disadvantaged families and children facing sudden setbacks by alleviating the financial burden of education by assisting in the purchase of stationery, books, and participation in activities. ensuring that all children can learn happily and participate in both school and extracurricular activities.



■ 13-Book Lovers: Magazine circulation day

In order to realize E.SUN's environmental protection spirit, the "13-Book Lovers: Magazine circulation day activity" has been held at E.SUN Headquarter buildings. In order to effectively achieve the goal of resource sharing, we collected magazines that various departments had subscribed to (or had received as donations), along with employees' own books, magazines, CDs, and DVDs, which were made freely available to all employees. We collected a total of 3,322 items in 2024, and circulated 1,845 items, for a circulation rate of 55.54%.

■ "E.SUN Environment and Energy Saving Education Day"

On the 13th of every month Environmental volunteers of each department promotes knowledge of environmental protection on the 13th of every month and educational material is regularly displayed on our e-Learning platform. Also, the 13th is also cleaning day, where employees would clean the office environment to put the 4R concept- Reduce, Reuse, Recycle, and Refuse into practice.

Month	2024 ESG Education Topics
January	COP28 Makes First-Ever Resolution to Reduce Methane Emissions
February	Conveying Sustainability to the Silent World
March	Mine Resurgence
April	Planet vs. Plastics
May	Energy storage
June	World Environment Day
July	The Greatest Challenge for the Financial Industry in Achieving Net Zero: Financial Carbon Emissions
August	World Humanitarian Day
September	10 years endeavors of the Malawi Project
October	World Architecture Day
November	UN Conference of the Parties to the Convention on Biological Diversity
December	COP29