

### **Overview**

The escalation of global extreme weather events is heightening the importance of sustainable development as the primary goal in the ongoing global economic transformation. Yuanta Bank is committed to becoming an international sustainability benchmark enterprise, aiming to achieve the goal of net-zero carbon emissions by 2050. We continue to build a sustainable financial ecosystem, dedicated to expanding our sustainable influence from within and working with stakeholders for the common good.

As a member of the "Coalition of Movers and Shakers on Sustainable Finance," Yuanta Financial Holding Group has pledged to take more active actions on five major issues, including "green procurement," "funding and engagement," "information disclosure," "assistance and promotion," and "international outreach." We use the United Nations Sustainable Development Goals (SDGs) as a blueprint and integrate Environmental, Social, and Governance (ESG) principles into our corporate culture and operational strategies.

We have the obligation to disclose climate-related risks and, through providing more diverse financial products, green finance services, and improving customer care, we aim to establish the influence of fund providers and managers, harnessing the positive impact of the financial industry to drive commercial partners towards low-carbon transition and work together towards the ultimate goal of net-zero carbon emissions.

This report follows the "Recommendations of the Task Force on Climate-related Financial Disclosures" (TCFD) framework of the Financial Stability Board (FSB) and uses the following four core elements to illustrate our management of climate-related risks and demonstrate our commitment to mitigating and adapting to climate change.

### **Governance**

Establish a sound governance framework for climate-related risks and opportunities, with the Board of Directors serving as the highest supervisory unit. Under the board's jurisdiction, a "Risk Management Committee" and a supervisory "Sustainable Development Committee" are set up to oversee and manage climate-related risks and opportunities, and to promote overall climate strategy and actions.

→ Please refer to Chapter 1



Identify short, medium, and long-term climate-related risks and opportunities for us, understand the impact of climate-related risks and opportunities on business, strategy, and financial planning, set science-based carbon reduction targets, adopt low-carbon strategies, enhance our operational resilience and adaptability, and promote the overall industry's low-carbon transition.

→ Please refer to Chapter 2







Based on the strategy and risk management process, establish metrics and targets for low-carbon operations and low-carbon transition, and gradually monitor and track progress on a regular basis.

→ Please refer to Chapter 4







### **Risk Management**

Integrate climate risks into the existing risk management framework (including processes for identification, measurement, monitoring, and reporting), establish relevant management policies, adopt differentiated management measures based on identified climate risks, and conduct scenario analysis to assess the impact of climate-related risks on business operations.

→ Please refer to Chapter 3



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### **Achievements in 2022**



# **Financing Aspect**

The total credit line for corporate finance in the sustainable industry +27%

accounting for 1.05% of our total corporate loan outstanding.

The sustainable construction related project financing +27% accounting for 0.74% of our total corporate loan outstanding.

The total outstanding of sustainable linked loans +219% with +15 approved cases.



# **Investment Aspect**

Achieved an issuance of sustainable bonds +2 billion NT dollars.

The sustainable related investment +17% accounting for 2.81% of our total investment.



# Internal Operations Aspect

The use of renewable energy

has accumulated +299%

reduction of 198.91 metric tons  $CO_2e$ .

(We have the first branch which uses 100% pure green energy)

Our digital operations resulted in **638** metric tons of CO<sub>2</sub>e emission reduction.

# A Word from the Chairman

According to the World Economic Forum's latest Global Risks Report in January 2023, natural disasters and extreme weather events, failure to mitigate climate change, and failure to adapt to climate change are viewed as the greatest short-term and long-term risks facing the world. The impact of these extreme weather events poses greater challenges to human life and business operations, and increasing climate resilience has become an important business issue.

As a member of the "Coalition of Movers and Shakers on Sustainable Finance," Yuanta Financial Holding Group has pledged to take more proactive action in five major areas, including "green procurement," "funding and engagement," "information disclosure," "assistance and promotion," and "international outreach." We have set targets based on the Science Based Targets methodology and actively reduced its own carbon emissions by introducing internal carbon pricing (ICP), implementing low-carbon operations, and undergoing low-carbon transition. We aim to achieve its vision of reaching net zero carbon emissions by 2050.

Since 2018, our company has been cooperating with the Financial Stability Board's TCFD framework, which incorporates climate issues into corporate governance and strategic management. At the end of 2021, a TCFD Working Group was established to integrate climate risk management into the existing risk management system, and to seek new opportunities through more diversified financial products and green financial services. The board of directors will directly supervise operational management strategies that respond to climate impacts.

As a key player in the low-carbon transition of industries and the promotion of sustainable development, the financial industry plays a crucial role in directing capital flow to sustainable businesses. We use the "Sustainable Finance Principles" as the highest framework and guidance for developing financial products and services standards. In the investment business, ESG factors are included in the investment review process, and in the credit business, the Equator Principles framework is used to manage potential environmental and social risks, promoting business operations that align with international sustainability trends. This will strengthen financial institutions' examination of investment and financing positions, risk and opportunity assessments, and strategic planning, and drive low-carbon transition, climate-related information disclosure, and the transition of Taiwan's economy to a low-carbon or zero-carbon economy.

Chairman Chien Weng



# **About this Report**

### Principles

This report follows the disclosure standards of the Financial Stability Board's "Recommendations of the Task Force on Climate-related Financial Disclosures", the Financial Supervisory Commission's "Guidelines for Disclosure of Climate-Related Financial Risks for Domestic Banks" Hong Kong's "GS-1 Climate Risk Management," and Taiwan's "Climate-Related Risk Management Practices Handbook for Domestic Banks."

### Reporting Period

This report discloses our achievements in governance, strategy, risk management, metrics and targets in the four dimensions during the 2022 fiscal year (January 1, 2022, to December 31, 2022).

### Scope of the Report

This report mainly covers our operational activities in Taiwan, including additional disclosures for Hong Kong's "GS-1 Climate Risk Management" requirements, which differ from Taiwan's "Climate-Related Risk Management Practices Handbook for Domestic Banks" in the four core areas of climate-related risk management. The report provides detailed information and notes on related data and paragraphs.

### Publication Information

This report is available in both chinese and english and can be downloaded from our official website's "Sustainable Development" section. The report will be published annually on our website (https://www.yuantabank.com.tw/bank/tcfd/list.do). This is the first publication, and the release date is June 2023.





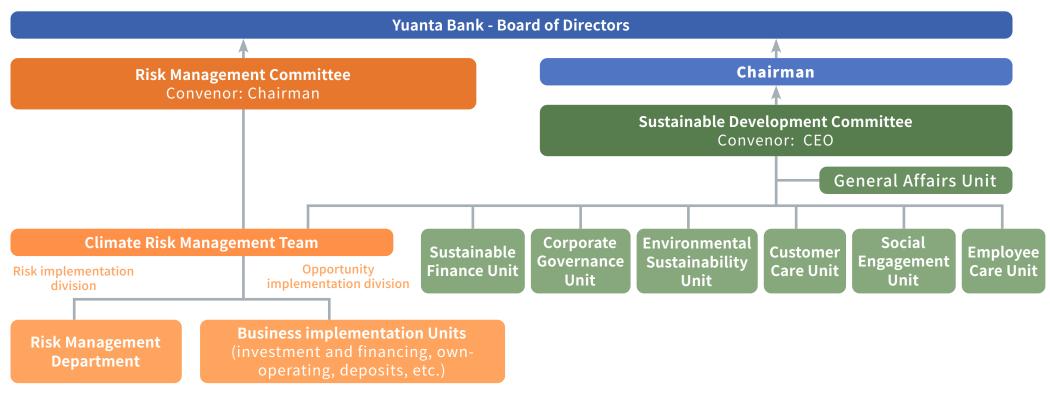
# **Chapter 1 : Governance**

### 1.1 | Roles and Responsibilities - Board Oversight of Climate-Related Risks and Opportunities

Following the practice of the Yuanta Financial Holding Group (also called the Group) the Board of Directors serves as the highest climate governance unit responsible for the formulation of climate-related policies, strategies, and goals, incorporating climate-related risks and opportunities into consideration, and overseeing climate-related risk management and disclosure. In addition to integrating the above-mentioned climate-related issues into our operational strategy, the Board also supervises the execution and effectiveness of various management mechanisms to ensure the sound operation of us. This includes regular discussions on climate-related issues, continuous review of risk assessment results, and periodic education and training programs to enhance the understanding of climate-related risk management issues among all employees of ours.

Under the jurisdiction of the Board of Directors, a "Risk Management Committee" has been established with clear division of labor for sustainable governance, making climate-related issues independent and overseen by the "Sustainable Development Committee". The committee is chaired by the Chairman and CEO of ours, demonstrating our commitment to climate governance.

### <Climate Governance Framework>



### Risk Management Committee

The Risk Management Committee is a non-functional committee under the Board of Directors of ours, responsible for executing and promoting risk management affairs across various units. The committee is chaired by the Chairman of the Board and vice-chaired by the CEO, with the Chief Auditor as an attendee. Other members of the committee include relevant business unit heads, executive officers, supervising vice presidents, or department heads at the same level. The committee convenes once a month, and important management issues and resolutions are reported to the Audit Committee and the Board of Directors.

The main responsibilities of the committee are to ensure that our risk management policies, risk appetite, and limits are consistent with its climate strategy and goals, to execute important risk management reports and project reviews, including climate risk, and to ensure that risk management is aligned with the company's policies, operating strategies, short-term goals, and long-term development, to help achieve our objectives and operational strategies.

### Sustainable Development Committee

Our bank follows the practice guidelines, policies, and management regulations on sustainable development of the Group, as well as the group's overall planning, to strengthen the execution of sustainable development and fulfill corporate social responsibility. We have established a "Sustainable Development Committee" to promote related matters in ours, and it is chaired and convened by the CEO. The committee members include the heads and authorized personnel of various business units designated by the CEO. Meetings are held quarterly and can be called anytime as needed. We continue to enhance corporate governance operations, implement business with integrity, promote green products and services, support sustainable finance, protect customer rights, and promote fair treatment of customers.

# Actions taken by the Hong Kong Branch

To enhance the risk management mechanism of the Hong Kong Branch, a "Hong Kong Branch Risk Management Committee" has been established. The committee is chaired by the president, with the relevant business unit heads serving as members. The committee holds a monthly meeting and reports the relevant resolutions to the Head Office Risk Management Committee and the CEO to ensure effective implementation of risk management procedures (including climate risks) and control risks within our tolerance level.



### The Board's corporate governance background and expertise

The independent directors of ours have enriched experiences and expertise in corporate governance, financial institution management, risk management, and operational practices. They have held important positions in relevant regulatory bodies and the industry, and continue to actively contribute to the promotion of corporate governance in Taiwan. Their professional and practical experiences continuously assist us in strengthening corporate governance and sustainable operations, overseeing the system and execution of our sustainable development committee and risk management committee.

In the face of the increasing impact of ESG on the operations of our group, the composition of the board of directors of ours considers the importance of professional knowledge backgrounds in corporate governance and sustainable finance. In addition to considering expertise in merger and acquisition, risk management, business management, corporate governance, and financial capabilities, we also continuously enhance practical experiences and knowledge skills in sustainable operations and climate issues.

As global attention to climate issues continues to grow and the trends change rapidly, we follow the lead of the Group in continuing to pave the way for sustainability. The independent directors of ours actively participate in forums and training seminars related to sustainability/climate change, continually improving their understanding of climate trends and enhancing their corporate governance capabilities to fulfill their supervisory responsibilities.

### 1.2 | Function and Responsibilities - Management of Climate-Related Risks and Opportunities

We have established the "Risk Management Policy" and "Climate Risk Management Measures" approved by the Board of Directors, which have incorporated climate risk into the overall risk management framework. Our organizational structure and the responsibilities of each unit are in accordance with the "Organizational Regulations" approved by the Board of Directors.

The climate governance-related management unit of ours is the "Climate Risk Management Team," which focuses mainly on the impact of climate issues related to ESG environmental issues on us and reports on the progress and effectiveness of management to the "Risk Management Committee" under the Board of Directors and the "Sustainable Development Committee" under its supervision.

### Climate Risk Management Team

To comply with the financial disclosure guidelines for climate risks issued by the regulatory authorities, we established the "Climate Risk Management Team" at the end of 2021. Our working group divides climate issues into two aspects of risk and opportunity, which are respectively executed by the Risk Management Department and the relevant business units to comprehensively manage climate-related issues and impacts. The Risk Management Department supervisor hosts monthly seminars to identify, assess, analyze, monitor, and formulate adaptation strategies and target indicators for climate-related risks and opportunities, as well as to study climate-related risk management as a whole. Monthly reporting of our climate risk monitoring indicators and the execution of the TCFD project are submitted to the Risk Management Committee and Audit Committee, and quarterly reports are submitted to the Board of Directors to facilitate the control of the implementation of climate risk.

### Sustainable Development Committee

Responsible for supervising and promoting the implementation of our sustainable development policies; the committee has set up seven functional groups, including the "Corporate Governance Units," "Sustainable Finance Units," "Climate Risk Management Units," "Customer Care Units," "Employee Care Units," "Environmental Sustainability Units," and "Social Engagement Units". Each functional unit holds monthly meetings and reports quarterly to the Sustainable Development Committee. After discussion by the committee, the meeting records and implementation results are submitted to the Board of Directors by the relevant units and responsible units.

### Climate Linked Incentives for Management

To facilitate the comprehensive implementation of climate strategies and policies within the organization, we have established related mechanisms to encourage the management team to practice sustainable development goals. We have included the annual operational targets of senior management (including the Hong Kong Branch President) as part of the sustainable ESG goals and linked the measuring indicators to various criteria such as conducting sustainable finance evaluations, implementing fair treatment principles, ESG-related verification, issuing sustainable finance bonds, and internal carbon reduction efforts. This strengthens the implementation of sustainable operations and promotes a core spirit of climate governance through a top-down performance system.

### <The Bank's Senior Management Performance Evaluation Form>

Assessment Items for Annual Operating Objectives	Measurement Indicators/KPIs
	Conduct sustainable finance assessments
	Implement Treat Customers Fairly
( <u>11</u> )	ESG-related verification
	Issue sustainable development financial bonds
ESG Goals for Sustainable Development (Environmental, Social, and Corporate Governance)	The implementation of an ICP management system has enabled a comparison of the carbon emission reduction rates between the current year and the same period of the previous year.
	Other

### **Enhancing Professional Competence in Climate-related Issues**

We enhance its professional competence in climate-related issues by participating in external seminars and exchanging ideas with experts in relevant fields. It also contributes to the development of practical manuals by the banking industry associations. Through these activities, we acquire new knowledge on domestic and international climate trends and influence the industry, collaborating with peers to keep up with global trends.

### <Yuanta Bank participated in various external lectures and forums related to climate change in 2022>

Course Category	Course Name	Theme	Participants
Expert Forum	2022 Expert Forum - Climate Change and Sustainable Development: Opportunities and Challenges for the Financial Industry.	<ul> <li>Climate Change</li> <li>Sustainable Development</li> <li>Opportunities and Challenges for the Financial Industry</li> </ul>	Department Heads and above.
Compulsory e-training for the entire bank	2022 Sustainable Finance TCFD Training Courses	<ul> <li>Sustainable finance development</li> <li>Correlation between ESG framework, and Climate change opportunities and risks</li> <li>Climate-related risks, opportunities, and financial impacts</li> <li>TCFD report's four dimensions and climate scenario analysis</li> </ul>	All executives and personnel in the bank, including the Hong Kong branch presdient.







### 1.3 | Major Decisions and Achievements in Climate Governance Over the Years

Through regulatory oversight and the establishment of related goals by the highest governance level, the Board of Directors of ours has passed the following major decisions and achieved related implementation results since 2017 with respect to its own operations, financing, fundraising, and investment, thereby promoting our progress towards sustainable management goals.



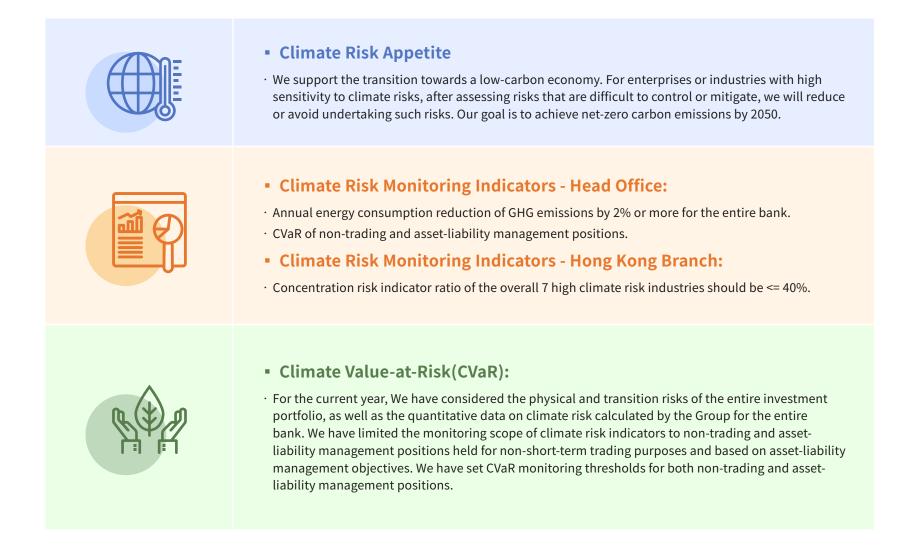
Label" in September.

The credit card obtained dual certifications from the Environmental Protection

Administration for "Product Carbon Footprint Label" and "Product Footprint Reduction

### Continuous Improvement of Climate Risk Management Mechanisms and Key Achievements in 2022

In addition, in 2022, our board of directors approved annual climate risk monitoring indicators, including climate risk appetite and climate value-at-risk (CVaR).





# **Chapter 2: Strategy**

With the vision of "becoming an international benchmark enterprise for sustainability and actively promoting a better future for descendants," the Group demonstrates its commitment to sustainability through the implementation of "Net Zero Emissions," "Sustainable Finance," and "Talent Development" initiatives. As a member of the "Coalition of Movers and Shakers on Sustainable Finance," the Group pledges to take more proactive actions in five key areas: "Green Procurement," "Investment, Financing and Engagement," "Information Disclosures," "Assistance and Promotion," and "International Outreach." Furthermore, the Group aligns its operations with the United Nations Sustainable Development Goals (SDGs), integrating ESG principles into its corporate culture and operational strategies. In accordance with the Group's vision and commitments, we actively utilize its financial influence to drive the overall industry's transition to a low-carbon economy, implement corporate carbon management, and ultimately track and review performance to achieve sustainable goals in meeting stakeholders' expectations.

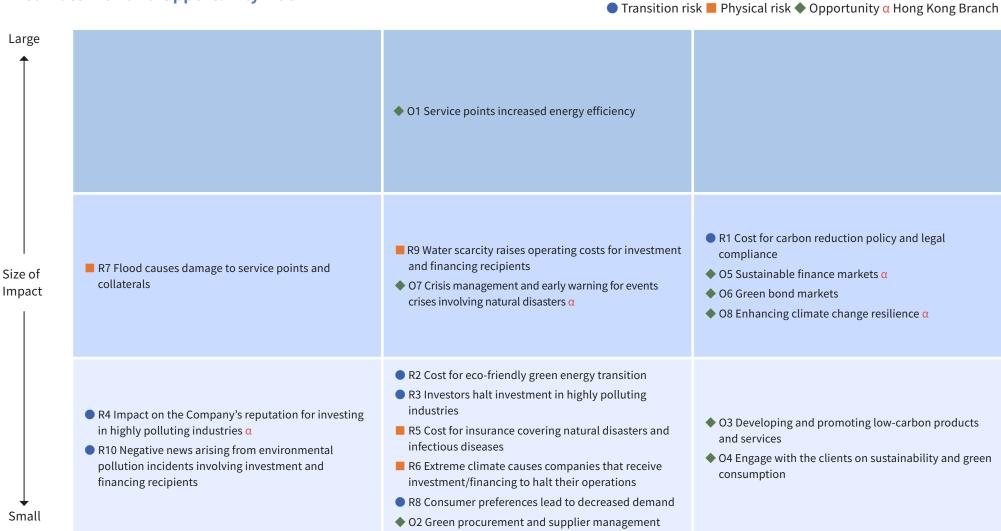
### 2.1 | Identification and Measurement of Climate Risks and Opportunities

To understand the impacts of climate change, we conduct an annual assessment of risks and opportunities resulting from climate change, categorized by business nature. It further identifies and measures climate risks and opportunities based on the TCFD recommendations, including risk taxonomy, transmission channels, time horizons, geographical heterogeneity, position within the value chain, and financial implications. This year, we utilized a climate risk and opportunity matrix to prioritize and identify 10 risks and 8 opportunities. Measures and strategies were developed based on the duration and severity of the impacts, aiming to coexist with climate change while creating corresponding opportunities.

The climate risk and opportunity identification and measurement for the Hong Kong branch align with our overall guidelines and management mechanisms. This year, the Hong Kong branch identified 1 high-risk and 3 high-impact opportunities. The branch is implementing the designated measures and strategies in parallel with us, while strengthening its ability to address climate risks and opportunities based on local operational risks and strategies in Hong Kong.



### Climate Risk and Opportunity Matrix



### Note:

Short-

term

- 1. The definition for "short-term" for the company is a duration within a year, medium-term is 1-3 years, and long-term is over 3 years.
- 2. The size of the impact is determined by the results of internal discussions after considering domestic and foreign industry analysis reports and the Group's market research information.

Duration of Impact

# Analysis of the Financial Impact Caused by Climate Change

### <Financial Impact and Response Measures to the 10 Major Climate Risks>

#	Risk	Financial Impact	Impact dimensions	Corresponding existing risks	Impact duration	Adaptation and mitigation measures
1	Cost for carbon reduction policy and legal compliance	The investment and financing recipients may incur additional carbon reduction costs and experience reduced profitability due to more stringent regulations, leading to potential stock price losses and impacting our assets.	Investment and financing	<ul><li>Market risk</li><li>Credit risk</li></ul>	long-term	Keep updated with the trend of international carbon tax and relevant regulations, facilitate engagement with investing and financing target companies with high carbon emissions
2	Cost for eco-friendly green energy transition	Investment and financing recipients may incur additional costs during the transition process or experience decreased revenue and income due to delayed transition.	Investment and financing	<ul><li>Market risk.</li><li>Credit risk.</li></ul>	medium-term	Monitor low-carbon market demand, assist clients in low-carbon transition.
3	Investors halt investment in highly polluting industries	Institutional investors are increasingly concerned about climate change and environmental issues. If investors have concerns about asset security and decide to withdraw a significant amount of funds, it can result in a decline in investment capital.	Investment and financing	<ul><li>Reputation risk.</li><li>Credit risk.</li><li>Liquidity risk.</li></ul>	medium-term	Incorporate sustainable financial management into the asset management process and strengthen the due diligence of investments with high pollution and high emissions to meet investor expectations.
4	Impact on the Company's reputation for investing in highly polluting industries α	Negative news surrounding the high- pollution companies in which we have invested can adversely affect our reputation and lead to investor withdrawals, resulting in a reduction in funding sources.	Own operations	<ul><li>Reputation risk.</li><li>Liquidity risk.</li></ul>	short-term	Strengthen scrutiny, control, and engagement with high-polluting companies in investment and financing, set risk preferences, and actively strive to become a sustainable financial institution through independent advocacy and international initiatives, building a positive social image.
5	Cost for insurance covering natural disasters and infectious diseases	Natural disasters or infectious diseases can result in harm or even death to customers and employees, leading to increased insurance claims and rising operational costs in the healthcare or life insurance sectors.	Investment and financing	<ul><li>Reputation risk</li><li>Operational risk</li></ul>	medium-term	Incorporate climate-related factors into product evaluation to provide insurance products that better meet customer needs and align with climate change trends.

#	Risk	Financial Impact	Impact dimensions	Corresponding existing risks	Impact duration	Adaptation and mitigation measures
6	Extreme climate causes companies that receive investment/financing to halt their operations	The investment and financing targets may experience property losses or operational disruptions due to extreme weather events, which can subsequently impact our profitability and lead to a decrease in revenue.	Investment and financing	<ul><li>Credit risk</li><li>Market risk</li><li>Operational risk.</li></ul>	medium-term	Enhance due diligence in the assessment of investment targets and incorporate an understanding of their resilience to extreme climate events into the Know Your Customer (KYC) process.
7	Flood/Landslide Disaster causes damage to service points and collaterals	Disruptions in business operations or a decrease in the value of owned properties or collateral as a result of flooding caused by extreme weather conditions can impact our profitability and lead to a decline in revenue.	<ul><li>Own operations</li><li>Investment and financing</li></ul>	<ul><li>Reputation risk</li><li>Credit risk</li><li>Operational risk.</li></ul>	short-term	Incorporate climate change-related factors into consideration for service points, investments in real estate, and collateral.
8	Consumer preferences lead to decreased demand.	Change in consumer preferences leads to a decline in demand for financial products/ services.	Own operations	<ul><li>Reputation risk</li><li>Operational risk</li></ul>	medium-term	Understanding consumer preferences and demand trends, and gaining knowledge of green products through the Know Your Product (KYP) process to assess customer acceptance.
9	Water scarcity raises operating costs for investment and financing recipients.	The rising average temperature and water scarcity, accompanied by drought, impose additional financial pressure on investment and financing targets that have to invest in water-saving and recycling equipment as a response.	Investment and financing	<ul><li>Credit risk</li><li>Market risk</li></ul>	medium-term	Monitor ongoing water scarcity and its potential impact on the operations and finances of investment and financing targets.
10	Negative news arising from environmental pollution incidents involving investment and financing recipients.	Environmental pollution incidents occurring in investment and financing targets leading to negative news coverage, indirectly affecting our reputation.	Own operations	<ul><li>Reputation risk</li><li>Credit risk</li><li>Market risk</li></ul>	short-term	Consideration of indirect impact on our corporate reputation due to negative news coverage of environmental pollution incidents involving investment and financing counterparts.

### <Financial Impact and Response Measures to the 8 Major Climate Opportunities>

#	Opportunity	Financial Impact	Impact dimensions	Impact duration	Mitigation strategies
1	Service points increased energy efficiency utilizing renewable energy, upgrading to energy efficiency energy management systems to enhance energy efficiency.  By implementing green procurement and supplier management supplier management management energy		Own operations	medium-term	Implementing ISO 50001 Energy Management System, purchasing renewable energy certificates, actively obtaining green building certifications for owned properties, and transitioning to energy-efficient lighting and water-saving equipment.
2			Own operations	medium-term	We adhere to the "Sustainable Procurement Declaration," "Code of Conduct," "Code of Ethics and Conduct Guidelines," "Supplier Sustainable Procurement Guidelines," and "Supplier Management Guidelines" established by the Group. We also include the "Integrity Commitment Statement" and "Supplier Sustainable Procurement Terms" in our supplier contracts. Our procurement regulations also incorporate the "Green Procurement Clause."
3	Developing and promoting low-carbon products and services.	By developing and promoting low-carbon products and services, we aim to meet the demands of investors and enhance our business revenue.	Investment and financing	long-term	We are implementing sustainable practices and conducting carbon footprint assessments for our existing financial products. We are also collaborating with investors to promote sustainable financial products and expand our sustainable asset management portfolio. Additionally, we are launching innovative products such as sustainable index-linked securities and warrant linked to the green energy industry to meet the investment needs of our customers and channel funds into sustainable and green energy enterprises.
4	Engage with the clients on sustainability and green consumption	Leverage financial products and services to engage customers in sustainable and green consumption, boosting revenue.	Investment and financing	long-term	Encourage customers to participate in energy conservation, carbon reduction, and green investments through various channels such as official websites and mobile apps. Actively engage institutional investors in adopting proactive ESG practices through verbal communication, correspondence, and other means.

#	Opportunity	Financial Impact	Impact dimensions	Impact duration	Mitigation strategies
5	Sustainable finance markets $\alpha$ Develop relevant action plans and guidelines for credit extension and investments to actively guide capital flow into sustainable businesses and enhance revenue generation.		Investment and financing	long-term	Adhere to the "Sustainable Finance Guidelines" and "Industry-Specific Environmental and Social Risk Management Guidelines" established by our financial group for investment and credit decisions. We follow the "Guidelines for Managing Equator Principles Financing Cases" to ensure that credit cases comply with the Equator Principles. Each subsidiary investment unit also formulates relevant regulations and indicators to incorporate ESG concepts into the investment process.
6	Green bond markets	nrojects, thereby enhancing its cornorate		long-term	Issue green bonds to fund the construction of green buildings and plan the issuance of sustainability bonds to support sustainable-related lending.
7	Crisis management and early warning for events crises involving natural disasters $\alpha$	Develop and ensure the effectiveness of adaptation measures to provide stable services across all business operations, enhance customer trust, and minimize operational losses.		medium-term	Implement measures such as uninterrupted power supply, generators, backup servers, and off-site redundancy to ensure continuity of operations. Develop disaster crisis management and early warning protocols along with response measures. Conduct regular disaster preparedness drills to ensure the smooth operation of equipment and mechanisms during times of crisis.
8	Enhancing climate change resilience α	To cultivate the ability to adapt to climate change, identify and measure climate risks in a timely manner, and reduce the operational and financial impact of physical and transition risks on us, as part of the efforts towards sustainable development.	<ul><li>Investment and financing</li><li>Own operations</li></ul>	long-term	Establishing the ability to adapt to climate change, identifying and measuring climate risks in a timely manner, and reducing the impact of physical and transition risks on us as part of the efforts towards sustainable development.

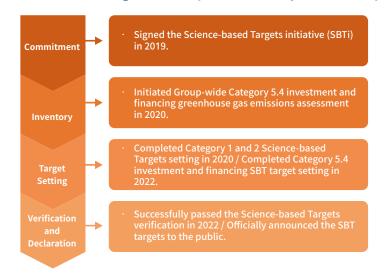
### 2.2 Development of Climate Strategy

Given the increasing impact of climate change on the global environment, with frequent occurrences of extreme weather events causing significant financial and human losses, governments, international organizations, and businesses are increasingly recognizing the need to address climate change and develop corresponding mitigation measures. We are committed to energy conservation and carbon reduction, aiming to minimize the impact of climate change on our operations. As a key player in the financial industry, we understand the importance of exerting positive financial influence and driving industries towards low-carbon transition. We have set our targets based on the Science Based Targets methodology, and we employ strategies such as ICP, low-carbon operations, and low-carbon transition to actively reduce our carbon emissions and achieve our vision of reaching net-zero carbon emissions by 2050. Through communication and engagement with internal and external stakeholders, we establish climate actions and strengthen our understanding and management of climate risks.

### <Low-carbon strategy>



### <Science-based targets Development Journey of the Group>



### Note:

Since 2019, the Group has conducted greenhouse gas inventory based on ISO 14064-1:2018 standard. The corresponding names between the old and new versions are as follows: Category 1 corresponds to Scope 1 (direct greenhouse gas emissions), Category 2 corresponds to Scope 2 (indirect greenhouse gas emissions from purchased energy), and Categories 3 to 6 correspond to Scope 3 (other indirect greenhouse gas emissions).

### 2.2.1 | Science-based Targets

Science-based Targets are an initiative jointly launched by the Carbon Disclosure Project (CDP), the United Nations Global Compact (UNGC), the World Wildlife Fund (WWF), and the World Resources Institute (WRI). The main purpose is to encourage global companies to set Science-based Targets. It is recognized as the most credible organization for approving carbon reduction targets worldwide. The Group recognizes the serious risks that climate change poses to the stability of the financial system. In 2019, we became the first comprehensive financial institution in Taiwan to sign an agreement with SBTi. Following the Science-based Targets methodology, we have developed emission reduction strategies and pathways for our own operations as well as for the critical investment and financing activities in the financial industry. Long-term carbon reduction targets have been set across these areas.

In addition to direct emissions (Scope 1) and indirect emissions from purchased energy (Scope 2), the financial industry plays a crucial role in promoting low-carbon transition through its investment and financing activities. As one of the five major profit engines of the Group, we cooperate with the Group to investigate and disclose greenhouse gas emissions related to category 5.4 investment and financing activities. Following the guidance of the Partnership for Carbon Accounting Financials (PCAF) and the recommendations of the TCFD, we have conducted greenhouse gas emissions inventories for category 5.4 assets, including project finance for thermal power plants, commercial real estate loans, investments in listed companies' stocks and bonds, and long-term corporate loans, since 2020. We also perform tracking and management annually.

In 2022, our total carbon emissions from investment and financing activities amounted to approximately 2.08 million metric tons of carbon dioxide equivalent, with an overall data quality score of 1.18. Over 97% of these emissions were concentrated in sovereign debt investments, investments in listed company stocks and bonds, and long-term corporate loans. Furthermore, 99% of the sovereign debt investments were from domestic issuers in Taiwan. The top five carbon-intensive industries among the investees of investments in listed company stocks and bonds and long-term corporate loans were steel, plastics, electronic manufacturing, cement, and paper. To mitigate climate risks associated with our assets, we are actively promoting risk management and low-carbon transition in investment and financing activities.

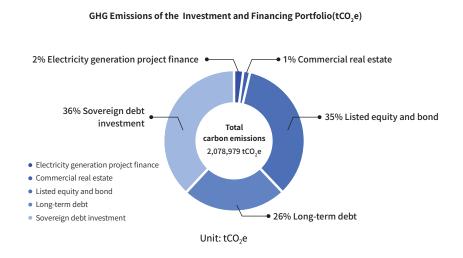
Science-based Targets					
Category 1 and 2				Absolute reduction of 42% compared to 2020 by the year 2030.	
		Electricity generation project finance		49% reduction in GHG emissions per MWh by 2030 in comparison to 2019 for electricity generation project finance portfolio	
		By Investment and Financing Target  Corporate loan  Other long-term loan  Other long-term loan  Sy Investment and Financing Target  Electricity generation sector  Electricity generation sector  58% reduction in GHG emissions per square meter by 2030, in comparison to 2019 for corporate long-term loan portfolio for finance, retail, service, food and lodging, and real estate developm sectors  38% reduction in GHG emissions by 2027 for corporate long-term loan portfolio for fossil fuel load sectors	59% reduction in GHG emissions per square meter by 2030 in comparison to 2019 for corporate loan portfolio for commercial real estate sector		
Category 5.4	vestment and Financing Target		•		
(By Investment and Financing Target)				58% reduction in GHG emissions per square meter by 2030, in comparison to 2019 for corporate long-term loan portfolio for finance, retail, service, food and lodging, and real estate development sectors	
				38% reduction in GHG emissions by 2027 for corporate long-term loan portfolio for fossil fuel <sup>[Note 1]</sup> , electrical and electronic equipment as well as general manufacturing sectors (calculated based on the loan value)	
		Listed equi	ty and bonds <sup>[Note2]</sup>	Science-based Targets are set at 39% (out of the invested value) by 2027 for investment portfolio for listed equity and bonds	

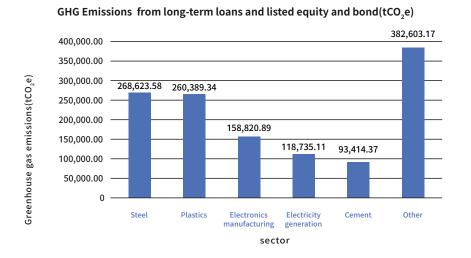
### Note:

- 1. The target includes 100% of the Group's fossil fuel corporate loans
- 2. The listed equity and corporate bond investment portfolio includes common stock, preferred stock, corporate bonds, exchange-traded funds, real estate investment trust (REIT) investments and mutual funds.
- 3. Targets validated by SBTi please refer to: https://sciencebasedtargets.org/resources/files/Target-language-and-summary\_Yuanta-Financial-Holding-Co.-Ltd.docx.pdf

### <GHG Emissions of the Investment and Financing Portfolio>

### <GHG Emissions from long-term loans and listed equity and bond >





Yuanta Bank and the Group are committed to Science-based Targets and prioritize carbon reduction efforts. In addition to reducing emissions from our own operations, we recognize the importance of low-carbon transition strategies in the key area of financing and investment within the financial industry. We implement strategies such as responsible financing, responsible investment, risk management, and ICP. We actively engage with internal and external stakeholders to align our efforts and systematically work towards achieving net-zero emissions by 2050. We are committed to transparently reporting and reviewing our annual target achievements.

### 2.2.2 | Implementation of Internal Carbon Pricing

In response to the global carbon reduction trend and to implement carbon management, our financial group launched the ICP mechanism in 2021. Following the principle of "cap and trade - polluters pay," this mechanism internalizes the cost of emissions. In 2022, we officially began the trial implementation, applying the concept of shadow pricing to the operational boundaries related to Category 1 and Category 2 greenhouse gas emissions. We are proud to be the first financial institution in Taiwan to explicitly price the "external cost" of greenhouse gas emissions and internalize it within our operations.

### <Schematic diagram of how ICP's application>













In line with the financial group's implementation of the ICP mechanism, we are committed to energy-saving and carbon reduction projects in each branch building, along with their associated benefits assessment. We integrate the ISO 50001 energy management system and incorporate carbon pricing parameters into every energy improvement action plan, thereby monetizing the value of carbon reduction benefits. In addition to considering the economic costs, we also take into account the environmental impacts, allowing for a more comprehensive calculation of the carbon costs associated with operations and an evaluation of annual carbon reduction benefits. This approach helps us identify carbon-related risks and opportunities. Going forward, we will link carbon reduction targets to performance assessments at the management level to ensure the effective implementation of our carbon reduction commitment.

### 2.2.3 | Low-carbon Operations

In recent years, the increasing frequency of extreme weather events has posed a significant challenge to sustainable business operations due to the impacts of climate change. We have integrated sustainable and low-carbon issues into our operational strategies. The management department of the financial group established the "Environmental Sustainability Team" in 2011, responsible for formulating environmental management systems and voluntarily implementing various environmental and energy management systems, including conducting greenhouse gas inventories. In 2016, the Group formulated "Environmental Policy" and "Energy and Climate Change Management Policy," which were approved by the board of directors. We align with the standardized and systematic management approach adopted by the financial group. We continue to work towards establishing a low-carbon operational model by focusing on three aspects: international verification related to environmental management, green building planning, and the use of renewable energy. Together, we aim to achieve our carbon reduction goals.

### < Low Carbon Operation Strategies Overview>

# Environmental Policy: Energy and Climate Change Management Policy Environmental Management and Verification Environmental Building Certification Renewable Energy Usage

### Management and Certification

To reduce greenhouse gas emissions, we have implemented the "ISO 14064-1 Greenhouse Gas Inventory" since 2017 to understand the emissions from our service points. We have achieved carbon reduction benefits through the replacement of energy-saving equipment, purchasing renewable energy certificates, and actual procurement of green energy. In 2018, we obtained verification based on comprehensive inventory, which served as the basis for setting long-term reduction targets. As of 2022, all 149 branches, the head office, and the Hong Kong branch, totaling 151 sites across the province, have achieved 100% coverage and obtained verification from the international certification body BSI to understand the environmental impact of our internal activities. The Hong Kong branch also cooperates with the greenhouse gas inventory and verification operations, while overseas locations will undergo greenhouse gas inventory training, information gathering, and statistical collection. Internal verification is expected to be completed by 2025, followed by external verification by a third party in 2027.

In response to environmental sustainability and climate change issues, we continue to implement the ISO 50001 Energy Management System. In 2022, all six self-owned buildings in Taiwan have been certified under the ISO 50001 Energy Management System, demonstrating our commitment to improving energy performance. Additionally, we have established a "Smart Energy Monitoring System" to manage electricity consumption in real-time and set up alerts for excessive usage. Through our "Environmental Sustainability Indicator System," which integrates data from various ISO management systems such as water usage, waste management, energy equipment specifications, business travel, and personnel changes, we calculate greenhouse gas emissions by category and provide warning notifications based on emissions from each unit. In the future, we will continue to enhance energy efficiency and reduce greenhouse gas emissions through the ISO 50001 Energy Management System and internal monitoring systems to achieve effective energy management.

### Green Building Certification

As part of the "Energy and Climate Change Management Policy" of the Group, our goal is for all future self-owned buildings to achieve a silver-level or higher green building certification to continuously improve energy efficiency in our buildings. The headquarters building has already obtained the Ministry of the Interior's green building silver-level certification, and we are also expected to obtain green building certification in 2023. This ensures that our operations align with low-carbon sustainability goals in terms of energy use.

Furthermore, to mitigate the physical risks associated with climate change at our service points, we consider flood risk, soil liquefaction, and sustainable building practices as criteria in site selection assessments. This proactive approach helps us prevent and reduce potential disasters and operational losses in the future.

### Renewable Energy

In response to the international trend of achieving net-zero carbon emissions, we have been purchasing Renewable Energy Certificates (T-REC) since 2016. As of 2021, we have accumulated a total of 786 certificates, equivalent to approximately 389.82 metric tons of  $CO_2$ e emissions. Additionally, between 2021 and 2022, we have utilized a cumulative total of 649,000 kilowatt-hours of renewable energy, resulting in a reduction of approximately 329.43 metric tons of  $CO_2$ e emissions. [Note]

The Group is fully committed to formulating and implementing renewable energy strategies. We actively support the

RE10x10 initiative by Greenpeace, an environmental organization, to promote low-carbon operations. Additionally, in 2020, the Group completed the signing of Power Purchase Agreements (PPAs) for renewable energy. Through direct usage of renewable energy, we are creating a "green electricity model" for commercial buildings. Starting from 2021, our business departments and Taichung branch have been powered by 100% renewable energy. We plan to gradually expand this initiative to other branches and business locations, in line with our financial group's vision of being a "green pioneer in addressing environmental change" and collectively moving towards the goal of net-zero carbon emissions.

### Note:

The amount of carbon reduction is calculated based on the latest electricity carbon emission factor by the Bureau of Energy of the Ministry of Economic Affairs.



Between 2016 and 2022, our organization has utilized a cumulative total of 1,435,100 kilowatt-hours of renewable energy. This translates to an estimated reduction of approximately 808.27 metric tons of  $CO_2e$  emissions.





In 2022, our headquarters building obtained the "Green Building Silver-level Certification" from the Ministry of the Interior. We are also working towards obtaining green building certification in 2023.





### Other Low-carbon Actions

In addition to the aforementioned actions in management and verification, green building, and renewable energy use, we also implement various energy-saving initiatives and paper reduction measures to strengthen employees' awareness of energy conservation, carbon reduction, and environmental protection. By doing so, we aim to reduce the potential risks associated with greenhouse gas emissions from its operations and mitigate the impact of climate change.

Furthermore, we promote paperless operations and process improvements. It has developed a transaction document management module, enabling the use of digital formats instead of printed documents for supporting financial transactions. We have also revised operation manuals for NT dollar bond business, foreign currency bond and bond futures trading, and ticket business operations. These efforts contribute to our goal of digitalization and reducing paper consumption.



### **Energy-saving initiatives**

Promoting paperless operations through the development of a transaction document management module, enabling relevant financial transaction evidence to be submitted and stored digitally instead of in paper format.

**Paper Reduction Measures** 

- Sustainable management through regular evaluation and improvement of operational energy usage to enhance overall energy efficiency.
- Replacement of old and energy-consuming air conditioning and lighting equipment.
- · Replacement with energy-efficient LED lighting fixtures.
- · Timed automatic shutdown of water dispensers.
- · Paperless operations:Internal documents digitization, Online approval system, Electronic payslips for employees
- · Paperless meetings: Electronic meeting materials, Video conferencing
- · Paperless training:Digital learning platforms, Cloud-based shared platforms for databases and e-learning materials
- · Paperless business services:Implementation of digital services in marketing, transactions, payments, and accounting processes
- · Paperless lifestyle:Reduction of paper cup and food container usage

### 2.2.4 | Low-carbon Transitions

In addition to our longstanding commitment to low-carbon operations, we actively support and assist other businesses in their journey towards sustainable operations. We offer a diverse range of mature sustainable financial products and services tailored to different industries. Through our financial influence, we actively support companies in achieving low-carbon transition, seizing climate-related opportunities, and pursuing sustainable business practices. Our low-carbon transition strategy focuses on three main areas: responsible financing, responsible investment, and other financial products and services.

We adhere to the "Sustainable Finance Guidelines" established by the Group as the highest framework and guidance for the development of financial products and services. It clearly stipulates that environmental (E), social (S), and governance (G) aspects should be considered when evaluating credit cases and investment targets. Sustainable factors are incorporated into business planning and

### <Overview of Low-Carbon Transitions Strategies>

### **Low-Carbon Transitions Sustainable Finance Guidelines** Responsible Other Low-Carbon Responsible Financing: Investment: Strategies: Corporate loan, Proprietary Paperless operations. product carbon footprint. investments, project finance, stewardship issuance of sustainable and consumer development bonds. loan

operations. We also follow the "Industry-specific Environmental and Social Risk Management Guidelines," which require the completion of an "Industry-specific Environmental and Social Risk Management Checklist" for high-risk industries such as steel manufacturing, semiconductor manufacturing, and plastic raw material manufacturing. This ensures a comprehensive understanding of the management measures related to social and environmental aspects of counterparties, assesses potential social and

environmental risks, and evaluates their ability to adapt and respond to these risks, thereby ensuring risk control in transactions. The number of approved credit and investment cases in accordance with the "Sustainable Finance Guidelines" or "Industry-specific Environmental and Social Risk Management Guidelines" as of December 2022 is shown in the chart below.

### **Responsible financing**

ESG factors are integrated into our credit approval process, with a focus on assessing credit applicants' environmental stewardship, climate change adaptation measures, social responsibility, and corporate governance. We actively promote these practices in the capital market, emphasizing accurate information disclosure and tangible actions. We also establish transparent communication channels with stakeholders and align ourselves with international sustainable finance development policies. Our responsible credit process and risk management mechanisms are outlined as follows:

### <Sustainable Finance Implementation Highlights>

### **Sustainable Finance Guidelines**

**Industry-specific Environmental and Social Risk Management Guidelines** 

### **Responsible financing**

A cumulative total of 1931 financing cases approved through the Sustainable Finance Guidelines

A cumulative total of 112 financing cases approved through the industry-specific Environmental and Social Risk Management Guidelines

### **Responsible investment**

A cumulative total of
617 investment cases approved through
the Sustainable Finance Guidelines

A cumulative total of **200** investment cases approved through the Industry-specific Environmental and Social Risk

Management Guidelines

### <Responsible financing procedure>



### <Monitoring and Controlling Risks>

### **Corporate Loan**

Yuanta Bank adheres to the "Sustainable Finance Guidelines" as the highest guiding principle, adjusting related business practices and internal processes accordingly. We incorporate sustainable financial risk management into the credit review and decision-making process, requiring a sustainable finance assessment for credit transactions. We carefully assess the potential environmental and social risks associated with the counterparties' business activities, utilizing customer due diligence (CDD) and know your customer (KYC) processes to understand their reputation, business operations, financial condition, management capabilities, regulatory compliance, international sustainability ratings, and any negative ESG practices. We enhance the depth and breadth of our pre-investigation procedures to ensure risk control. We also conduct regular reviews and

assessments of approved credit cases to monitor fund utilization, evaluate potential social and environmental risks, assess adaptive capacity to environmental and social risks, and ensure the implementation of sustainable development practices. In 2022, there were no incidents of credit customers violating environmental or human rights issues, and appropriate measures were taken to cease financing in such cases.

In accordance with the "Industry-specific Environmental and Social Risk Management Guidelines," our business executives are required to complete the "Environmental and Social (E&S) Risk Management Assessment Form for Creditors in the Steel Manufacturing, Plastic Raw Material Manufacturing, and Semiconductor Manufacturing Industries" when engaging with controversial companies, high climate risk entities, or businesses sensitive to environmental and social issues. This strengthens the depth and breadth of due diligence, understanding the management measures of counterparties in the social and environmental aspects. We continue to monitor the fund utilization dynamics after the approval of credit cases, assess potential social and environmental risk impacts, and evaluate adaptive capacity to environmental and social risks to ensure the controllability of transactions and avoid significant indirect negative impacts on the environment and society.

In 2022, we followed the guidelines of our financial holding group for electricity supply, prohibiting engagement with enterprises whose coal-fired power generation accounts for more than 50% of their total power generation or are in coal-related or unconventional oil and gas industries. If there is no specific improvement or improvement plan, these enterprises are listed as prohibited counterparties to strengthen control over high climate risk industries.



Yuanta Bank's corporate lending business incorporates environmental and social risk assessment into the CDD and KYC processes to identify and manage customer risk cases. In the current year, there were 1,931 cases reviewed and approved in accordance with the "Sustainable Finance Guidelines," with a cumulative amount of 577,240 million New Taiwan dollars. Additionally, there were 112 cases reviewed and approved in accordance with the "Industry-specific Environmental and Social Risk Management Guidelines," with an amount of 52,548 million New Taiwan dollars.



### ESG-based credit refusal for coal-fired power financing.

Yuanta Bank, in line with its commitment to sustainable financial risk management, has declined a financing application for a coal-fired power project during the current year. Despite the significant role of the company in domestic urban development, we consider the overall climate risk measurement of the Group and the adherence to Science-based Targets. We aim to leverage its financial influence to encourage the company to accelerate its transition towards substantial risk transformation by investing in green energy generation and alternative fuel plans, thereby contributing to the achievement of the 2050 net-zero goal.

### **Project Finance**

For project financing cases, we incorporate the ESG criteria into the risk assessment process. We examine potential ESG risks of the borrowers and follow the "Guidelines for Project Financing Management" to conduct due diligence on the project's financial, legal, insurance, and technical aspects to assess feasibility and risks. We also implement post-loan management mechanisms and strengthen review operations. If necessary, external experts such as lawyers, accountants, or professional consulting firms, or third-party assessment organizations may be engaged to provide evaluation reports. In cases where the assessment reports include post-loan monitoring conditions, we require borrowers to regularly engage independent third-party institutions to conduct ES risk monitoring and provide reports. This helps mitigate potential credit risks and enhances

the focus of borrowers on environmental preservation and corporate social responsibility.

In October 2020, we officially became a member bank of the Equator Principles Association. In June 2021, we officially implemented the "Guidelines for Managing Equator Principles Financing Cases" and related operational procedures. In November 2020, we established the "Environmental and Social Risk Committee" and played a role in reviewing and monitoring in relevant operational processes. We maintain a high level of sensitivity in assessing the applicability of credit cases and manage ES risks of large-scale project financing cases in a tiered manner, categorizing them as high (A), medium (B), or low (C) based on the impact on the environment and society. We thoroughly evaluate the ES impacts of projects in the context of the Equator Principles 4.0 framework, including climate change, greenhouse gas emissions, and key stakeholders. When meeting relevant criteria, appropriate environmental and social risk monitoring reports and action improvement plans are obtained to ensure compliance with the Equator Principles.



### **ESG Project Financing Rejection Case.**

In strict accordance with the "Guidelines for Managing Equator Principles Financing Cases," We evaluated three project financing cases in 2022 based on the Equator Principles. However, all three cases were rejected after evaluation. One of the reasons for the rejection was the consideration of solid waste recycling by the waste supplier. If the quality of the classified and treated waste does not meet the requirements of the power plant, it would affect the incineration efficiency and potentially increase pollution emissions. Therefore, the evaluation result led to the rejection.

### Consumer loan

When processing loan applications for individual credit recipients, including corporate borrowers for auto loans, we proactively implement KYC procedures and strengthen due diligence investigations. Credit limits are determined based on creditworthiness, funding needs, financial capacity, and collateral value of each customer. During the assessment of ESG-related risks and opportunities, all cases require customer reference checks and on-site inspections of collateral to fully understand the customer's financial capability and collateral condition.

In response to the United Nations SDGs and to enhance communication with customers, we include a specific statement regarding the SDGs in the loan application forms for housing and auto loans. It urges applicants to fulfill their social responsibilities, pay attention to environmental protection, social welfare, and corporate governance, support green industries and low-carbon transition, advocate for human rights, and contribute to social welfare. It also encourages avoiding loan funds being used for purposes that may have significant negative impacts on the environment and society, and jointly implementing corporate responsibilities to mitigate and adapt to climate change. To achieve the goal of sustainable homes, the company introduces the "Green Building Mortgage Program," which offers preferential interest rates and loan conditions for properties that are certified with a qualified green building label.

### <Responsible financing Performance>

### **Corporate loan**

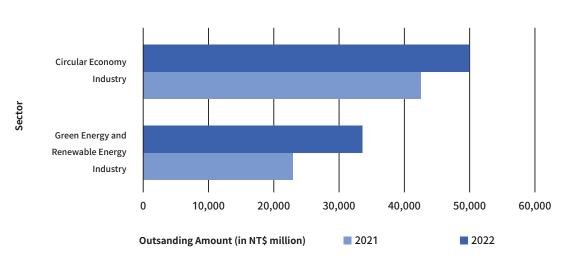
We actively respond to the government's six core strategic industries promotion plan by providing loans for green energy and renewable energy projects. It also supports industries involved in resource integration and green innovative material development to meet the demand for environmental



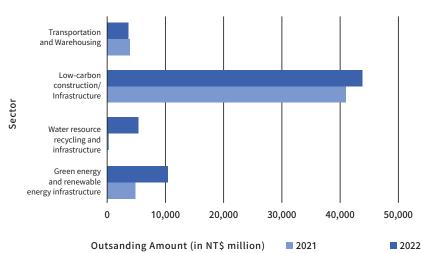
In 2022, our total corporate lending for sustainable industries reached NT\$84.1 billion, accounting for 17.09% of our total outstanding corporate loans.

protection equipment and pollution prevention. We are committed to assisting Taiwanese industries in transitioning towards low-carbon and sustainable development. Additionally, we provide financing for industries that incorporate sustainable concepts, including solar cell manufacturing, renewable energy generation, and sectors related to healthcare and education, further promoting Taiwan's transition towards a low-carbon and sustainable future.

### **ESG and Climate-Related Outsanding Amount**



### **Green/Sustainable construction Outsanding Amount**



### **Sustainable Construction Financing**

We provide financing for sustainable construction projects aimed at reducing pollution and resource waste during production or service provision. These projects include solar power generation, wastewater treatment, environmental recycling, waste management, low-carbon transportation, telecommunications, and low-carbon buildings. We also support enterprises and infrastructure development in clean energy technology, expanding the positive impact of sustainable construction financing on the environment and society as we strive towards a low-carbon and sustainable home.

### **Sustainability Linked Loans**

In line with the principles of sustainable finance, we introduce Sustainable Linked Loans to encourage businesses to embrace sustainability. Through proactive engagement with each credit applicant, we aim to foster a widespread understanding of ESG principles. When businesses demonstrate positive actions in environmental, social, or governance aspects, they will be offered preferential credit terms and financial support. This initiative aims to promote sustainable development in society and mitigate unnecessary losses associated with climate change adaptation during the low-carbon transition of businesses. We will periodically assess the achievement of relevant ESG indicators and provide discounted interest rates accordingly. We are committed to refining our business processes, expanding our sustainable linked commercial



In 2022, we provided a total of **63** billion NT dollars in financing for sustainable construction projects, accounting for **12.79%** of our total corporate lending of **492.46** billion NT dollars.



In 2022, a total of **22** Sustainable Linked Loans were approved with a loan of **18.5** billion NT dollars. This represents an increase of **15** cases and an additional **12.7** billion NT dollars compared to 2021.

services and product offerings, and collaborating with our clients to build a greener economy for the future.

### **Consumer Loan**

In addition to emphasizing the proactive sustainable development actions of corporate clients, we strive to enhance ESG interaction with our customers. We invite customers on their credit card statements to join us in adopting green consumption habits and cultivating sustainable lifestyles. We encourage customers to purchase low-carbon products such as green buildings and hybrid/electric vehicles. This year, we continue to collaborate with new energy vehicle dealers, offering benefits such as favorable auto loan schemes to encourage the public to embrace new energy vehicles. Furthermore, our car loan and mortgage calculators promote prioritizing the purchase of "Green Building Label" certified homes and alternative energy vehicles that are energy-efficient, low-emission, and low-pollution. Additionally, we actively seek carbon footprint verification and carbon reduction labeling for our entire range of credit cards, implementing energy-saving and carbon reduction measures ourselves to foster a lower carbon lifestyle. For more details, please refer to the "Other Low-Carbon Strategies" section.

# Year 2022 2021 2020 0 10,000 20,000 30,000 40,000 50,000 60,000

Outstanding Amount (in NT\$ millions)

**Low-Carbon Product Credit** 



### Sustainable Linked Loan Case

Yuanta Bank supports ASUS in promoting responsible mineral sourcing and conducting due diligence. Through Full Material Declaration (FMD) management, we gain insights into the composition of products, manage critical metal shortage risks, and identify components with recycling value for circular reuse. This year, a Sustainable Linked Loan of 5 billion NT dollars was signed, furthering the collaboration between us and ASUS in sustainable development.



In 2022, the total amount of consumer credit products and services related to sustainability accounted for approximately **9.60**% of the total consumer credit amount.

**Green Environmental Credit Cards** 

**Green Building Mortgages** 

New Energy Vehicle Loans

<sup>\*</sup>Credit Outstanding Amount Definition: Credit card products are based on credit card limits, while loan products are based on the outstanding loan for the year. (New energy vehicle loans are calculated based on the environmentally certified collateral of the vehicle.)

### Responsible Investment

Yuanta Bank adheres to the concept of fulfilling corporate social responsibility in the financial industry. Recognizing the intensified risks of climate change, we incorporate environmental and social risks as considerations when selecting investment targets. It integrates ESG factors and climate risk management into the investment process and establishes risk management and screening procedures for medium to long-term investment targets. By implementing responsible investment and practicing good governance, we direct our investments towards companies that prioritize climate risk and sustainable development, aligning financial goals with broader social and environmental objectives.

### <Risk Management Mechanisms>

### **Proprietary Investments**

In order to fulfill our commitment to sustainable development in the financial industry, we have incorporated ESG-related screening criteria into investment business regulations based on respective business types, aligning with the guidelines set by the financial holding company. We have established internal mechanisms to implement responsible investment practices. When selecting medium to long-term investment targets, we follow the risk assessment framework and screening procedures, considering the environmental and social performance of investment targets. If the investment target belongs to the coal-fired power generation industry, coal-related industries, or unconventional oil and gas industry, and is listed in the withdrawal list published on official websites of international environmental advocacy organizations, we carefully evaluate their potential environmental and social risks. If the assessment results indicate significant negative impacts on ESG factors, we avoid engaging with companies that cannot provide concrete improvement plans. For existing positions, we refrain from increasing investment. By reducing investment activities that pose negative impacts on the environment and society, we aim to support the development of sustainable businesses.

On the other hand, for long-term investment in equity products and banking book bonds, the investment targets must not be included in the exclusion list. ESG factors should be considered in investment decision-making. If the issuing company of a bond has controversial issues, the investment can only proceed after obtaining approval from the appropriate level of management, and the reasons should be explained in the investment report. This is in line with our vision of achieving a low-carbon transition and the net-zero carbon emission target by 2050.

### <Responsible Investment Procedure>



ESG Risk Assessment Items in Investment Operations						
Exclusion Items	Companies prohibited by the "Sustainable Finance Guidelines" for engagement.					
Supportive Items	Actively support companies that have a positive impact on society and the environment as stipulated by the "Sustainable Finance Guidelines."					
Avoidance of Investment Items	Avoid investing in companies mentioned in the "Sustainable Finance Guidelines" with controversial issues. If the assessment still indicates long-term investment value, the reasons for exceptional investment must be clearly stated. Approval from the investment decision-making committee, along with the participation of risk management department personnel who sign as attendees, and approval from respective subsidiary companies, are required before execution.					
Specific Industries	If belonging to industries regulated by the "Yuanta Financial Holding Co., Ltd. Industry-specific Environmental and Social Risk Management Guidelines," additional evaluations using the "Industry-specific Environmental and Social Risk Management Checklist" should be conducted.					
Pre- and Post- Investment Checks	Prior to investment, conduct checks based on the "Sustainable Finance Evaluation Form" and the "Industry-specific Environmental and Social Risk Management Checklist." Regularly review the sustainable development performance of investment counterparts after investment.					

### **Stewardship**

Yuanta Bank has signed the Institutional Investor Stewardship Principles and discloses its compliance with due diligence governance on its website. This includes the publication of the "Institutional Investor Stewardship Principles Compliance Statement," "Institutional Investor Stewardship Report," and "Attendance at Investee Company Shareholders' Meeting Voting Records." These disclosures demonstrate our commitment to responsible investment, ensuring the integrity of customer and stakeholder rights. We also pay close attention to news, financial information, industry performance, business strategies, environmental practices, sustainable development, and corporate governance of investee companies. Should an investee company's actions on climate or social environmental issues harm the interests of other beneficiaries, we will engage in communication through various channels to safeguard long-term sustainable and robust investment performance, maximizing the influence of its due diligence governance principles.



In 2022, the total amount of responsible investments reached NT\$26.79 billion. We implemented 617 cases of review and approval based on the "Sustainable Finance Guidelines," with a cumulative amount of NT\$56,095 million. Additionally, there were 200 cases of review and approval based on the "Industry-specific Environmental and Social Risk Management Guidelines," with a cumulative amount of NT\$11,712 million.

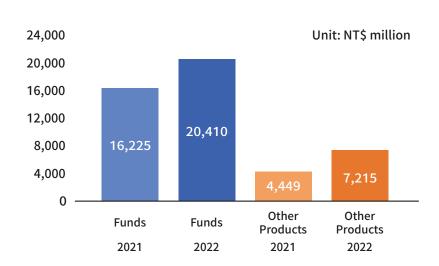
# <Performance of sustainable investment products> In addition to investing in low carbon products, our institution a

In addition to investing in low-carbon products, our institution actively offers asset management clients a range of related products, including low-carbon funds, sustainable funds, and stocks of companies with lower transition risks. By selling low-carbon products, we connect client funds to low-carbon investment targets.

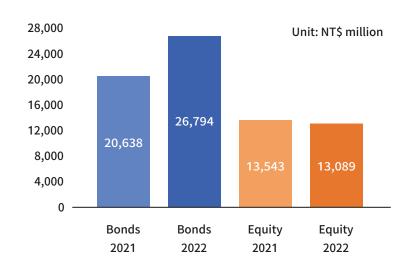


In 2022, the amount invested in sustainable investment products accounted for approximately 12.21% of the total investment amount.

### **Wealth Management Low Carbon Product Sales Situation**



### Investment situation of low carbon products in our institution



### Other Low Carbon Strategies

In addition to strictly managing credit and investment risks through various risk management processes, we are also committed to promoting sustainability awareness and actions in our lending and investment practices. We offer a wide range of sustainable financial products to the public, aiming to make sustainable development a nationwide movement. Furthermore, we lead by example by integrating sustainability concepts into our own products and services, promoting paperless transactions and digital transformation. We strive to leverage our financial influence to contribute to the creation of a low-carbon economy and society.

### **Paperless Transactions**

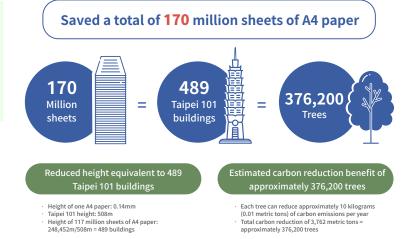
By disclosing the carbon emissions saved through electronic transactions, we aim to raise environmental awareness among the public. This year, we have introduced the innovative "Diamond Carbon Fortune - Carbon Account." Customers can access the "My Carbon Account" section through the Yuanta Mobile Banking App or the new version of our online banking platform on our official website. The system automatically calculates and consolidates the reduction in paper usage resulting from customers' electronic transactions, which is then disclosed. Customers can view their carbon reduction achievements through the Yuanta Mobile Banking App, encouraging the integration of electronic transactions into their daily lives. Over time, these small steps can lead to significant carbon reduction effects.

We have also launched online foreign exchange services with special offers, as well as online applications for regular savings plans with daily deductions, starting from zero fees for designated fund/ETF subscriptions. We encourage customers to take action with just a few taps and enjoy various green benefits. By tangibleizing the benefits of carbon reduction, we offer customers "carbon reduction perks" in alternative forms. In 2022, our customers saved a total of 170 million sheets of A4 paper through online applications, contributing to resource conservation and reduced overall energy consumption. Together, we are committed to the net-zero emissions target by 2050.

### <Diamond Carbon Fortune - Carbon Account>



Yuanta Bank has achieved excellent energy and carbon reduction results through its digital operations, using the example of the 2022 fiscal year:





If compared to the year 2021, the growth rate of digital operation greening has reached 20%.

vs. the same period last year	Estimated reduction in paper usage (in sheets)	Estimated carbon emissions reduction (in metric tons)	Overall growth and progress
2021	147,352,803	3,124	200/-
2022	177,465,727	3,762	20%

### **Product Carbon Footprint**

Yuanta Bank has set a goal to issue zero-carbon credit cards. The carbon footprints of all our credit card offerings were independently verified by the British Standards Institution (BSI) for ISO 14067 Carbon Footprint Assessment and PAS 2060 Carbon Neutrality in November 2021 and February 2022, respectively. The carbon footprint per credit card is approximately 850g. Compared to the carbon reduction baseline set in 2018, our credit card products have successfully achieved a reduction of over 3% within five years. Additionally, in the same year, we obtained dual certifications, the "Product Carbon Footprint Label" and the "Product Footprint Reduction Label," from the Environmental Protection Administration, demonstrating our commitment to reducing greenhouse gas emissions throughout the credit card manufacturing and usage processes.

To align our products and services with the goals of the supervisory authority in green finance and sustainable development, we have also launched a mobile banking app. We voluntarily conducted an ISO 14067 Product Carbon Footprint assessment and received international standard verification from the British Standards Institution (BSI) in March 2022. Furthermore, our mobile banking app has completed PAS 2060 carbon neutrality verification in May 2022

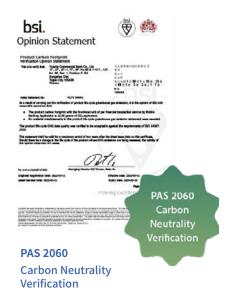


Environmental Protection Administration product carbon footprint 850g label



Environmental Protection Administration product carbon footprint reduction label





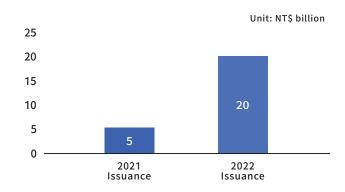
#### **ESG-related Bond Issuance**

Yuanta Bank has been tirelessly promoting sustainable development for a long time, recognizing the challenges associated with climate change. To support green investment projects, we have issued two sustainable development bonds. In 2022, the proportion of sustainable development bonds in the total bond issuance amounted to approximately 8.7%.

#### 1.Green Bonds

In April 2021, we issued green bonds with a total value of NT\$500 million. The proceeds were primarily used for constructing our headquarters building, which aimed to obtain the Taiwan Green Building Label (EEWH) Diamond-level certification. The building incorporates energy-saving and recycling systems, such as low-emissivity double-layer glass, LED lighting, variable-frequency central air conditioning, water-conserving sanitary fixtures with water-saving certifications, carbon dioxide detection equipment, and rainwater harvesting systems. It is expected

The total amount of our sustainable bond issuance.



to achieve five energy-saving and carbon reduction performance indicators, including TCO<sub>2</sub> emissions reduction, daily energy conservation, water resource utilization, and recycling of dismantled steel. These initiatives promote the symbiotic relationship between the building and the environment, contributing to sustainable operations.

#### 2. Sustainable Development Bonds

In March 2022, we issued sustainable development bonds worth NT\$2 billion. The funds were allocated to lending activities supporting green investments in areas such as healthcare, urban renewal, and renewable energy generation. The goal is to expand the financing effectiveness of sustainable industries, providing medium- to long-term funding for green energy technologies, circular economy initiatives, and socially beneficial industries. By reducing the risk of funding disruptions and supporting the reduction of greenhouse gas emissions and the promotion of affordable housing development, these bonds contribute to various benefits and the achievement of sustainable development.

#### 2.2.5 | Communication and Initiatives

Yuanta Bank engages in external communication efforts to drive the overall industry towards low-carbon transition. Internally, we focus on cultivating a culture of sustainability by enhancing the knowledge and capabilities of its employees in sustainable finance, green finance, and climate change. This proactive approach ensures us is well-prepared to address the risks and opportunities associated with climate change.

#### External Communications

Hosting and Participating in ESG ForumsInitiatives and Actions	Participation in Climate Initiatives and Actions	Supplier Engagement
<ul> <li>In 2022, we participated in 2 ESG forums:</li> <li>2022 Sustainable Finance and Climate Change Summit</li> <li>Summit on the Opportunities and Challenges of Climate Change and Sustainable Development for the Financial Industry</li> </ul>	In 2022, we participated in climate action by joining forces with <b>56</b> suppliers in the "Earth Hour" event, a global initiative to raise awareness about environmental conservation and promote energy conservation by turning off lights for one hour.	In 2022, we organized <b>3</b> supplier conferences and invited a total of <b>60</b> suppliers to participate.

We annually send due diligence questionnaires to invested companies via email. The questionnaires primarily inquire about the company's participation in corporate governance evaluations and certifications, ongoing investments in energy-saving or green energy-related environmentally sustainable major machinery and equipment, any instances not in compliance with corporate governance principles, lawsuits or convictions related to labor rights violations or environmental pollution, and the preparation of an annual CSR report with third-party verification. This regular process ensures the governance performance of the invested companies. We also collaborate with the Group to actively engage in climate change-related issues through external participation in initiatives such as Science-based Targets, CDP, and the RE10x10 Climate Declaration. Additionally, we organize ESG forums and engage in supply chain collaboration activities.

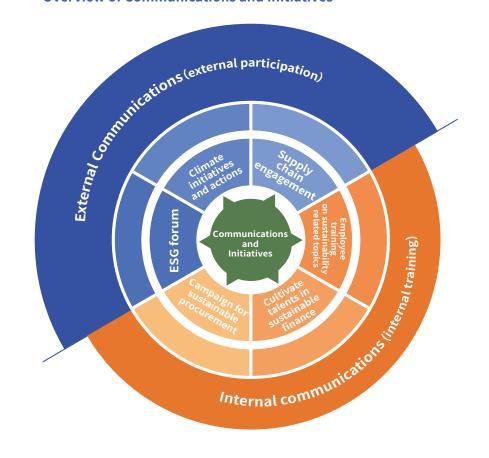
#### **Hosting and Participating in ESG ForumsInitiatives and Actions**

By organizing and participating in ESG forums, we promote mutual communication and collaboration among industry, government, and academia. Through various media channels, both print and online, it raises public awareness and enhances their understanding of ESG concepts and sustainable practices. In 2022, we participated in the "2022 Sustainable Finance and Climate Change Summit" hosted by the Taiwan Stock Exchange, where important trends and practices in corporate sustainability and climate change were discussed. Additionally, we also took part in the "Summit on Climate Change and Sustainable Development: Opportunities and Challenges for the Financial Industry," where Mr. Shusheng Pu, the Northeast Asia Regional Manager of the British Standards Institution (BSI), was invited to explore the trends in climate change and sustainable development, as well as how the financial industry can respond to opportunities and challenges. Through the insights shared by influential leaders from Taiwan's industry, government, and academia, we lead discussions on the challenges and strategies of achieving net-zero carbon emissions in Taiwan. It focuses on practical approaches to explore Taiwan's path to net-zero, incorporating interdisciplinary innovation and global trends, and providing solutions for the industry and academia to adapt and respond.

#### **Participation in Climate Initiatives and Actions**

In addition to international initiatives, we actively participate in tangible climate-related actions in collaboration with the financial group. One such action is the participation in the global event called "Earth Hour" initiated by the World Wide Fund for Nature (WWF). This event takes place on the last Saturday of March from 8:30 to 9:30 PM, during which people worldwide switch off their lights for one hour as a

#### <Overview of Communications and Initiatives>



concrete step towards carbon reduction and environmental conservation. In 2022, a total of 56 suppliers joined us in responding to this initiative and taking part in the "Earth Hour" event.

#### **Supplier Engagement**

Since 2019, we have been actively participating in annual supplier conferences in collaboration with the financial group. These conferences aim to advocate for environmental and human rights requirements within the supply chain and establish transparent communication channels with stakeholders. Through these conferences, we share concepts and practices related to supply chain management and sustainable procurement, emphasizing the role of businesses in creating social

impact. The conference themes are adjusted each year based on sustainability trends.

In 2022, we organized three supplier conferences and invited 60 suppliers to participate. The conferences focused on different topics, including achieving net-zero carbon emissions by 2050, carbon footprint assessment methods, and green procurement trends. Suppliers relevant to each theme were invited to align themselves with sustainable development

and collectively address the risks and opportunities associated with climate change. The conferences aimed to seek solutions for climate change and further deepen sustainable influence.

During the conferences, educational training sessions were provided on various topics to enhance suppliers' practical implementation and knowledge of different sustainability issues. In 2022, we invited Taiwan Fujisoft Information to share their ESG commitment to achieving net-zero carbon emissions and Dongyi Information to discuss ESG practices. Additionally, Ernst & Young provided insights and recommendations on green procurement trends.

#### Internal communications

Yuanta Bank, in collaboration with the Group, ensures that all employees are equipped with knowledge on climate change, sustainable finance, and sustainable procurement through internal training programs. Talent development plans are tailored to different business units, and high-level managers have included "sustainable development goals" as important performance indicators in their assessments. This cultivates a company-wide awareness of sustainable development.

#### **Employee Training**

We adhere to sustainable finance principles and integrate sustainability factors into practical processes and business operations through comprehensive employee training. This ensures that staff members possess the necessary skills to guide clients in enhancing sustainability benefits. In 2022, a total of 4,365 hours were dedicated to sustainable education and training initiatives.

#### **Cultivating Talents in Sustainable Finance**

As a gatekeeper and promoter of sustainable development in the financial industry, we place great emphasis on nurturing sustainable finance talent. In particular, key talent development is focused on the following business areas: business planning,

Employee Training	Cultivating talents in Sustainable Finance	Sustainable Procurement Campaigns
A total of <b>4,365</b> hours of sustainable education training were conducted in the year 2022.	In the year 2022, a total of <b>230</b> hours were dedicated to participating in courses, forums, and other activities related to sustainable finance.	In 2022, we participated in 25 procurement apprenticeship training sessions, totaling 50 hours.

corporate finance, investment banking, digital finance, financial product design, investment trading, and risk management in the realm of green finance. Relevant personnel are assigned to participate in green finance forums, seminars, sustainable finance courses, and obtain certifications. In 2022, a total of 230 hours were dedicated to participating in sustainable finance courses, forums, and other related activities.

#### **Sustainable Procurement Campaigns**

In 2022, we participated in four procurement quarterly meetings organized by the financial group. These meetings aimed to share key insights on improving the entire group's procurement-related audit cases throughout the year. Starting from a supply chain management perspective, we promoted ESG practices, advocated for the implementation of sustainable procurement policies and processes, and established a sustainable supply chain that protects the environment and human rights.

The educational training theme for 2022 was "Net Zero Emissions and International Decarbonization Trends." External organizations such as Ernst & Young (EY) provided training on supplier management measures, while Delta Electronics shared their ESG project experiences. EY also provided education and training on ISO 16064 and 14067 for suppliers, covering current domestic and international decarbonization trends, corporate carbon footprint assessment methods, and international green procurement trends.

In 2022, a total of 25 procurement personnel from us participated in educational training programs, accumulating 50 hours of training. Additionally, the procurement department organized six "procurement learning" sessions during the year. These sessions aimed to enhance negotiation skills, raise awareness of green procurement, and promote improvements in audit-related matters to ensure the implementation of green procurement practices.



## **Chapter 3: Risk Management**

## 3.1 | Identification, Measurement, and Management Processes

#### Climate Risk Governance

Yuanta Bank has established a comprehensive risk management organizational framework, policies, and procedures. The scope of risks includes operational risks, legal and compliance risks, as well as environmental risks (including climate risks). Taking into consideration the dimensions of environmental protection (E, Environmental), social responsibility (S, Social), and corporate governance (G, Governance), our risk management policies have incorporated environmental risks (including climate risks). This signifies that we view climate change as a strategic business risk and have integrated the identification, measurement, and management processes of climate change into our overall risk procedures.

To establish a climate risk management standard that ensures its appropriateness, effectiveness, and reasonableness, we have developed the "Climate Risk Management Policy" based on its existing "Risk Management Policy." Climate risk management aims to assess, mitigate, and adapt to climate risks in various business areas, ensuring that the climate risks to which each business is exposed align with our risk management objectives and risk tolerance. It also ensures that each unit understands the impact of our business on the overall climate risk of us and effectively and clearly defines the business scope and exposure level prior to executing operations. To achieve this, we, including its Hong Kong branch( referred to as "HK branch"), have developed the "Bank-wide Climate Risk Appetite" in accordance with the organization's existing risk appetite and industry practices recommended by banking associations. The risk appetite is reviewed at least once a year.

<The Scope of the Bank's risk management in our company>

### **Overall Risk of Yuanta Bank**

## **Operational Risks**

## Legal and Compliance Risks

#### **Environmental Risks**

- Market Risk
- · Credit Risk
- · Liquidity Risk
- · Interest Rate Risk
- · Large Exposure
- · Operational Risk
- Information Security
   Risk
- · Human Resources Risk
- · Emerging Risk

- · Compliance Risk
- · Legal Risk
- Anti-Money Laundering and Counter-Terrorism Financing Risk
- Integrity management Business Ethics Risk

· Climate Risk

#### **Climate Risk Appetite**

- 1. The bank supports the transition to a low-carbon economy and, for enterprises or industries highly sensitive to climate risks that are assessed to have difficult-to-control or mitigate risks, the bank will reduce or avoid engagement. The bank aims to achieve net-zero carbon emissions by 2050. [Head Office and HK Branch]
- 2. The bank aims for an annual energy consumption reduction of more than 2% in the total greenhouse gas emissions of the entire organization. [Head Office]
- 3. The concentration risk indicator ratio for the seven high climate risk industries should be less than or equal to 40%. [HK Branch]

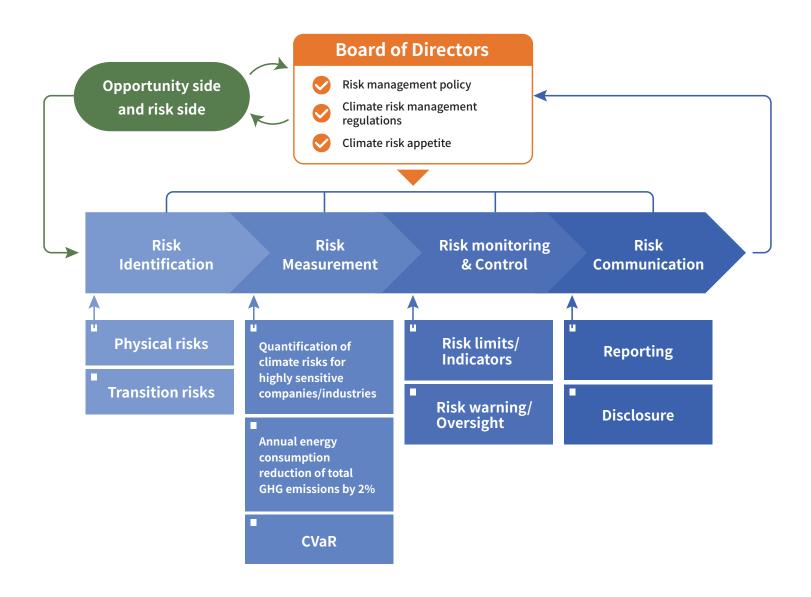
To implement risk management and internal controls, we have established three lines of defense in accordance with regulatory requirements. The "Internal Controls Three Lines of Defense Management Measures" have been formulated, clearly defining the organization, responsibilities, and functions of each line of defense to ensure the effective operation of the risk management mechanism.

The first line of defense incorporates climate-related risks into its assessment and considerations when conducting relevant business. The second line of defense operates independently from the first line and assists in supervising and overseeing the execution of climate-related risk management by the first line. Lastly, the third line of defense, under the purview of the Board of Directors, conducts audits and assessments of the effectiveness of climate risk management by the first and second lines of defense and provides improvement recommendations as necessary.



## Climate risk management process

Yuanta Bank's climate risk management process follows established risk practices and consists of four main steps: risk identification, risk measurement, risk monitoring, and risk communication. The responsibilities and actions of each step are outlined in the diagram as shown.



Risk Identification	· Identify the climate risks (transition risks and physical risks) associated with its own operations, investments, and financing activities, and assess their correlation with existing risks such as credit risk, market risk, operational risk, and liquidity risk. Incorporate these climate risks into existing risk management processes.
Risk Measurement	<ul> <li>Take into account the reasonableness, materiality, and interrelationships of climate risks in the measurement and management of these risks.</li> <li>Establish climate risk measurement methods to enhance the monitoring and management of climate risks, whether qualitative or quantitative.</li> </ul>
Risk Monitoring & Control	<ul> <li>Establish climate risk monitoring indicators and regularly analyze, monitor, and report.</li> <li>The Risk Management Department reviews the appropriateness of climate risk monitoring indicators annually, considering our business objectives, risk tolerance, and climate risk measurement methods.</li> </ul>
Risk Communication	<ul> <li>The Risk Management Department regularly reports important climate risk management information to the Risk Management Committee, Chairman, Audit Committee, and the Board of Directors.</li> <li>In case of significant anomalies or special circumstances, take immediate responsive measures according to internal regulations and report them to the Board of Directors.</li> </ul>

## Differentiated Climate Risk Management Mechanism

By establishing a climate risk management mechanism, clarifying the responsibilities of relevant units, and establishing risk management procedures, monitoring items, and threshold indicators, we can strengthen its climate risk management process. In the credit business, we follow the "Precautions for Sustainable Financial Risk Management" and recommend avoiding transactions with industries that cannot address potential E&S risks or have no improvement plans. For existing credit exposures in such industries, it is recommended to refrain from further increases.

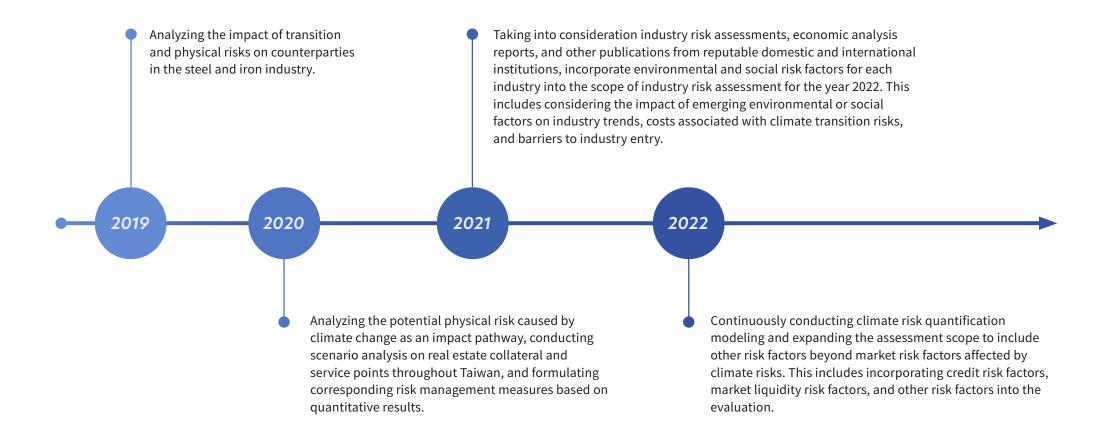
## <Specific Industries Explanation for Precautions in Sustainable Financial Risk Management>

In our risk management process for sustainable finance, we identify specific industries and take relevant improvement measures or plans to establish adaptation and mitigation measures. The specific industries are as follows:

- 1. Enterprises engaged in electricity supply with coal-fired power generation accounting for more than 50% of their capacity.
- 2. Enterprises in coal-related industries or unconventional oil and gas industries, where coal-related or unconventional oil and gas-related revenues account for more than 30% of their total revenues.
- 3. Coal-related industries mentioned above refer to activities such as mining, drilling, mining services, processing, coal trading, transportation, engineering, and coal-fired power generation. Unconventional oil and gas industries refer to the overall operational activities of oil sands, shale oil and gas, liquefied petroleum gas, deep-sea drilling for oil and gas, and Arctic drilling for oil and gas.
- 4. The improvement measures or plans include, but are not limited to, supporting documents such as climate-related financial disclosure (TCFD), science-based reduction targets initiatives, and proposals for energy transition plans related to low-carbon transition and climate risks.

## 3.2 | Financial Quantitative Analysis of Climate Change

The physical risks, transition risks, and opportunities caused by climate change have an impact on the financial performance of the financial institutions, including their operations, balance sheets, income statements, and cash flow statements, as well as various credit, market, liquidity, and operational risks. We adhere to the TCFD goals for quantifying climate risks. The quantitative analysis conducted in recent years is detailed in the following diagram.



## The overall of scenario analysis

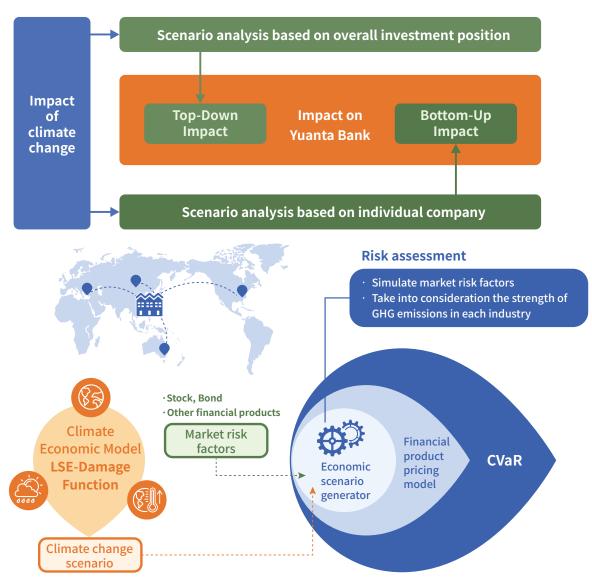
Yuanta Bank, including its HK branch, follows the practices of the Group and adopts a combination of top-down portfolio-level scenario analysis and bottom-up individual company-level scenario analysis. This approach allows for a comprehensive analysis of the financial impacts related to climate change from different perspectives, considering different time horizons and scenarios.

#### Note:

- Scenario analysis based on overall investment positions (Top Down): Calculate
  additional losses of investment positions under the impact of climate change
  at the industry level by incorporating information on climate risks derived from
  economic model.
- Scenario analysis based on individual company (Bottom Up): Analyze the impact
  of individual investment and financing targets on us by understanding industry
  climate risks and risk exposures with industry-specific climate risk assessment
  tools.

## Scenario Analysis based on Overall Investment Positions(Top Down)

Based on the scenario analysis of the Group, we selected a climate scenarios to identify the linkages between rising average temperatures due to climate change and global economic variables, and we established a climate-linked economic model. Additionally, it screens market risk factors based on the data required for financial product valuation. Finally, the climate-linked economic model is integrated with mature financial asset risk measurement techniques to generate economic scenarios. These scenarios calculate the impact of climate scenarios on economic damages, extend to the impact on market risk factors, and adjust the market risk factors for each investment position and country's economic variables. They are then incorporated into financial product pricing models to forecast the profit and loss performance of long-term investment positions under climate change.



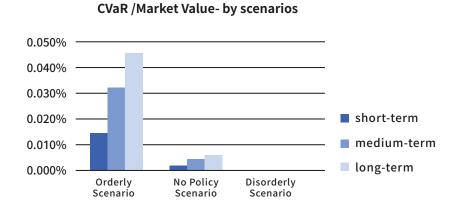
**Purpose of assessment** | Climate change and will continue to affect all countries and industries. The objective is to quantitatively measure the abstract climate risks and identify opportunities for proactive measures, including the development of innovative business models. This assessment aligns with the climate risk and opportunity management framework of the Group, taking into account national and industry-level factors.

Targets of assessment | Long-term investment positions within ours (including the HK branch) are the focus of the assessment.

Method of assessment | CVaR assessment method

**Climate Scenarios for Assessment** | Based on Network of Central Banks and Supervisors for Greening the Financial System (NGFS) and the IPCC climate scenarios, we have selected three climate scenarios: the no policy RCP8.5 scenario, the orderly scenario RCP2.6, and the disorderly scenario RCP2.6. These scenarios will be used to evaluate potential financial impacts using the end of December 2022 as the reference point.

**Result of assessment** | The investment positions of ours are primarily concentrated in countries such as Taiwan, the United States, and Australia. The overall proportion of investments in industries with high GHG emissions is low. Further analysis reveals that our equity investments are more affected by climate risk factors, particularly in industries with high GHG emissions, compared to other industries. In terms of bond investments, bonds issued by companies in industries with high GHG emissions and lower credit ratings are more susceptible to the impact of climate risk factors.

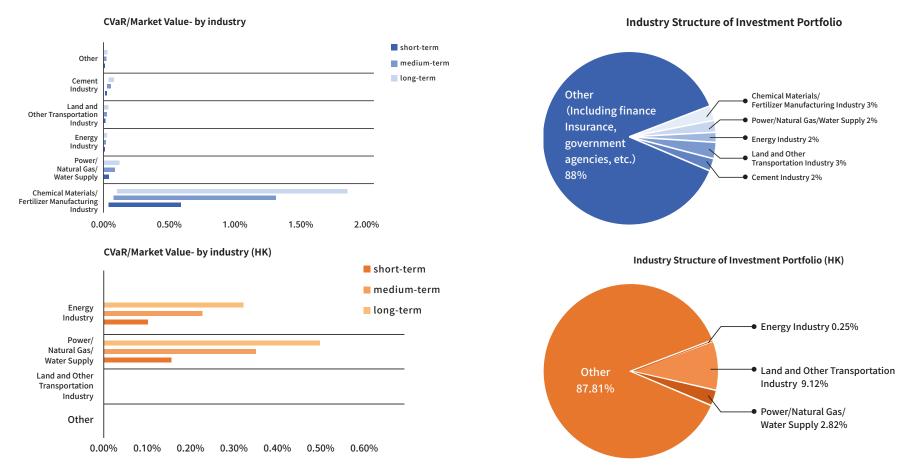


According to the analysis results, our investment positions are affected by rising average temperatures, resulting in a relative value reduction (CVaR) ranging from approximately 0.002% to 0.045% of the market value as of the reference date (end of December 2022). However, due to the bank's diversified investment types and risk diversification, the impact on us is relatively insignificant.

#### <Overall Distribution of Investment Positions by Country>



From the perspective of industry investment portfolio analysis, our investment in high carbon emission industries, particularly the chemical materials/fertilizer manufacturing industry, is significantly affected. The relative value reduction (CVaR) caused by rising average temperatures for this sector is estimated to be approximately 0.03% to 1.88% of the portfolio's market value as of the reference date.



#### Note:

- 1. The CVaR/market value represents the percentage decrease in short-term (1 year), medium-term (5 years), and long-term (10 years) market values under temperature rise compared to the market value as of the reference date (end of December 2022)
- 2. The bar chart represents the potential range of impacts (CVaR/market value) under different climate scenarios during the same loss period.

Given the smaller exposure of the HK branch to high carbon emission industries, its climate risk impact is relatively low. Based on the industry analysis of investment positions, the sectors most affected are power, natural gas, water supply, with a relative value decrease of approximately 0% to 0.5% of the market value as of the reference date.

### **Mitigation measures**

Yuanta Bank will continue to diversify its investment portfolio to mitigate the impact of climate risk factors on the value of financial investment. In Additionally, based on the aforementioned scenario analysis results, we will reassess its risk tolerance and asset risk pricing, and establish CVaR monitoring indicators based on the estimated losses of the investment portfolio. This will help control investment transaction limits and prevent value losses caused by extreme climate risks.

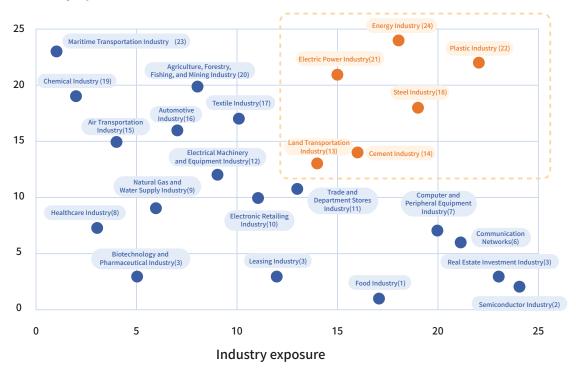
## High Climate Risk Industry Analysis

Before conducting individual company-level scenario analysis and quantitative assessment, we follow the practice of the Group to first conduct a comprehensive evaluation of the overall financial transaction market. By integrating the reports and analyses from the Group and domestic and international industries, we gain an understanding of the climate risk levels and exposure scale of various industries within the Group, and we select key industries for focused attention. The analysis results indicate that the cement, steel, plastics, land transportation, power generation, and energy sectors are high climate risk industries. Examining the industries with a high concentration (over 8%) in our portfolio for the year 2022, government agencies and financial and insurance industries stand out. However, due to the nature of these industries, their physical and transition risks are actually low.

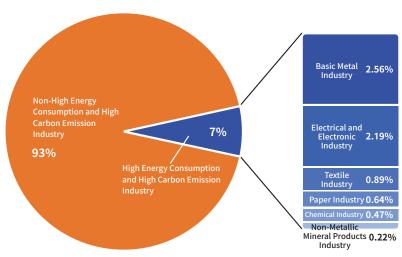
In addition, based on the definition of high-energy-consuming and high carbon emission industries by the Ministry of Economic Affairs, we have compiled the results of explosure for the year 2022, revealing the following distribution of amounts:

#### <Industry-specific Risk Matrix>

Level of climate risks



## <High Energy Consumption and High Carbon Emission Industry Risk Portfolio>



#### Note:

- 1. The climate risk rating is primarily based on the risk assessment provided by Moody's Investor Service industry analysis reports.
- 2. The scale of industry risk includes the analysis of all investment and financing targets within the bank.

## Scenario Analysis at the Individual Company Level (Bottom Up)

In addition to the overall investment portfolio scenario analysis, we also conducted in-depth individual company-level scenario analysis models in 2021 to analyze the financial impacts associated with climate under different time periods and scenarios. Based on the implementation results of the Group in 2022, we selected one significant transition risk, one physical risk, and one opportunity for further quantitative analysis of financial impacts at the individual company level.

#### <Overview of Analysis Methods for Individual Company Scales>

Selecting Risks and Opportunities		Analysis Scope		Analysis Method		
Type	Risk Factor	Analysis of the Industry	Analysis of the subject	Climate Scenario	Duration of assessment	Method of assessment
		Corporate banking credit position		NGFS Net Zero(1.5° C),	2025, 2030, 2035, 2040, 2050	Expected Credit Loss Model
	Cost for	Cement, steel and iron, plastics, land	Equity investment position	Well below 2° C	2035, 2040, 2050	Equity Valuation Model
Transition Risk	decarbonization policy and legal compliance	n transportation,	Bond investment position	<ul> <li>Orderly scenario RCP2.6</li> <li>Disorderly scenario RCP2.6</li> <li>No policy RCP8.5 scenario</li> </ul>	<ul><li>Short-term (1 year)</li><li>Medium-term (5 years)</li><li>Long-term (10 years)</li></ul>	Expected Credit Loss Model
Physical Risk	Flood/Landslide Disaster causes damage to service points and collaterals	All	<ul> <li>Real estate collateral</li> <li>All service points in Taiwan</li> <li>The registered location of the investment company.</li> </ul>	RCP8.5	2036~2065	Disaster risk model
Opportunity	Develop and promote low-carbon products and services	Steel and iron	Heavy electricity users	The Ministry of Economic Affairs regulation	2050	Market pricing model

## 1. Scenario analysis of transition risks: Quantitative assessment of the impact of carbon fees on the corporate banking's credit positions

**Purpose of assessment** | The financing targets are affected by carbon price in that they have to bear additional costs for meeting the regulatory requirements. The additional costs have an impact on value of its net worth, resulting in an increase in credit risk (increase in probability of default), which in turn increases the potential credit loss of us. Therefore, it is important for us to effectively estimate the changes in the expected credit losses of its financing targets.

**Targets of assessment** Our six major credit clients in high climate risk industries at home and abroad.

Method of assessment | Expected credit loss model

Result of assessment | The asset locations of individual companies in the six major industries that have been granted credit by the banking sector were input into a credit loss model to calculate the EL under two scenarios (1.5° C/<2° C) affected by carbon price. The impact ratios (the ratio of the EL of the industry in that year to the total exposed amount of the industry) are presented in the figure below. The figure shows that the impact of the power generation and steel industries in the credit granting positions is significantly affected as the years go by. The impact of the 1.5° C scenario is more significant than that of the <2° C scenario. From 2030 to 2035, the impact curve of the individual industries in the power generation industry in the 1.5° C scenario shows exponential growth. Through detailed analysis, it was found that the financial factor changes resulting from the carbon tax pressure on some high carbon emission companies have exceeded the default risk level that the credit risk PD model can bear. This has caused a significant increase in the overall curve. However, under the <2° C scenario, the curve only shows exponential growth from 2040 to 2045.

The difference in the impact curve of individual industries between the two scenarios can be observed from two aspects:

#### <Expected credit loss model>

## Step 1

Calculating the additional costs for different time horizons and scenarios

#### Suppose Carbon emission Carbon price Company BAU limit in the climate estimate in the carbon emissionNote 1 Decarbonization costs companies have to climate scenario<sup>Note</sup> pay without adopting any remediation measures to regulatory changes **Excess emissions** Step 3 Step 2 Calculate the potential amount Changes in various financial factors of potential credit loss caused by changes in additional costs Calculation of potential credit loss Suppose (EL model) Note 3 Additional costs Incorporate for credit clients individual PD $\triangle PD \times IGD \times FAD = \triangle EL$ in the 6 major models for the 6 LGD and EAD do not industries major industries change in the future Internal credit rating changes→ change in PD→change in EL

# Note:

- The carbon emission growth rate of the selected industry for the company's BAU scenario forecast is obtained by taking referencing the International Energy Agency's (IEA) data.
- The carbon price forecast for each year and each scenario is obtained by referencing the NGFS data.
- PD is Probability of Default, LGD is Loss Given Default, EAD is Exposure at Default and EL is Expected Loss.

First, for a specific industry, taking the power generation industry as an example, the difference in the impact curve between the two scenarios in 2030 is 1.94%, and it significantly increases to 4.71% in 2035, which significantly increases the load on the credit risk PD model.

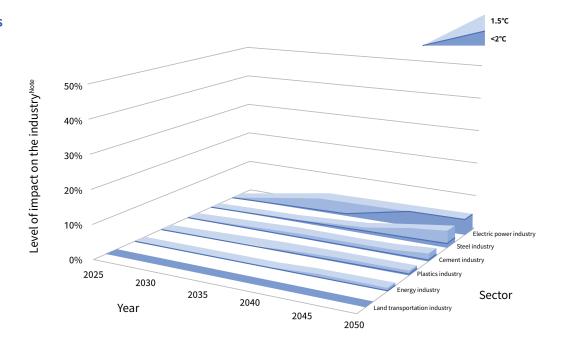
Second, from an overall perspective of the six major industries from 2025 to 2050, it can be observed that the difference in the impact curve between the two scenarios for individual industries continuously widens over time, indicating that the strength of temperature control may have a significant impact on credit borrowers and the impact losses on us due to default risk may also have significant differences.

#### **Mitigation measures**

Based on the result of the analysis, we formulated the "Guidelines for Managing Equator Principles Financing Cases" based on the Equator Principles to rate project finance loans and manage accordingly and require clients to improve their environmental and social performance. In addition, by engaging with clients, we expect to prevent some of the negative financial impact caused by climate change. In the meantime, it employs its power as a financial intermediary to encourage financial service recipients to implement carbon reduction and climate risk management actions, in order to enhance its clients' resilience to climate risks. And in accordance with the "Industry-Specific Environmental and Social Risk Management Guidelines" of the Group, We have strengthened its review of customers' ability to cope with transition risks and reduced financing activities for high climate risk enterprises in the credit assessment process.

# <Industry Impact Ratio of Credit Accounts in Six Major Industries under Different Scenarios and Different Time Horizons>





Note:

The level of impact on the industry refers to the percentage of the EL for the credit position relative to the amount of risk exposure on the reference date (the end of December 2022) under different climate scenarios.

# 2. Scenario analysis of transition risks: Quantitative assessment of the impact of carbon price on equity and bond investment positions

## **Equity investment**

**Purpose of assessment** | The introduction of carbon price imposes additional costs on companies in order to comply with regulatory requirements. The additional costs have an impact on companies'net worth and consequently a likely negative impact on the stock price. Therefore, it is important to be able to effectively estimate the EL of the equity investmentposition held by us.

**Targets of assessment** | We have followed the high-risk industries designated by the Group for the year 2022, which include the steel and iron industry, cement industry, plastic industry, land transportation industry, energy industry, and power generation industry, and evaluated the issuing companies in which its investment positions fall within the scope of these industries.

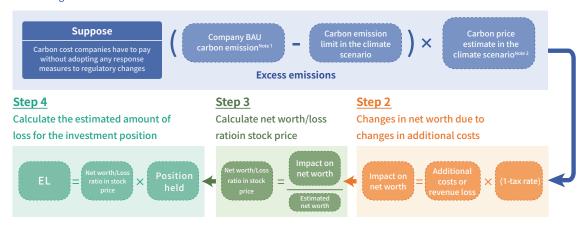
#### Method of assessment | Equity valuation model

**Result of assessment**  $\mid$  Our investments in high carbon emission industries include plastic, cement, and steel, which represent a relatively low proportion of our overall stock investments. The EL resulting from carbon price under two scenarios (1.5° C / <2° C) are using an impact ratio [note] method. Regardless of the 1.5° C or <2° C scenario, the impact of plastic and cement industries increases significantly with each year and exhibits an upward trend. The total loss of the three major industries is relatively low compared to our net worth, indicating that the transformation risk of equity investments has a low impact on our bank.

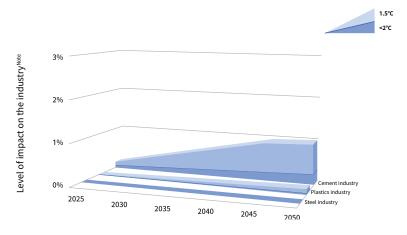
#### <Equity valuation model>

#### Step 1

Calculating the additional costs for different time horizons and scenarios



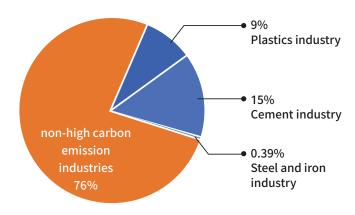
# <Industry Impact Ratio under Different Scenarios and Different Time Horizons>



#### Note:

The impact level of industries is presented in impact ratio (EL of the industry in that year divided by the net worth of the bank in 2022).

#### Proportion of high carbon emission industries in the overall stock portfolio



#### Note:

- 1. The carbon emission growth rate for the company's BAU scenario forecast is based on the specific industry it resides with reference made to the IEA data.
- 2. The carbon price forecast for each year and each scenario is obtained by refence to the NGFS.

#### **Bond investment**

**Purpose of assessment** | The issuer of bonds may face increased costs due to carbon reduction policies and regulations, leading to a decrease in issuer's profitability and an increase in credit risk. Therefore, it is crucial to accurately estimate the EL of our bond investment portfolio.

**Targets of assessment** | Yuanta Bank follows the high-risk industries selected by the Group for the year 2022, which include the steel industry, cement industry, plastic industry, land transportation industry, energy industry, and power generation industry. We assess the investment positions to identify the issuing companies within these industry sectors.

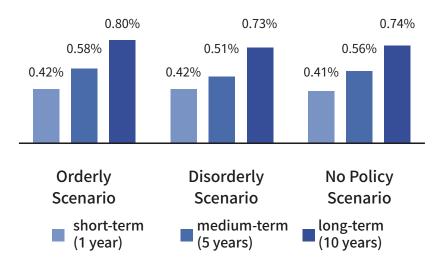
Method of assessment | Expected Credit Loss Model

Result of Assessment | The expected credit loss as a percentage of market value for bonds in three climate scenarios, namely short-term (1 year), medium-term (5 years), and long-term (10 years). The fluctuation range for the expected credit loss of high carbon emission industries is approximately 0.41% to 0.80% of the overall market value. In the long-term scenario, the transportation/other shipping sector and the power/natural gas/water supply sector experience larger declines in expected credit loss as a percentage of market value. However, since our holdings in high carbon emission industries account for a relatively low proportion (approximately 10%) of the overall bond investment portfolio and are mostly investment-grade bonds, the impact on us is expected to be low under climate scenarios.

#### **Mitigation measures**

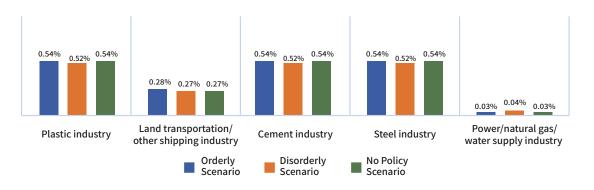
Yuanta Bank follows the "Sustainable Finance Guidelines" and "Industry-specific Environmental and Social Risk Management Guidelines" of the Group in our investment in medium- to long-term stocks and bond products. It conducts sustainability assessments before investing and regularly reviews investment targets to ensure that they fulfill their corporate social responsibilities. We also have climate risk indicators and thresholds to regularly monitor and report on the status of the indicators, review fluctuations in CVaR, and reduce the volatility of the overall investment portfolio returns under the impact of climate change, thus reducing investment risk.

# The expected credit loss for high carbon emission industries fluctuates



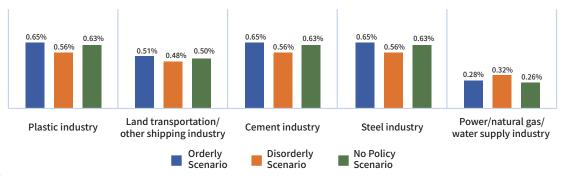


### **Expected Loss as a Percentage of Market Value (Short-term)**



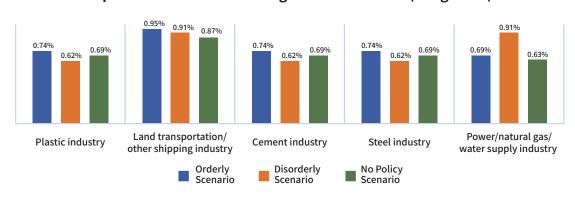


## **Expected Loss as a Percentage of Market Value (Mid-term)**





## **Expected Loss as a Percentage of Market Value (Long-term)**



#### 3. Physical Risk Scenario Analysis:

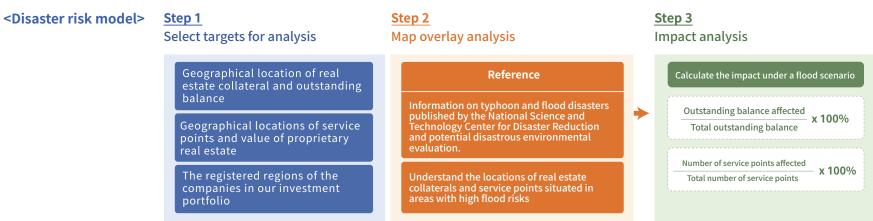
Quantitative assessments are conducted on real estate collateral and the registered locations of all service points and investment positions of companies throughout Taiwan.

Purpose of assessment | In recent years, discussions on the issues of extreme weather such as heavy rainfall and flooding have become frequent. In addition to our service points, real estate mortgage loans, corporate property mortgages, and investment positions with companies registered in flood-prone areas could all have a significant impact on our business. Therefore, we have followed the guidelines of the Group and referred to the flood and landslide risk map (RCP 8.5) published by the National Science and Technology Center for Disaster Reduction to conduct a scenario analysis for physical risk. This analysis helps us understand the potential impact on our business and asset value in the future, especially as climate change continues to intensify.

**Targets of assessment** Our real estate collateral, as well as the regions where our service points and investment positions are located throughout Taiwan.

**Method of assessment** | Disaster risk model

Result of assessment | In terms of real estate collateral, approximately 8.74% of the properties are located in areas with a high risk of flooding by the end of the century, and approximately 7.09% are situated in areas with a high risk of landslide disasters by the end of the century. As for service points throughout Taiwan, around 8.72% are located in areas with a high risk of flooding by the end of the century, and approximately 6.71% are situated in areas with a high risk of landslide disasters by the end of the century.



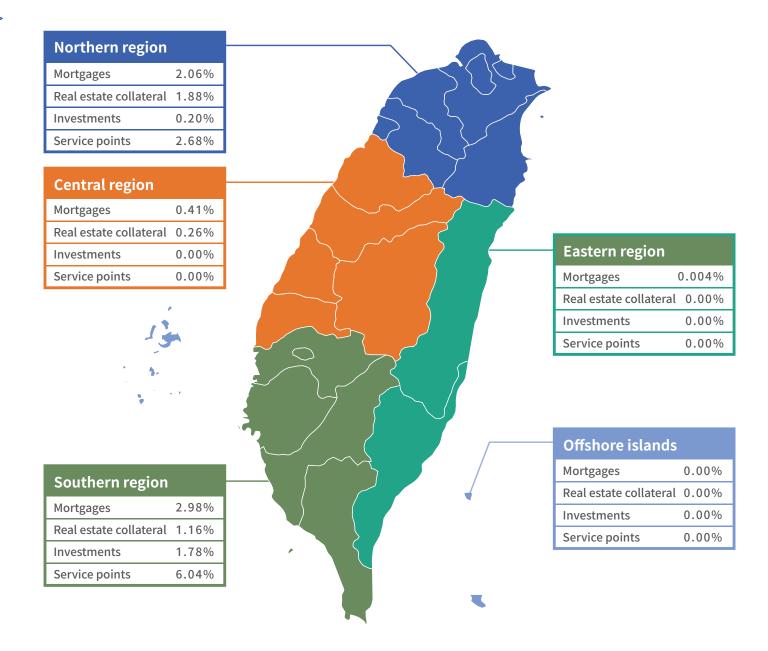
#### **Adaption measures**

Yuanta Bank has added provisions in the "Real Estate Collateral Handling Rules" to assess the impact of environmental and climate risks on collateral located in high flood risk areas. If the collateral is located in such areas, the reasons and impact of the collateral's value on credit risk should be stated in the appraisal report and review form, and a total control mechanism for "high flood risk areas" and a countermeasure for exceeding the limit of 90% have been added. In addition, we have established sound physical risk adaptation measures for our service points. In addition to formulating policies and regulations such as the "Business Continuity Management Policy," "Business Continuity Management System Implementation Guidelines," "Crisis Management Policy and Procedure Rules," "Intra-Bank Major Incidents Emergency Notification Operation Procedures," "Operational Continuity Abnormal Incident Response Operation Guidelines," and "Crisis Management Contingency Manual" to cope with major disaster events, we will also increase the insurance coverage for service points in high-risk areas based on the results of physical risk scenario analysis. Moreover, climate-related evaluation factors will be added when acquiring new real estate/service points in the future. Furthermore, we have regulated that newly built self-owned real estate should meet the design standards of green buildings, and therefore, 100% of the new buildings have complete physical risk adaptation measures.

## The proportion of high flood-risk areas to our exposure

#### < The proportion of high flood-risk areas>

Site	Proportion
Mortgages	Proportion of
Real estate collateral	loan amount
Investments	Proportion of investment amount
Service points	Proportion of locations



## The actions related to HK branch

## Assessment and response of our service points

- Based on the "Green and Sustainable Finance Data and Information Platform" of the Hong Kong Monetary Authority (HKMA), the HK branch assesses the operational risks of different service points. In 2022, the HK branch assessed that our service points (in Admiralty) and backup center (in Tsuen Wan) are not located in flooding black spots. Additionally, the four flooding black spots listed are not adjacent to Admiralty and Tsuen Wan.
- · Considering the impact of extreme weather, the HK branch continuously strengthens its business continuity plan (BCP) to ensure operational resilience management.

## Assessment and response of external third parties

For some of our products or services provided through third parties (such as external consultants/suppliers), the HK branch follows the guidelines of the "Guidelines on Internal Controls and Procedures for Outsourcing" and has a "Self-Assessment Checklist for Outsourcing Risks" to assess and confirm the reliability of the products or services provided by third parties.

#### Note:

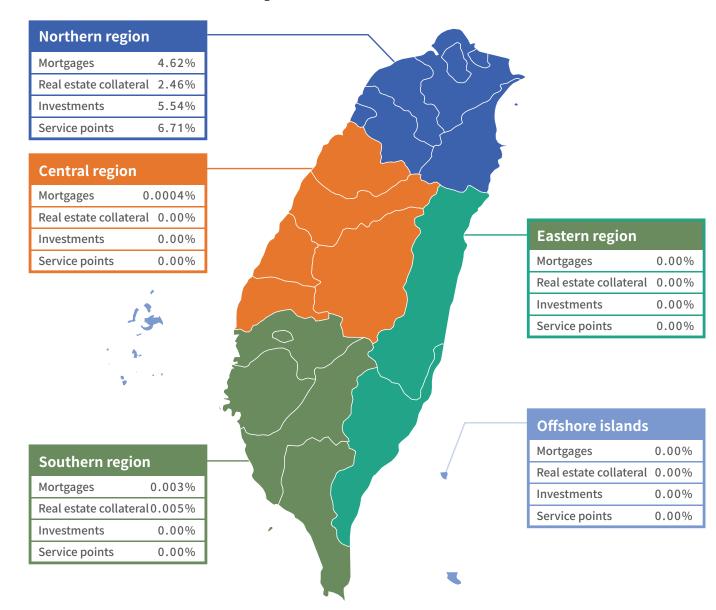
The Drainage Services Department (DSD) established a systematic method in 1994 to identify flooding black spots throughout Hong Kong (https://www.dsd.gov.hk/TC/Flood\_Prevention/Our\_Flooding\_Situation/Flooding\_Blackspots/index.html). If a location is listed as a flooding black spot, the DSD will grade it according to the extent and severity of the flooding in the affected area, with four levels of severity: Serious (Level 4), Moderate (Level 3), Minor (Level 2), and Slight (Level 1).

#### **Landslide Risk Assessment**

Based on the information provided by the Landslide Hazard Potential Map, we have identified the administrative regions in Taiwan with high Landslide hazard potential. We have also determined the proportion of our various businesses with hazard located in areas with high Landslide risk. The relevant results are as follows.

## <The proportion of high Landslide-risk area>

Site	Proportion
Mortgages	Proportion of
Real estate collateral	loan amount
Investments	Proportion of investment amount
Service points	Proportion of locations



## 4. Opportunity Scenario Analysis: Quantitative Assessment of Renewable Energy Equipment Financing Needs

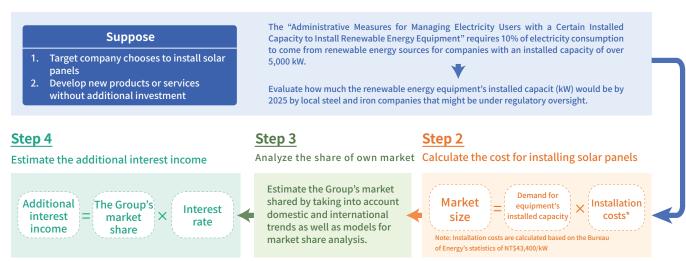
#### **Purpose of assessment**

The Energy Bureau of the Ministry of Economic Affairs announced the "Regulations for the Management of Setting up Renewable Energy Power Generation Equipment of Power Users above a Certain Contract Capacity" at the end of 2020, and it was officially implemented on January 1, 2021. Based on the assessment conducted by the Group, we anticipate that this trend will generate substantial financing demand for renewable energy equipment. In order to evaluate the potential market share opportunities resulting from this trend, we have employed market valuation methods to conduct further financial quantification analysis.

**Targets of assessment** | The Group assessed steel and iron companies in Taiwan that may be subject to regulatory oversight.

Method of assessment | Market valuation method

Step 1
Calculate the demand for renewable energy equipment



#### **Result of assessment**

It is estimated that the market value of Taiwan's steel and iron industry's demand for renewable energy equipment will reach NT\$6.75 billion by 2025. After analyzing the market share the Group can realize, it is estimated that this opportunity will bring NT\$2.73 million of interest income.

#### **Strategies**

We issued our first sustainable bond on March 21, 2022. The funds will be used to fund investments which quality as green investments, such as the development of renewable energy and energy technology, energy efficiency improvement and energy conservation, greenhouse gas reduction, waste recycling, pollution prevention and control or circular economy, etc., to support and fund key industries with sustainable initiatives, assist the energy transformation of the real economy, and support the growth of sustainable industries with real actions.

## 3.3 | Climate Scenario Analysis

#### 1. Purpose of Assessment

In accordance with the letter No. 1110227536 issued by the Financial Supervisory Commission on November 23, 2022, we are requested to conduct climate change scenario analysis based on the requirements of the Bankers Association's "Plan for Conducting Climate Scenario Analysis by Domestic Banks," using the balance sheet as of the end of 2022 audited by certified public accountants as the basis.

#### 2. Assessment Subject

Domestic and international credit risk exposure within the bank.

#### <Climate Scenario Comparison Table>

#### 3. Assessment Methods

In accordance with the operational plan, we have defined six climate scenarios for the years 2030 and 2050: orderly transition, disorderly transition, and no policy. These scenarios serve as a basis for analyzing the impact of physical risks and transition risks on the bank's investment and financing exposure, using December 31, 2022, as the reference date.

To calculate the potential expected credit loss resulting from climate change, the bank will utilize risk chain indicators and align them with probability of default(PD) provided by the JCIC, as well as LGD based on the bank's practical experience. This calculation will be performed for each of the six climate scenarios.

For a detailed list of corresponding items for each climate scenario, please refer to the table below.

Scenario Category and Description		Orderly Transition Scenario Disorderly Transition Scenario		No Policy Scenario
Transiti	on Risk	Medium-low risk	Medium-high risk	Low risk
Carbon price	2030	219	437	0
(USD/ton)	2050	375	829	0
Physic	al risk	Medium-low risk Medium-low risk		High risk
Temperatu	re rise (°C )	<2°C	2°C – 4°C	3°C – 4+°C
IPCC Scenar	rio Pathway	RCP 2.6	RCP 2.6	RCP 8.5
Growth rate of macroeconomy (%)	2030	3.23	1.46	3
	2050	1.21	1.15	1.3

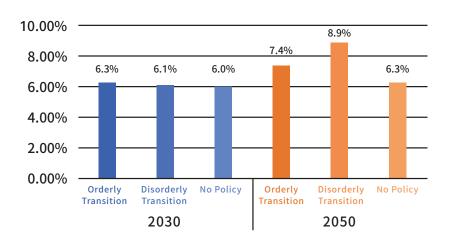
#### 4. Result of assessment

The results of the bank's calculations have been imported into the required reporting forms as outlined in the "Plan for Conducting Climate Scenario Analysis by Domestic Banks." The results are as follows:

Reference Point:2022/12/31

#### Reference Point:2022/12/31

## **Expected credit loss to net worth ratio**

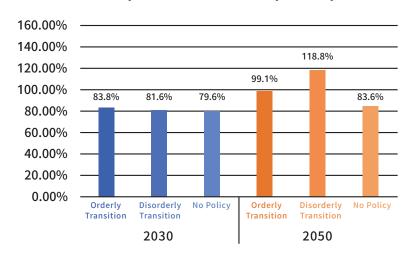


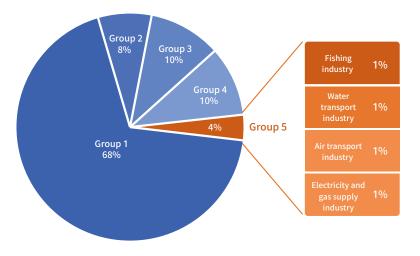
# 5. Transition Risk Analysis - Distribution of Industry Carbon Intensity

#### **5.1 Domestic Corporate Credit**

Most of our domestic corporate credit clients are categorized as having low carbon intensity. Only 4% are classified as having high carbon intensity (Group 5), including approximately 1% each in the fishing industry, the electricity and gas supply industry, and the water and air transport industry.

## Ratio of expected credit loss to pre-tax profit

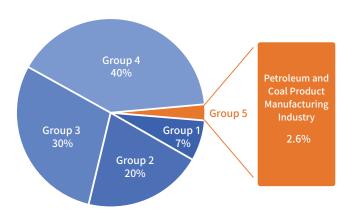




### **5.2 Domestic Banking Book Investments**

The proportion of high carbon emission industries (risk level 5) in the domestic bank investment portfolios of ours are only 2.6%, with the reviewed industries being petroleum and coal product manufacturing. •

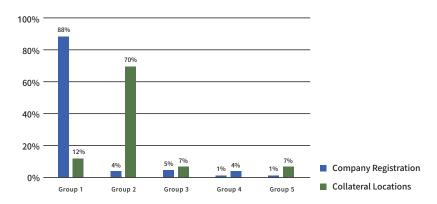
#### **Carbon Intensity Group by sector (Transition risk)**



# 6. Physical Risk Analysis - Distribution of Company Registration and Collateral Locations

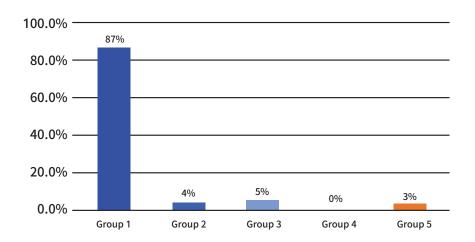
## **6.1 Domestic Corporate Credit**

The Bank found that most of its corporate borrowers are registered in areas with low physical risk, with only 1% of them categorized as high physical risk (group 5), and around 7% of the collateral located in high physical risk areas (group 5).



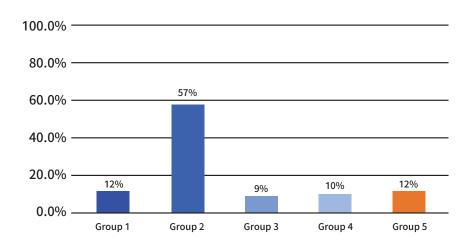
#### **6.2 Domestic Banking Book Investments**

Only 3% of the domestic banking book investment companies' registered locations are in areas with high physical risk (level 5).



#### **6.3 Mortgage Business**

Upon reviewing the 2050 "No Policy" scenario (RCP8.5), it is found that 12% of our mortgage portfolio is exposed to high physical risk (Level 5) areas.



## 7. Climate Risk mitigation strategies



- Develop relevant risk screening procedures in accordance with sustainable finance guidelines. Conduct sustainable finance assessments prior to investments and regularly review the sustainability performance of investment targets after investment.
- Establish climate risk indicators and thresholds. Monitor the usage of CVaR on a monthly basis to evaluate the value losses caused by extreme climate risks.



- · Adjust relevant business policies and internal processes to incorporate sustainable finance risk management into the credit review and decision-making process. Increase compliance with prohibited industries.
- Strengthen ESG interaction with customers. Invite customers to respond to green consumption on credit card bills to cultivate sustainable lifestyle habits.
- Establish regulations in the "Real Estate Collateral Handling Rules" for the location and evaluation of collateral that is vulnerable to environmental and climate change impacts. Implement aggregate control measures for "high flood risk areas."













## **Chapter 4: Metrics and Targets**

# 4.1 | Metrics and Targets for Low-carbon Operation Management

Our responsible for investment and financing in our bank primarily align their operational, strategic, product, and financial planning goals with the sustainability development strategy blueprint of the Group (such as responsible investment (PRI)) and the TCFD report. We have set short, medium, and long-term objectives:







## 19

## **Sustainability Goals: Exchange (Environmental Change Green Pioneer)**

Material issues	Development Strategy	2021 Short-term Target	2023 Medium-term Target	2025 Long-term Target
Energy and Climate Change	To properly manage extreme weather events and the related risks of transitioning towards a low-carbon economy, Yuanta Bank will incorporate climate risks into	For industries that are more sensitive to climate change (such as the steel industry), our responsible for investment and financing will conduct financial risk quantification. We will also introduce climate scenario analysis tools to identify and manage risks.	<ul> <li>Develop investment and financing climate risk management measures.</li> <li>Pass TCFD compliance assessment.</li> </ul>	Continuously improve financial impact assessment and disclosure of risks and opportunities.
process, i	its operational decision-making process, identifying and managing these risks.	Continuously deepening efforts in the CDP to improve by 30%, and consistently receiving the A-level leadership rating.	Proactively responding to the CDF and continuously obtaining leade	9 ,

We are committed to the Group's science-based carbon targets, set short-, medium-, and long-term goals and continue to track them. It regularly checks information on energy use in its operational locations and greenhouse gas emissions related to its operations to implement low-carbon operational management.

## Low-carbon operational goals and achievements

	Target	Short-term Target	Medium-termTarget	Long-term Target	SBT	2022 Achievement
	Category 1 & 2 reduction <sup>[Note]</sup>	Reduce carbon intensity by 4% in 2021 compared to 2017	Reduce carbon intensity by 6% in 2023 compared to 2017	Reduce carbon intensity by 8% in 2025 compared to 2017	Reduce GHG by 42% in 2030 compared to 2020	In 2022, the carbon intensity was reduced by 13 % compared with 2017, and the medium and long-term targets
		<b>√</b>	In progress	In progress	In progress	will be achieved ahead of schedule
	Renewable Energy Use	<ul> <li>In 2021,100% of the 2 service points adopted green energy</li> <li>The proportion of green energy usage increases by 2% year by year</li> </ul>	<ul> <li>In 2023, at least 4 service points will adopt 100% of green energy</li> <li>The cumulative use of green energy reaches 1.5 million kWh</li> </ul>	In 2025, the cumulative use of green energy will reach 2.7 million kWh, accounting for 2% of the total energy use	The annual purchase of renewable energy will go from 0% in 2020 to 2% in 2025	<ul> <li>In 2022, 2 service points adopted 100% of green energy through renewable energy Power Purchase Agreements (PPA), and achieved their mid-term targets ahead of schedule.</li> <li>In 2022, the use of green</li> </ul>
		✓	In progress	In progress	In progress	energy increased by 40% which achieved the short-term target.

#### Note:

- 1. Since 2019, the Group has been conducting GHG inventories in accordance with the new version of ISO 14064-1:2018. The corresponding names of the old and new versions are as follows: Category 1 is Scope 1 (direct GHG emissions), Category 2 is Scope 2 (indirect GHG emissions from electricity use). The inventory boundary is determined by operational control and calculated based on the emission coeffcient.
- 2. Category 1 emissions include mainly gasoline and refrigerants, and their emission coeffcients are calculated in accordance with the "Management Table 6.0.4 of Greenhouse Gas Emission Coeffcients of the Environmental Protection Administration, Executive Yuan."
- 3. Category 2 emissions include purchased electricity, and its emission factor is calculated based on the carbon emission coeffcient of electricity over the years as recently announced by the Bureau of Energy, the Ministry of Economic Affairs in 2021.

### GHG Emissions

In 2022, the category 1 and 2 emissions of us significantly decreased. The main reasons for this were the relocation to a new building with more energy-efficient equipment and the gradual switch to green energy supply at our service points, resulting in lower carbon emissions compared to using conventional electricity. In response, we will continue to monitor greenhouse gas emissions and strive to reduce the potential risks associated with our operational carbon footprint.

Management Metrics	2019	2020	2021	2022
Category 1 (metric tons of CO₂e)	624.7341	687.6067	709.300	547.93
Category 2 (metric tons of CO₂e)	8,391.0389	9,816.8103	9,314.920	8,697.46
Category 1 & 2 (metric tons of CO₂e)	9,015.773	10,514.417	10,024.220	9,245.39
Carbon intensity (metric tons of CO₂e/NT\$1 billion revenue)	392.5844	528.5800	483.3862	453.997
Reduction percentage compared to the baseline year	-23.88%	-11.31%	-15.36%	-21.94%

## Renewable Energy Usage

We have achieved the goal of using 100% green energy in two operating branches, including the Head Office and Taichung Branch, by signing power purchase agreements (PPAs) for renewable energy since 2021. In addition, starting from 2023, 15 branch locations including Kaohsiung, Yongkang, and Mingcheng, as well as six other locations of the Head Office, will also be supplied with green energy, totaling 21 locations, to continue the implementation of low-carbon operations.

Item	2018	2019	2020	2021	2022
Purchase of renewable energy certificates (kWh)	200,000	231,000	200,000	155,000	-
Green power wheeling(kWh)	-	-	-	129,971	519,137
Total consumption of renewable energy (kWh)	200,000	231,000	200,000	284,971	519,137
Percentage of green energy usage in total electricity consumption (%)	-	-	-	0.70	3.04
Electricity Carbon Emission Factor (kgCO₂e)	0.533	0.509	0.502	0.509	0.509
100% green energy-powered service points	-	-	-	2	2



## 4.2 | Metrics and Targets for Low-carbon Transition Management

We follow the Group's science-based carbon reduction targets in its low-carbon transformation management. It continues to calculate the carbon emissions and carbon intensity of its financial asset investment portfolio and tracks and manages the carbon footprint hotspots of its credit and investment businesses. This is to respond to the expectations of various stakeholders for the financial industry to guide the economy towards a low-carbon transformation.

## Absolute GHG Emissions and Intensity of Investment and Financing

We have utilized the methodologies of PCAF and SBTi to conduct a carbon footprint assessment of our credit and investment portfolios from 2020 to 2022. In 2022, the total carbon emissions from our credit activities amounted to 606,500 metric tons, representing a reduction of approximately 4% compared to the previous year. This decrease can be attributed primarily to a significant reduction in emissions from financing coal-fired power projects and commercial real estate mortgage loans.

As for our investment portfolio, the total carbon emissions amounted to 1,472,500 metric tons of  $CO_2$  equivalent, representing a slight increase of 1% compared to 2021. This marginal increase is mainly due to the inclusion of sovereign debt investments in the scope of our annual assessment.

Asset Type	Category		2020	2021	2022
	Investment in listed company	GHG emissions (metric tons of CO <sub>2</sub> e)	1,670,921.61	1,454,367.07	731,341.11
Investment	equity and bond	GHG intensity (metric tons of CO <sub>2</sub> e/NT\$ million)	9.28	7.19	6.36
mvestment	Investment in	GHG emissions (metric tons of CO <sub>2</sub> e)	-	-	741,130.25
	Sovereign Debt	GHG intensity (metric tons of CO <sub>2</sub> e/NT\$ million)	-	-	6.76
long-term Financing corporate loans	GHG emissions (metric tons of CO₂e)	411,046.62	504,551.43	551,245.34	
	·	GHG intensity (metric tons of CO₂e/NT\$ million)	3.70	4.60	4.17

Asset Type		Category	2020	2021	2022
Electricity Generation Project Finance	Emissions from electricity generation project finance	GHG emissions (metric tons of CO₂e)	54,783.41	100,707.22	42,574.12
		GHG intensity (metric tons of CO₂e/NT\$ million)	86.54	94.39	59.97
	Avoided emissions from electricity generation project finance	Carbon avoided emissions (metric tons of $CO_2e$ )	1,006.22	1,466.37	1,741.60
Commercial Real Estate Loan	Commercial Real Estate Loan	GHG emissions (metric tons of CO₂e)	21,183.47	23,386.90	12,688.11
		GHG intensity (metric tons of CO₂e/NT\$ million)	1.14	1.37	1.06

#### Note:

- 1. GHG emissions from investment and financing are calculated based on Yuanta Bank's long-term corporate loans, electricity generation project finance, commercial real estate loans, and long-term investment in equity and corporate bonds consolidated by the Group, using the Global GHG Accounting and Reporting Standard for the Financial Industry (first edition)(8) published by the PCAF (7) on November 18, 2020, as reference. The relevant GHG emission data comes from the external database, self-collection and estimation.
- 2. The GHG intensity of each financial asset is calculated based on the methodology recommended by the TCFD guidelines. Formula: Total GHG emissions borne by financial assets (metric tons of CO<sub>2</sub>e) / financial asset exposure (NT\$ million) = GHG intensity of financial assets (metric tons of CO<sub>2</sub>e / NT\$ million).
- 3. The coverage rate of the inventory= the balance of reviewed investment and financing positions / the sum of the FVPL, FVOCI, AC, loans and discounting items in the balance sheet.

## Analysis of Greenhouse Gas Emissions in Investment and Financing of High Carbon Emission Industries

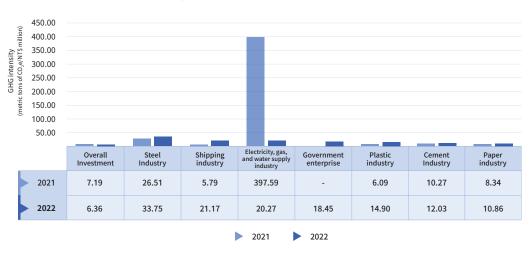
We have conducted an independent analysis of greenhouse gas emissions specifically related to the top 7 high-carbon emission industries in the past two years. Based on the results of this analysis, we have examined the entities contributing to high carbon emissions within our investment and lending portfolios. We are continuously enhancing collaboration with these entities to mitigate their carbon impact. Additionally, we plan to incorporate greenhouse gas intensity considerations into our future investment and lending decision-making processes, aiming to promote the transition towards a low-carbon economy. Analyzing the carbon emissions of these top 7 high carbon emission industries in our total investment and loan portfolios, they accounted for 94% and 71% respectively in 2021, and 87% and 60% respectively in 2022. By tracking the annual changes in carbon emissions and analyzing the progress towards our targets, we can make necessary adjustments to our business strategies. This approach aims to enhance the decarbonization impact achieved through our investment and lending portfolios.

#### Note:

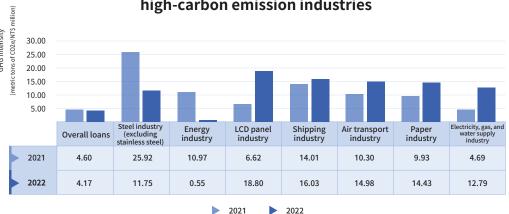
Industry-specific GHG intensity (carbon intensity) calculates the GHG intensity of investment and financing for various industries as recommended by the TCFD guidelines. Formula: Total GHG emissions undertaken by the investment and financing in the industry (metric tons of  $CO_2e$ ) / investment and financing exposure (NT\$ million) = GHG intensity for the industry (metric tons of  $CO_2e$  / NT\$ million)



# Carbon intensity of the investment portfolio in high-carbon emission industries



# Carbon intensity of the lending portfolio in high-carbon emission industries





## **Chapter 5 : Outlook**

This report presents our performance and implementation climate-related governance, strategy, risk management, and metrics and targets based on the recommendations of the TCFD. As a member of the Coalition of Movers and Shakers on Sustainable Finance, we recognize the importance of the issue of climate change and commit to take more active actions in areas such as "green procurement," "funding and engagement," "information disclosure," "assistance and promotion," and "international outreach."

We use the United Nations SDGs as a blueprint and integrate the concept of ESG into our corporate culture and operational strategies to address the risks, opportunities, and challenges brought by climate and social changes. We focus on long-term planning and systematic and effective actions to invest in financial products and services that have a positive impact on society and the environment.

Following the spirit of "fulfilling your dreams," our bank promotes sustainability in five dimensions: Corporate Governance, Customer Rights, Employee Care, Environment Sustainability, and Social Public Welfare, with "DREAM" as the keyword. Our sustainability goals are Devotion (full engagement in social participation), Reliability (the customers' number one trusted brand), Exchange (the green pioneers in environmental change), Achievement (provide an exceptional workplace that employees aspire to work in), and Motivation (a leader in corporate governance).

To align with international trends and the government's "2050 net-zero emissions pathway," our bank, guided by the sustainability blueprint of the Group, adopts systematic and scientific ways to reduce carbon emissions. We continuously improve the methodology of climate risk quantification assessment, introduce ICP, disclose climate-related risks faced by the bank, provide more diversified green financial products and services, and improve customer caring. We enhance our influence as fund providers and managers, strengthen our awareness and mitigation strategies on climate change, improve climate resilience, and exert the positive influence of the financial industry to drive low-carbon transformation of the value chain for business partners and stakeholders, working towards the ultimate goal of achieving net-zero carbon emissions for the country.















 RELIABILITY Customers' number one trusted brand

## EXCHANGE Green pioneers in

environmental change



















Full engagement in social participation





A leader in corporate governance





- 1. With the "public welfare platform" as the core, we integrated the Group's resources, connected stakeholders, and used our financial functions to help solve social and environmental problems, becoming a solid partner of social welfare organizations and demonstrating social influence.
- 2. Using financial technology to promote products of financial inclusion, expand the accessibility and use of financial services, and enabled all customers to have reasonable access to financial services.



- 1. To provide quality services with a customer-centric approach, and to build "Yuanta" into a financial brand that customers can trust with confidence.
- 2. We are deeply engaged in the field of digital finance, using technology to introduce ESG factors, providing customers with a new experience in investment and financial management, strengthening the development of Internet and mobile applications, and providing convenient and smooth financial services.
- 3. Integrate the Group's resources to implement "Green Finance Action Plan 2.0" and provide diversified financial services, and focus on sustainability issues with our customers. Integrate the spirit of ESG into investment strategies and incorporate environmental and social risk assessment into the investment and financing selection process to guide and encourage clients to pay attention to green and social issues
- 4. We provide sound information security protection to create a reliable and trustworthy financial trading environment. We use intelligent and prospect technology to filter intelligence to ensure a sound information security system and layout, and strengthen information security.

- 1. To properly manage the risks associated with extreme weather events and the transition to a low-carbon economy, we identify and manage the risks of climate change by incorporating them into our
- operational decisions. 2. In the face of global warming and the resource depletion crisis, the Group is fully committed to responding to the trend of energy saving and carbon reduction and to carry out mitigation and adaptation actions to reduce the impact on the environment.
- 3. We support and encourage our suppliers to work together to implement corporate social responsibility, promote environmentally sustainable development, and practice the protection of basic human



- 1. Employees are a company's most important asset. We are committed to providing a friendly and excellent work environment by promoting physical and mental health programs and welfare measures that are better than the law requires
- 2. We provide employees with multi-functional education and training system and course activities, and strengthen employees' competitive advantage through performance evaluation mechanism to enhance talent retention rate and corporate competitiveness.
- 3. Encourage more people to commit to ESG corporate sustainability through a linkage between sustainability KPIs and long-term rewards. Create a quality work and career development environment for employees in order to bring together quality employees and create a competitive advantage.
- 4. Fully implement the Declaration on Human Rights Policy and introduce human rights due diligence and issue management in overseas subsidiaries. (By country)



- 1. Actively respond to the "Corporate Governance 3.0 Sustainable Development Roadmap" by improving the corporate governance structure, strengthening the functions and effectiveness of the board of directors, and enhancing information transparency to ensure shareholders' rights and interests and enhance sustainable corporate development.
- 2. Establishing an independent and comprehensive risk identification and management mechanism to manage various operational risks, enhance the quality of risk management, and ensure sustainable and sound business operations.
- 3. The implementation of relevant regulations can reduce operational risks and losses from significant penalties and facilitate the development of international business and expand the scale of operations.



Yuanta Financial Holdings Sustainable Development Strategies: https://www.yuanta.com/TW/ESG/Sustainable-Development-Strategy

## **Appendix**

## Reference and Data

- Recommendations of the Task Force on Climate-related Financial Disclosures (Task Force on Climate-Related Financial Disclosures, 2017)
- 2. ESG Global: Heat map: Sectors with \$3.4 trillion in debt face heightened environmental credit risk(Moody's Investors Service, 2020)
- 3. The Working Group I contribution to the Sixth Assessment Report, Climate Change 2021: The Physical Science Basis(Intergovernmental Panel on Climate Change, 2020)
- 4. The Equator Principles: https://equator-principles.com/
- 5. Science Based Targets: https://sciencebasedtargets.org/
- 6. State and Trends of Carbon Pricing 2020 (World Bank, 2020)
- Partnership for Carbon Accounting Financials: https:// carbonaccountingfinancials.com/
- 8. The Global GHG Accounting and Reporting Standard for the Financial Industry(Partnership for Carbon Accounting Financials ,2020)
- 9. Financial Sector Science-based Targets Guidance(Science Based Targets, 2022)
- 10. Emerging Practices in Internal Carbon Pricing: A Practical Guide (WBCSD, 2015)
- 11. Taiwan Renewable Energy Certificate: https://www.trec.org.tw/
- 12. Power Purchase Agreement: https://www.taipower.com.tw/tc/download.aspx? mid=228&cid=477&cchk=7c40ad7d-8130-41c2-8b4e-49b75b3a6bc0
- 13. Principles for Sustainable Insurance: https://www.unepfi.org/psi/
- 14. Principles for Responsible Investment: https://www.unpri.org/
- 15. RE10X10: https://cloud.greentw.greenpeace.org/campaign-climate-re10x10
- 16. Carbon Disclosure Project: https://www.cdp.net/en/scores

- 17. Task Force on Climate-related Financial Disclosures: Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures(TCFD, 2021)
- 18. Plan for Conducting Climate Change Scenario Analysis by Domestic Banks(2022)
- 19. Climate-Related Risk Management Practices Handbook for Domestic Banks (The Bankers Association of the Republic of China & PwC Taiwan, 2022)
- 20. Supervisory Policy Manual, GS-1 Climate Risk Management(HKMA,2021): https://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/supervisory-policy-manual/GS-1.pdf

## Climate Policies, Reports and Publications of Yuanta Bank

- 1. Yuanta Bank E.S.G. (Environmental, Social, and Governance) Section: https://www.yuantabank.com.tw/bank/environmentalSustainability/list.do
- 2. Yuanta Bank Climate-related Financial Disclosures Report 2022(TCFD): https://www.yuantabank.com.tw/bank/tcfd/list.do
- 3. Yuanta Bank TCFD Report: https://www.yuantabank.com.tw/bank/tcfd/list. do
- 4. Yuanta Bank Stewardship section: https://www.yuantabank.com.tw/bank/companyGovernance/list5.do
- 5. Yuanta Bank Guidelines for Managing Equator Principles Financing Cases: https://www.yuantabank.com.tw/bank/companyGovernance/equatorPrinciples/list.do
- 6. Yuanta Bank Diamond Carbon Fortune: https://www.yuantabank.com.tw/bankwebIMG/event/Bank\_Act2022/greenacc/index.html

Guidelines for Disclosure of Climate-Related Financial Risks for Domestic Banks	Chapter
Governance	
1. The board of directors and senior management should incorporate climate risk factors into the bank's risk appetite, strategy, and business plans, including identifying and evaluating climate-related risks and opportunities and their impact on the bank's strategy and plans. At the same time, relevant international	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
agreement targets and national policy requirements should be considered to continuously and effectively monitor the bank's management and disclosure of climate risk.	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities
	2.1 Identification and Measurement of Climate Risks and Opportunities
2. The board of directors should approve a climate risk management policy and use it to guide, supervise, and manage the bank's exposure to climate risk, ensuring that the bank's qualitative and quantitative measures are in line with its risk appetite. The board of directors should recognize the potential impact of climate risk on the bank's finances and ultimately be responsible for ensuring the establishment and maintenance of an appropriate and effective climate risk management system.	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
3. Senior management should develop policies, management systems, and monitoring indicators for climate risk management, regularly review their effectiveness and implementation, continuously monitor the bank's exposure to climate risk, and examine whether the bank's coping strategies in different climate scenarios are resilient. Adequate human resources should also be allocated and appropriate training provided.	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities
4. The bank should regularly report climate risk-related information to the board of directors to facilitate consideration in the formulation of strategic planning and monitoring of business operations. During the process of monitoring climate risk, if significant anomalies or special circumstances are found, appropriate	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
measures should be taken in accordance with internal regulations and reported to the board of directors.	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities
Strategy	
1. When assessing the impact of climate risks, banks should explain how identified climate risks will affect their operations, strategies, products, and financial planning over different periods (short, medium, and long-term). In particular, banks should provide detailed information on the current status and impact of carbon-related assets, including exposure to carbon-intensive industries and industries vulnerable to climate change. Banks should evaluate the impact of climate risks at least in the short term (within the bank's business planning horizon) and long term (beyond the current asset portfolio's maturity and lasting at least several decades).	2.1 Identification and Measurement of Climate Risks and Opportunities

Guidelines for Disclosure of Climate-Related Financial Risks for Domestic Banks	Chapter
2. When formulating business, strategy, and financial plans, banks should take into account the impact of climate risks, including factors such as the degree of impact and frequency of occurrence, and develop	2.2 Development of Climate Strategy
corresponding strategies and measures.	2.3 Moving Towards Low-Carbon Operations
	2.4 Moving Towards Low-Carbon Transition
3. Banks can use different scenarios of climate change to understand the appropriateness of their climate risk-related strategies' resilience and adaptability, and adjust their strategies based on the results of climate change scenario testing.	3.2 Financial Quantitative Analysis of Climate Change
Risk Management	
<ol> <li>Banks should establish a three-line internal control framework and clearly define the climate risk management responsibilities of each line of defense:</li> <li>The first line of defense should assess climate risks, especially for industries that are highly vulnerable to such risks, when conducting relevant business activities.</li> <li>The risk management unit in the second line of defense should effectively monitor the implementation of climate risk management by the first line of defense, while the compliance unit should ensure that all operational activities comply with legal and regulatory requirements.</li> <li>The third line of defense should assess the effectiveness of the first and second lines of defense in monitoring climate risks and provide timely recommendations for improvement.</li> </ol>	3.1 Identification, Measurement, and Management Processes
2. Banks should develop climate risk assessment methods and processes based on their clients or asset portfolios to identify and evaluate the level of climate risks, prioritize risks, and define significant climate risks. Climate risk assessment methods should take into account relevant laws (such as the Greenhouse Gas Reduction and Management Act) and internationally recognized standards.	3.1 Identification, Measurement, and Management Processes
3. Banks should identify the correlation between climate risks and other risks, such as credit risk, market risk, operational risk, and liquidity risk.	3.1 Identification, Measurement, and Management Processes
4. Banks should adopt differentiated risk management measures based on the level of identified or evaluated climate risks or risk ranking. For businesses or transactions with high climate risks, approval from senior management should be obtained and relevant records should be retained.	3.1 Identification, Measurement, and Management Processes

Guidelines for Disclosure of Climate-Related Financial Risks for Domestic Banks	Chapter
5. When developing management measures for clients with high climate risks, banks should consider factors such as the significance of climate risks, the client's willingness and ability to improve their own climate risks, and alternative measures to mitigate the bank's exposure. For clients who cannot effectively manage their own climate risks, banks may take responsive measures, such as reflecting additional risk costs in risk pricing, setting exposure limits for high-risk loans, or re-evaluating their relationship with the client.	3.2 Financial Quantitative Analysis of Climate Change
6. When a bank formulates management measures for assets with high climate risk, the factors to be considered should include the significance of such climate risk, the bank's ability to manage the assets, and whether there are alternative measures that can mitigate the bank's exposure to extreme risk. If a bank fails to effectively manage assets with climate risk, it may adopt responsive measures such as transferring the risk losses, setting investment limits for assets with high climate risk, controlling the concentration of high-risk areas or industries, among others.	3.2 Financial Quantitative Analysis of Climate Change
7. Banks should conduct scenario analysis and stress testing on physical and transition risks to assess the impact of climate-related risks on their businesses and explore their resilience to such risks under different climate scenarios. Banks should select relevant and reasonable scenarios and explain how climate risks	3.2 Financial Quantitative Analysis of Climate Change
can be transmitted and impact their financial risks, taking into account the uncertainty and long-term prospects of climate change. The selected scenarios should include forward-looking information to avoid underestimating potential future risks by relying solely on historical data.	3.3 Climate Change Scenario Analysis
8. When reviewing their climate risk management policies and practices, banks should refer to the results of scenario analysis and stress testing. Banks should also keep records of critical assumptions or variable-	3.2 Financial Quantitative Analysis of Climate Change
related documents from scenario analysis and stress testing for at least 5 years, including scenario selection, reasonableness assumptions, evaluation results, actions to be taken, and actual actions taken to address risks, among others.	3.3 Climate Change Scenario Analysis
Metrics and Targets	
1. Banks should use representative historical data to analyze, measure, and manage key indicators of climate risk. These indicators should take into account the length of time affected by climate risk (such as short, medium, or long-term), as well as the differences in factors such as industry, geographic location, and credit ratings.	4.1 Metrics and Targets for Low-Carbon Operations Management

Guidelines for Disclosure of Climate-Related Financial Risks for Domestic Banks	Chapter
2. Banks should prioritize the use of domestically required greenhouse gas emissions calculation methods for disclosure, followed by internationally accepted methods. If the calculation method used by the bank is not one of the above, the reasons and differences should be explained.	4.1 Metrics and Targets for Low-Carbon Operations Management
one of the above, the reasons and amerences should be explained.	4.2 Metrics and Targets for Low-Carbon Transition Management
3. Banks should set goals for each key indicator based on the established criteria, and regularly monitor progress towards these goals. The progress of each indicator should be appropriately evaluated, and if progress is falling behind, relevant explanations and improvement measures should be provided.	4.1 Metrics and Targets for Low-Carbon Operations Management
progress is taking bening, relevant explanations and improvement measures should be provided.	4.2 Metrics and Targets for Low-Carbon Transition Management

Note: For detailed content of the regulations, please refer to[19]

## HKMA GS-1 Disclosure Requirements Comparison Table

HKMA GS-1	Chapter	HKMA GS-1	Chapter
Governance		3.2.1	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
3.1.1	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities	3.2.2	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
3.1.2	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities	3.2.3	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities
3.1.2	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities	3.2.4	3.1 Identification, Measurement, and Management Processes
3.1.3	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities	3.2.5	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
3.1.4	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities	3.2.6	3.1 Identification, Measurement, and Management Processes
3.1.5	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities	3.2.7	3.1 Identification, Measurement, and Management Processes

HKMA GS-1	Chapter
Strategy	
4.1.1	2.1 Identification and Measurement of Climate Risks and Opportunities
4.1.2	2.2 Development of Climate Strategy
4.1.3	2.2.3 Low-carbon Operations
7.1.5	2.2.4 Low-carbon Transitions
4.2.1	2.2 Development of Climate Strategy
4.2.2	2.1 Identification and Measurement of Climate Risks and Opportunities
4.2.3	2.1 Identification and Measurement of Climate Risks and Opportunities
4.2.4	2.1 Identification and Measurement of Climate Risks and Opportunities
4.2.5	2.1 Identification and Measurement of Climate Risks and Opportunities
4.2.6	2.2.5 Communication and Initiatives
4.2.7	2.1 Identification and Measurement of Climate Risks and Opportunities
4.2.8	2.1 Identification and Measurement of Climate Risks and Opportunities
4.3.1	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
4.3.1	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities

HKMA GS-1	Chapter	
4.3.2	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities	
4.3.3	3.1 Identification, Measurement, and Management Processes	
4.3.4	2.2.4 Low-carbon Transitions	
4.3.5	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities	
4.3.6	2.2.3 Low-carbon Operations	
4.3.7	3.2 Financial Quantitative Analysis of Climate Change	
4.3.8	2.1 Identification and Measurement of Climate Risks and Opportunities	
	2.2 Development of Climate Strategy	
Risk Management		
5.1.1	3.1 Identification, Measurement, and Management Processes	
5.1.2	3.1 Identification, Measurement, and Management Processes	
5.1.3	3.1 Identification, Measurement, and Management Processes	
5.2.1	3.1 Identification, Measurement, and Management Processes	
5.2.2	3.1 Identification, Measurement, and Management Processes	
5.2.3	3.2 Financial Quantitative Analysis of Climate Change	
5.2.4	3.2 Financial Quantitative Analysis of Climate Change	
5.2.5	3.2 Financial Quantitative Analysis of Climate Change	

HKMA GS-1	Chapter
5.3.1	3.2 Financial Quantitative Analysis of Climate Change
5.3.2	3.2 Financial Quantitative Analysis of Climate Change
5.3.3	3.3 Climate Change Scenario Analysis
5.3.4	3.2 Financial Quantitative Analysis of Climate Change
5.5.4	3.3 Climate Change Scenario Analysis
5.3.5	3.2 Financial Quantitative Analysis of Climate Change
5.3.6	3.2 Financial Quantitative Analysis of Climate Change
5.3.7	3.2 Financial Quantitative Analysis of Climate Change
5.3.8	3.2 Financial Quantitative Analysis of Climate Change
F 2 0	3.2 Financial Quantitative Analysis of Climate Change
5.3.9	3.3 Climate Change Scenario Analysis
5.4.1	3.2 Financial Quantitative Analysis of Climate Change
E 4 2	4.1 Metrics and Targets for Low-Carbon Operations Management
5.4.2	4.2 Metrics and Targets for Low-Carbon Transition Management
5.4.3	3.2 Financial Quantitative Analysis of Climate Change
5.4.4	4.1 Metrics and Targets for Low-Carbon Operations Management
3.4.4	4.2 Metrics and Targets for Low-Carbon Transition Management
5.4.5	3.2 Financial Quantitative Analysis of Climate Change
5.4.6	4.1 Metrics and Targets for Low-Carbon Operations Management
5.4.7	4.2 Metrics and Targets for Low-Carbon Transition Management

HKMA GS-1	Chapter
5.4.8	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities
5.4.9	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities
F 4 10	1.1 Roles and Responsibilities - Board Oversight of Climate- Related Risks and Opportunities
5.4.10	1.2 Roles and Responsibilities - Management Oversight of Climate-Related Risks and Opportunities
5.5.1	3.1 Identification, Measurement, and Management Processes
5.5.2	3.1 Identification, Measurement, and Management Processes
5.5.3	3.1 Identification, Measurement, and Management Processes
5.5.4	3.2 Financial Quantitative Analysis of Climate Change
5.5.5	3.2 Financial Quantitative Analysis of Climate Change
5.5.6	3.2 Financial Quantitative Analysis of Climate Change

Note: For detailed content of the regulations, please refer to [20]

