



HTC 2023 TCFD Report

2023

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Editorial Principle

Welcome to HTC's 2nd Climate-related Financial Disclosures (TCFD) report, which is intended to reflect the company's risk management and strategic planning on climate change, and demonstrate how we are addressing these challenges through innovation and continuous improvement. In addition, we follow international best practices and guidelines to ensure that the content of the report not only meets TCFD international standards, but also meets the expectations and needs of stakeholders. It is hoped that this report will provide a trustworthy reference for all readers and promote in-depth understanding and dialogue on climate issues.

Report Basis

HTC refers to the framework of the "Task Force on Climate-Related Financial Disclosures (TCFD)" guidelines issued by the International Financial Stability Board (FSB), analyzes the transition and physical risks and opportunities that may be faced in the future, and actively In response to relevant impacts, four core elements are disclosed according to the framework of its TCFD: "Governance", "Strategy", "Risk Management", "Indicators and Objectives", establish a risk framework, and identify major risks and opportunities that may be caused to operations. And put forward its relevant coping strategies, and prepare this TCFD report based on this, to achieve the purpose of communicating with stakeholders.

HTC ESG Website

HTC continues to update the content of the ESG website to provide stakeholders with the most real-time ESG information, please click the link to enter the HTC ESG website : <https://www.esg.htc.com>



Report Scope and Boundary

Global Operation Locations



HTC is headquartered in Taiwan. Driven by effective branding, HTC now has operations, sales, and services covering most areas in the world, including Europe, the Americas and Asia. With the coordination and integration of our operational HQ, HTC provides customers with a network of professional services. Offices have been established in all the major markets of the world, including the USA, Canada, the UK, Germany, France, India, Australia, China, Japan, Hong Kong and UAE.

The scope of disclosure in this report includes the global operations of HTC and its subsidiaries, but the physical risk consideration is that the inventory is mainly stored in factories, so it is limited to the operation base in Taiwan.

Time Coverage of Disclosure

From 2022, HTC plans to publish the TCFD report regularly every year, and the period of assessment information used in this report is from January 1, 2023 to December 31, 2023. This report has passed the external assessment of SGS-Taiwan and obtained the assessment statement of "TCFD Performance Assessment".

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Preface

According to the Global Risks Report released annually by the World Economic Forum (hereinafter referred to as WEF) since 2005, the global risk trend has changed from economic risks to environmental risks. Among them, extreme weather and failure of climate action have been identified as medium- and long-term focus; and since the Paris Agreement (Paris Agreement) set the global temperature rise to be controlled at 1.5°C, governments of various countries have successively announced net zero goals and actively formulated regulations to strengthen the strength of climate change response. How to cope with the impact of climate change has become a topic that the world needs to face together.

HTC is aware of the impact of climate change on corporate operations, and will introduce the risk management method recommended by TCFD in 2022 to assess and manage climate change-related risks and opportunities, strengthen the company's climate change governance system and mitigate the threats brought by climate change. To achieve the purpose of sustainable operation of the company.

When assessing the impact of climate-related risks and opportunities on corporate operations, HTC leverages our expertise in mobile technology and our unremitting efforts in product innovation to weave elements of climate change into our VIVE Reality vision and continue to serve the corporate world and society to provide a complete solution. Create richer life experiences by integrating advanced augmentation mobility technology expertise.

HTC provides high-quality hardware, software, platforms and services to customers in various fields, including education, art, entertainment and healthcare, with innovative technological strengths that break through spatial distance. In particular, private and business travel continues to be restricted due to the epidemic and has become the norm in life. Many industries and organizations have begun to introduce various virtual reality applications that are not limited by space and distance, making business processes smoother and increasing consumers' resilience in the face of climate change. . HTC exerts its corporate influence and actively acts as a leader in net zero emissions. With reference to the SBTi scientific reduction path, it sets the target and path of corporate net zero emissions, and cooperates with the establishment of a carbon management platform to examine possible environmental impacts during the operation process. Integrate sustainability-related information so that HTC can gain insight into opportunities when facing sustainability-related decisions.

Climate Governance _____

Climate Change Governance Framework

HTC's climate change governance and management structure is the final decision-making and review work of the board of directors. It has an ESG committee responsible for the implementation of issues and resolutions related to climate change management, and the ESG office is responsible for the identification and assessment of climate change risks and opportunities. . At the beginning of 2022, HTC renamed the original CSR committee to the ESG committee. Chairwoman Cher Wang serves as the chairman of the committee, and senior vice president Madeline Chen appointed as the Chief Sustainability Officer. The ESG Office was established as a full-time operating unit responsible for planning and guiding the company's "Sustainable Development (ESG)" related implementation operations, and also regularly reported the trend, impact and implementation performance of related issues to the ESG Committee. Responsibilities related to climate change are described as follows:

- Board of Directors :

- (1) The board of directors is the highest decision-making unit of HTC's climate change risk management, responsible for reviewing HTC's overall climate change management policies and major resolutions, and supervising the effective operation of the climate change management mechanism ;
- (2) Make final decisions on HTC's annual budget, business plans, and major capital expenditures related to climate change-related risks and opportunities.

- Audit Committee :

- (1) Audit the risks and opportunities related to HTC's climate change, and include them in the annual budget, business plan, and major capital expenditure proposals °

- ESG Committee :

- (1) Report the assessment results and work progress of climate risks and opportunities to the board of directors every year ;
- (2) Responsible for the implementation of climate change management policies and major resolutions reviewed by the board of directors, and set up a ESG office as a full-time executive unit under it.

- ESG Office :

- (1) Regularly track information related to the development trend of international climate change, and enhance the company's colleagues' awareness of global risk trends and climate change ;
- (2) Responsible for identifying and assessing the risks and opportunities of climate change, and regularly coordinating climate change discussion meetings, convening the risk management team to identify the physical risks, transition risks and opportunities of climate change, and proposing corresponding improvement measures and regularly tracking the implementation status and goals, and continue to strengthen climate risk and opportunity management.

- TCFD Risk Management Group :

- (1) Composed of designated members of the ESG Committee, responsible for identifying and assessing the risks and opportunities of climate change, identifying the physical risks, transition risks and opportunities of climate change, and proposing corresponding improvement countermeasures and regularly reporting the implementation status and goals.

Management Responsibility

Led by the Chief sustainability officer, the ESG Committee is responsible for implementing climate change management policies and major resolutions deliberated by the Board of Directors, integrating resources and progress of climate actions in different departments, and comprehensively evaluating climate change risks alongside other corporate risks. Several work groups have been set up under the committee to respond to ESG topics across multiple areas and collect sustainable development topics from each department to continually promote corporate social responsibility with the aim of implementing corporate sustainable management with equal consideration across the economy, environment, and society.

With a clear organization and division of labor, relevant departments are involved in management actions through cross-departmental meetings, thereby driving the overall sustainable development and innovation of HTC, and ensuring that relevant policies and measures are incorporated into the company's daily operations. The TCFD risk management team is established by designated members of the ESG Committee to participate in the project. The ESG Office is established under the Committee to continuously monitor and review the progress of various climate change-related measures. Regularly adjust the climate risk assessment and analysis results in the same industry, and report the above actions to the Audit Committee/ Board of directors through the ESG Committee.

The ESG Office is responsible for the company's overall "Greenhouse Gas Inventory and Verification Scheduling", and reported to the Board of Directors that "the parent company already completed greenhouse gas inventory" in April 2022. Since the first quarter of 2023, the ESG Office reported the scheduling of parent companies and subsidiaries, and submits the implementation progress to the Board of Directors for control on a quarterly basis. HTC has established a Climate Change Management Policy which was submitted to the Board of Directors for deliberation and implementation in May 2023, with the objective of realizing the goal of corporate sustainable management.

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Climate Change Risk Management Organizational Chart



Risk Management

Risk Management Process

In order to strengthen corporate governance, promote stable operation and sustainable development, HTC has formulated relevant "risk management policy" as the criteria for risk management according to various types of risks, and has set up a full-time unit to be responsible for the company's related risk management and risk measurement execution operations. To establish a sound risk management mechanism. The ESG Office is responsible for the company's climate change and ESG-related risk management and coordinating the TCFD risk management team to carry out risk measurement and execution operations. The risk management organizational structure takes the board of directors as the highest decision-making unit for risk management, and has an ESG committee under it, which is responsible for reviewing risk management policies and reviewing Management report on major risk issues.

When identifying risks, HTC conducts qualitative or quantitative management of various risks by analyzing its operating environment and covering various businesses and operating activities. After identifying the risks it may face, HTC will formulate appropriate measurement methods according to different risk types as the basis for risk management. Risk measurement refers to the use of various information to determine the possibility of occurrence or non-occurrence of risk events, and to study and judge the impact of the results on HTC. When conducting risk analysis, consider whether the current internal control can prevent risk events. Determine the risk level based on the risk analysis results, and provide the necessary information as the basis for risk assessment and risk response. After assessing and summarizing the risks, all responsible units formulate appropriate response measures to the risks they face and control the risks to an acceptable level. Each responsible unit monitors the risks of its business and proposes countermeasures, and provides the risk assessment form to the risk management team of the ESG committee, and the risk management team submits it to the ESG committee after compilation. The ESG committee measures and monitors the quality of overall risk management, and regularly submits risk assessment results and work progress to the board of directors.

HTC formulated the "Climate Change Management Policy" and "Climate Change Risk Management Procedures", and from 2022, according to the risk assessment mechanism recommended by TCFD, started the process of identifying climate change risk &

opportunities, completed the risk opportunity identification, and evaluated its financial impact, and then Establish response measures and key indicator targets. HTC defines the short, medium, and long-term time intervals of climate-related risks and opportunities, setting "2022-2025" as the short-term, "2026-2030" as the medium-term, and "2031-2050" as the long-term and based on this Carry out climate risk and opportunity assessment, in principle, re-identify and assess climate risk opportunities every two years. The types of climate risks include transition risks and physical risks, which are further divided into policies and regulations, technology, market, reputation, and immediate and long-term. Opportunities are grouped into categories such as resource efficiency, energy sources, products and services, markets, and organizational resilience. Participating units identified the company's operational transition and physical risks (10 items in total) and potential opportunities (8 items in total) that may be caused by climate change factors through workshops, and assessed Risks and Opportunity probability and impact degree, draw risk and opportunity matrix, and formulate relevant response measures for the top three risks and opportunities with high probability of occurrence and high impact.

Evaluation Criteria

Assessment Orientation	Risk	Opportunity
Likelihood of Occurrence	Risk past experience Risk future occurrence time The risk may occur in the future	Chance past experience Opportunity future time point Opportunity future possibility
Impact	Operational impact Reputation impact Personnel impact Advance warning Financial Impact Scale	Reputation impact Financial Impact Scale

Climate Change Risk and Opportunity Identification Process

No.	Process	Description
1	TCFD workshop	TCFD risk management team lists business-related climate change risks and opportunity factors by means of scenario simulation analysis and other methods and with reference to internal and external information
2	Collect identification results	The ESG Office is responsible for compiling the climate change risk and opportunity factors related to the business of each unit
3	TCFD Risk/Opportunity Matrix	Calculate the possibility and impact degree of TCFD risk/opportunity, and draw the TCFD risk/opportunity matrix
4	Develop countermeasures	Authorities and responsible units write major climate risk and opportunity response strategies, and calculate the cost of strategy implementation
5	Calculating Financial Impact	Calculate the financial impact of risks/opportunities and response costs by the responsible units
6	Develop indicators and goals	The corresponding indicators and targets are recommended by the responsible units to evaluate the implementation of relevant response measures
7	Policy Implementation	The ESG office regularly (quarterly) tracks the implementation status, and the ESG committee regularly reports to the board of directors as a reference for performance tracking

Scenario Analysis

HTC follows the TCFD guidelines and uses climate scenario analysis to effectively identify and assess the potential impact of climate-related risks on business performance, and formulate robust coping strategies based on the analysis results to strengthen HTC's resilience to climate change.

Risks and Opportunities	Physical Risk	Transition Risk Opportunity
Scenarios	IPCC Global Warming Scenarios in 6 th Scientific Assessment Report RCP 8.5 (or SSP5 8.5)	SBTi 1.5°C : Science-Based Target and Net-Zero Pathway NDC : Nationally Determined Expected Contribution of Taiwan
Contextual Content	Under the scenario of extremely high greenhouse gas emissions (SSP5-8.5), climate change will lead to intensified changes in future average temperature, extreme high temperature, annual total rainfall, annual maximum 1-day rainstorm intensity, annual maximum number of consecutive days without rainfall, and the proportion of strong typhoons. Possible operational impact on HTC and its value chain	When the global warming is controlled within 1.5°C, the risks arising from the low-carbon transformation faced by enterprises HTC sets a net-zero path that meets the requirements of SBT, sets reduction targets, and refers to the carbon price of NDC and IEA to calculate the financial impact of carbon tax on enterprises
Financial Impact	In extreme cases, it may result in an operating loss of 0.3% of consolidated operating income, an inventory loss of less than 3%, and an increase of operating expenses of less than 0.1%.	HTC's low-carbon design assesses 20%-50% increase in consolidated operating income, and 11% increase in operating costs of consolidated operating income

* Under different scenarios, HTC uses climate risks and opportunities that may have financial impacts on corporate operations. For details, please refer to 3.3 Financial Quantification - Risk

Physical Risk

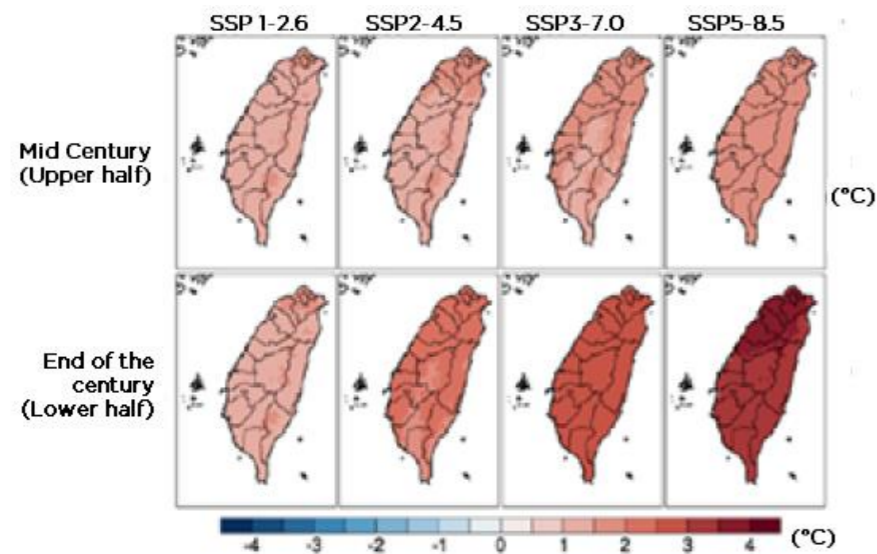
This year’s scenario analysis includes global operating bases, but the physical risk consideration inventory storage is mainly based on factories, and because HTC implements a local procurement policy, the amount of local procurement of raw materials accounts for 56.39%, and most of the factories of critical suppliers are located in Taiwan, so they are limited to Taiwan operation bases and use IPCC Global Warming Worst Scenario in the Sixth Scientific Assessment Report.

In order to make the scenario analysis more specific and comprehensive, it is planned that the Taiwan scenario analysis will use the tools provided by the National Center for Disaster Prevention and Rescue Technology (NCDR) and TCCiP (Climate Change Integration Service Platform) as a reference for the assessment of physical risk scenarios in the next year, and include the countries and regions where critical suppliers are located, through the World Resources Institute (WRI) and other climate scenario simulation tools to gradually extend scenario analysis to critical global suppliers.

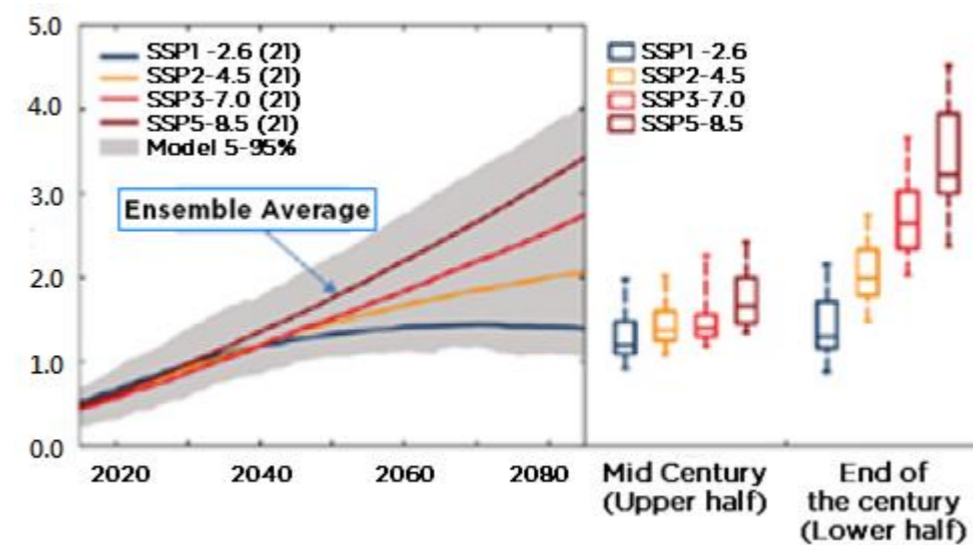
IPCC Global Warming Worst Scenario in the Sixth Scientific Assessment Report (SSP5-8.5)

1. It is estimated that the temperature in various parts of Taiwan will continue to rise in the future.
 - Under the worst scenario of global warming (SSP5-8.5), the average annual temperature may rise by more than 1.8°C and 3.4°C in the middle and end of the 21st century.

(a) Spatial distribution of estimated annual mean temperature in Taiwan in the future

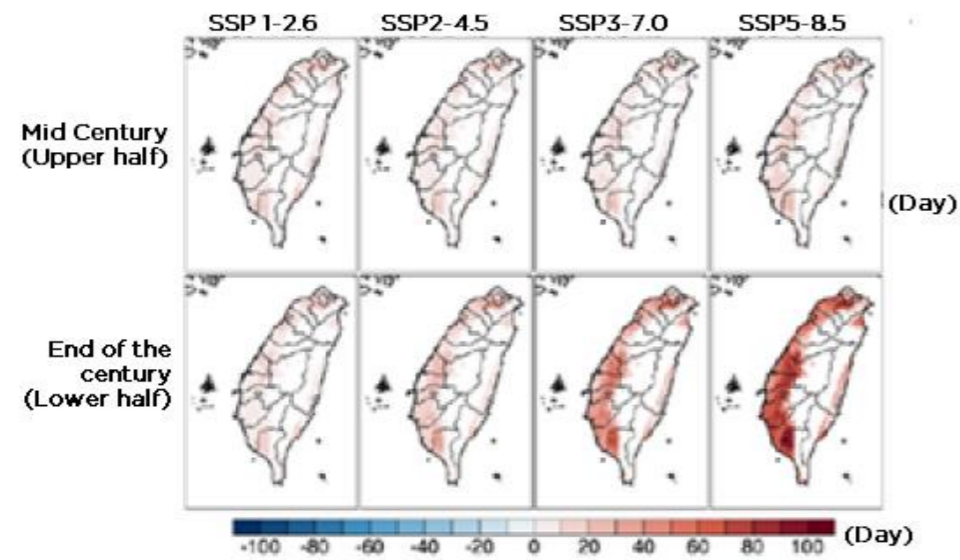


(b) Estimation of Taiwan’s annual average temperature in the future

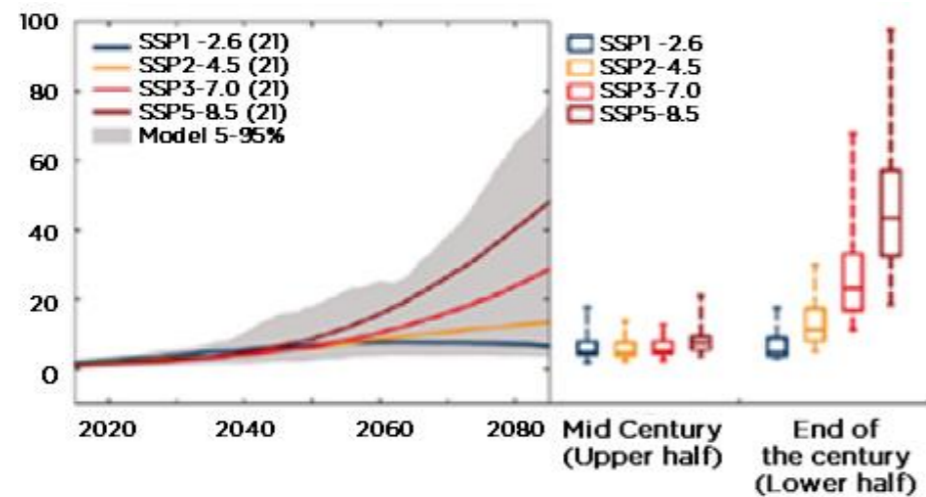


2. In future extreme high temperature events, the number of days with high temperature above 36°C will increase.
 - Under the worst scenario (SSP5-8.5), in the middle and end of the 21st century, the increase rate is about 8.5 days and 48.1 days.

(a) Estimated spatial distribution of Taiwan's high temperature days above 36°C in the future

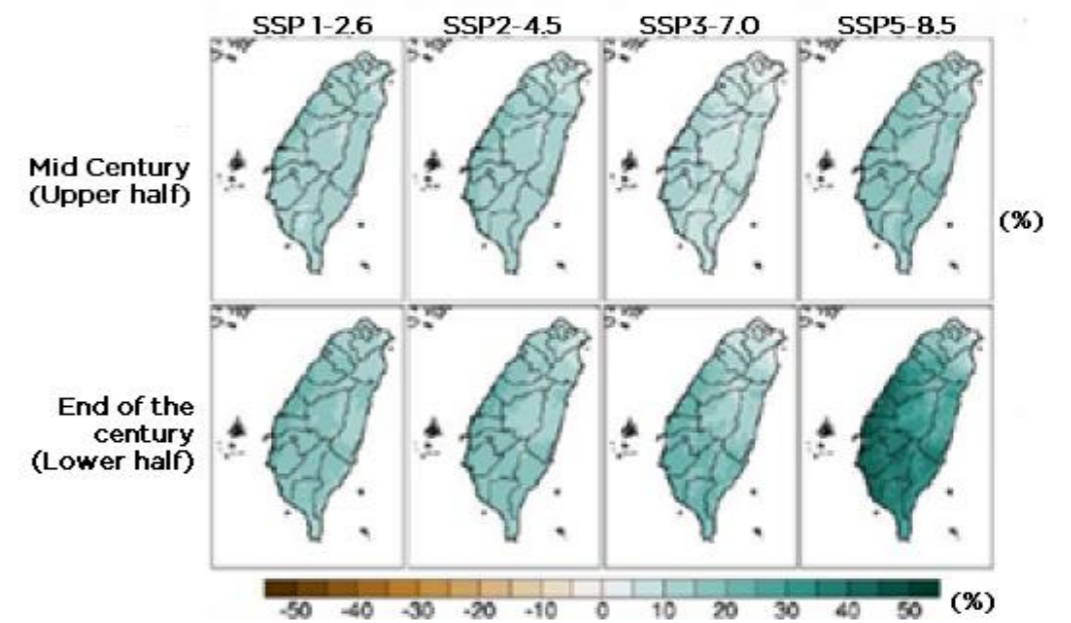


(b) The number of days with high temperature above 36°C in Taiwan is estimated in the future

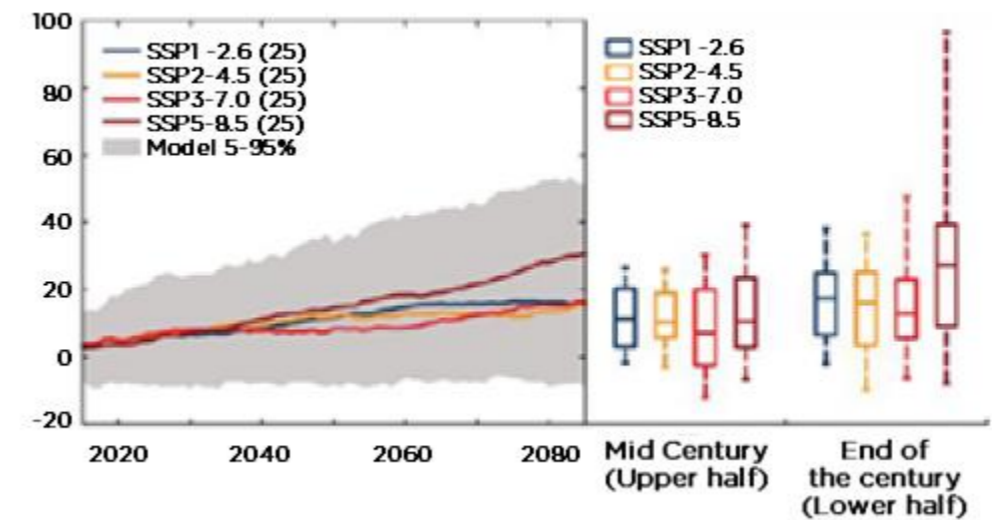


3. It is estimated that the total annual rainfall in Taiwan will increase in the future.
 - Under the worst scenario (SSP5-8.5), the average annual total rainfall in Taiwan will increase by about 15% and 31% in the middle and end of the 21st century.

(a) Spatial distribution of Taiwan's annual total rainfall estimated in the future

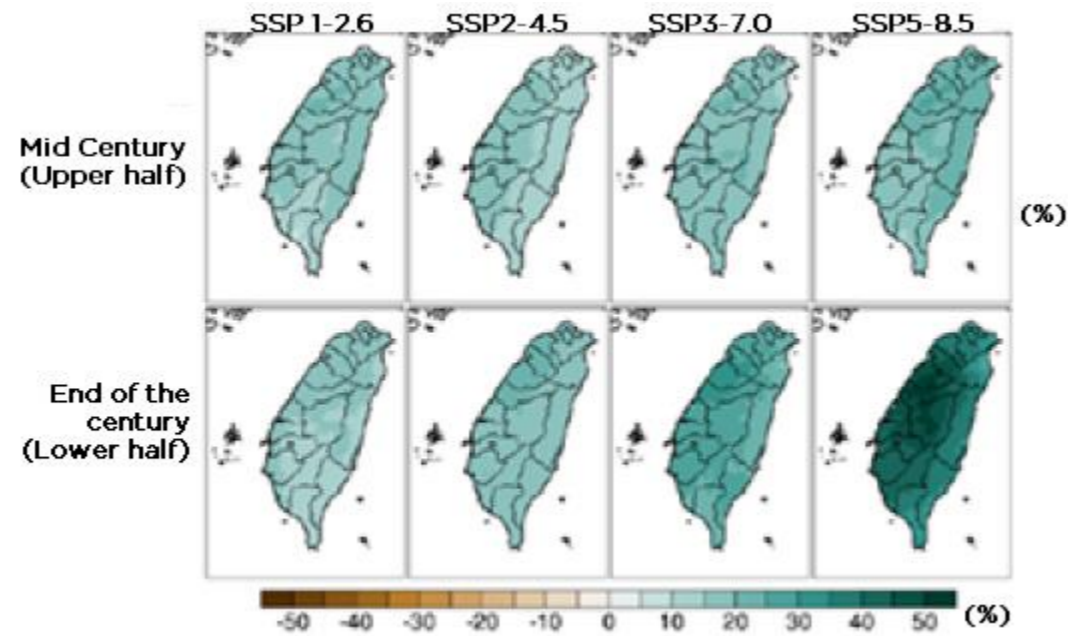


(b) The Future Estimation of Total Annual Rainfall in Taiwan

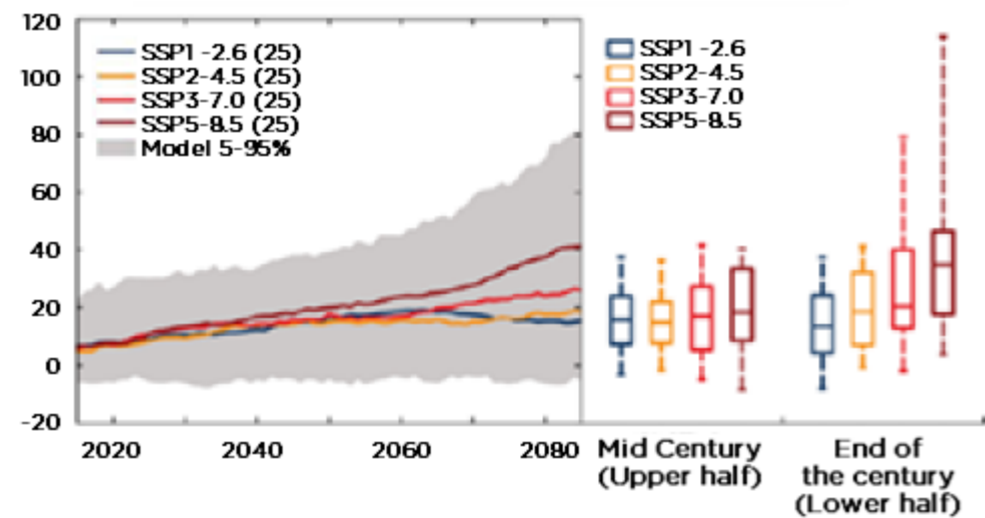


4. The intensity of the annual maximum 1-day rainstorm in Taiwan tends to increase.
 - Under the worst scenario (SSP5-8.5), the average annual maximum 1-day rainstorm intensity increases by about 20% and 41.3% in the middle and late 21st century.

(a) Spatial distribution of estimated annual maximum 1-day heavy rain intensity in Taiwan in the future

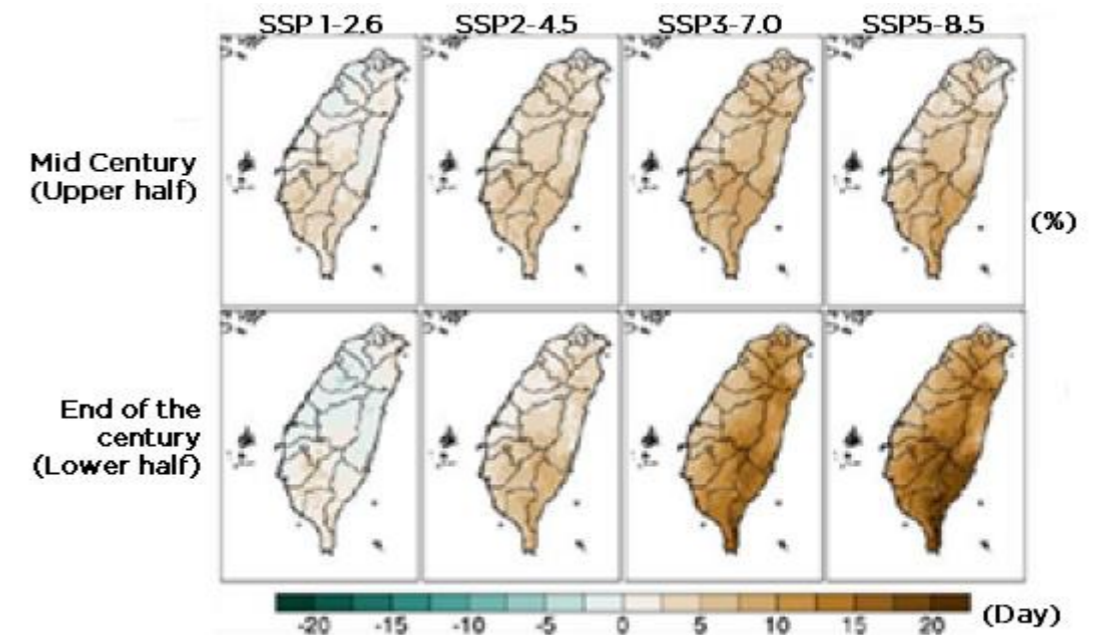


(b) Future Estimation of the Intensity of the annual maximum 1-day rainstorm in Taiwan

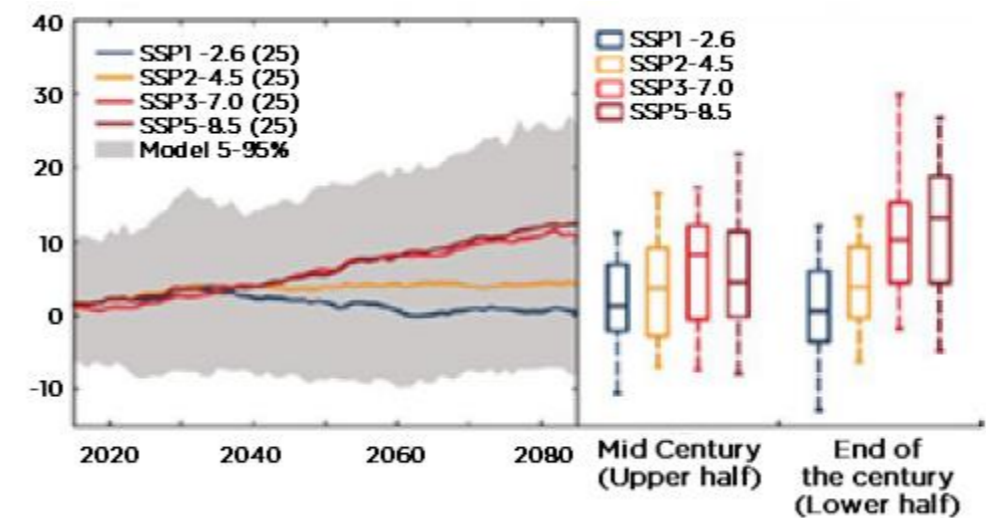


5. The annual maximum number of consecutive no-rainfall days in Taiwan tends to increase.
 - Under the worst scenario (SSP5-8.5), the average growth rate in the middle and end of the 21st century is about 5.5%, 12.4%.

(a) The estimated spatial distribution of the annual maximum continuous rainless days in Taiwan

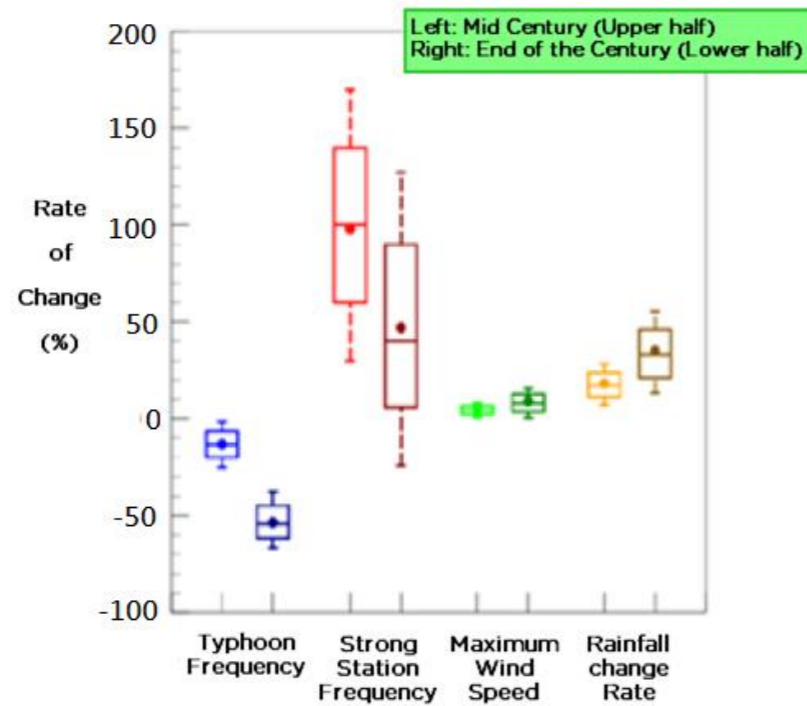


(b) The Future Estimation of the Maximum Continuous No Rain Days in Taiwan



6. Affecting the number of typhoons in Taiwan and the change rate of typhoon rainfall.

- Under the worst scenario (RCP8.5) in the middle and late 21st century, the number of typhoons affecting Taiwan will decrease by about 15% and 55%, the proportion of strong typhoons will increase by about 100% and 50%, and the typhoon rainfall change rate will increase by about 20% %, 35%.



Transition Risk and Opportunity

We consider the risks and opportunities that businesses face during the low-carbon transition when global warming is controlled within 1.5°C. To maintain consistency with the science-based reduction targets assessment, we primarily use the 1.5°C/WB2C scenario as the assumption for our company’s transition risks and opportunities. Based on the net-zero pathway set by HTC that meets SBT requirements and with reference to the carbon pricing from NDC and IEA, we calculate the financial impact of carbon taxes on businesses. This includes the following estimates for the years 2030 and 2050:

1. **Growth rate of key activities:** number of employees, number of shipments, and base area, and 2021 is used as a benchmark to calculate the annual estimates.
2. **HTC’s cost of purchasing green electricity:** including the estimation of green and gray power trends in various operating locations around the world.
3. **Potential external carbon costs:** At present, the carbon tariff policies of the US and the EU do not cover HTC’s industries and product categories, and the threshold for the collection of carbon fees in Taiwan is still higher than HTC’s current situation; Therefore, assuming that HTC will be regulated from 2040, the estimated carbon price and regulated amount at that time are calculated as the carbon credit hypothetical scenario.

Strategy

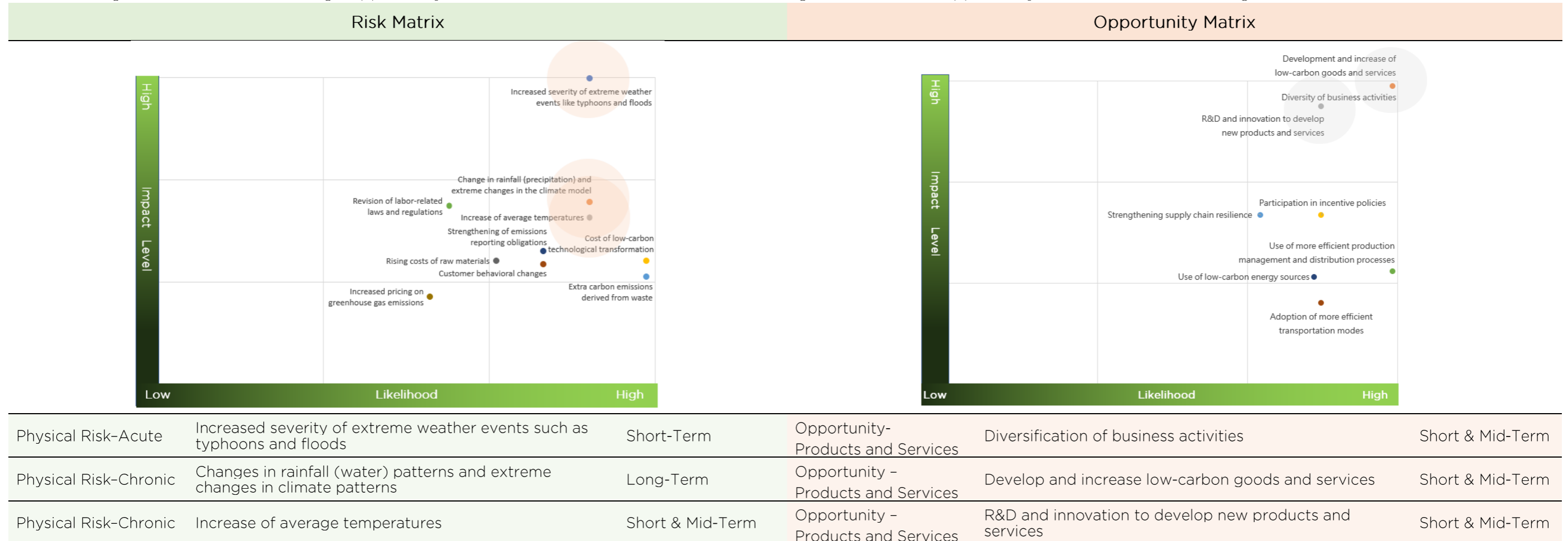
Risks and Opportunity

Adhering to HTC's corporate vision and sustainable responsibilities, HTC includes the risks related to climate change into the scope of assessment and tracking, and continues to pay attention to climate risks that will impact HTC's operations, including international regulations and extreme weather conditions, etc., and according to the climate change recommended by TCFD Climate change risk and opportunity assessment framework, climate change scenario setting and derived risks and opportunities, assess climate change risks and opportunities faced in the operation process, and further discuss relevant coping strategies and target targets for high-impact risks and opportunities, as a climate change specific management measures.

The specific identification process of risks and opportunities related to climate change is as follows:

A. Setting Climate Change Scenarios	B. Assess the impact of the operating environment	C. Identify climate risks and opportunities
Setting up two climate change scenarios : <ul style="list-style-type: none"> ● SSP5-8.5 : Warming up to 6°C ● SBTi 1.5°C, NDC : 1.5°C warming 	Assess the impact and impact of climate change on the operating environment and stakeholders	Establish a risk and opportunity matrix to identify climate change risks and opportunities

Three HTC high-risk factors and three high-opportunity factors were identified, and the climate change risk matrix and opportunity matrix are shown in the figure below:



Coping Strategy

For each climate change risk and opportunity, HTC considers the impact of products or services, supply chain or value chain, climate adaptation or mitigation activities, new R&D or investment, and the type of business operation or the location of business operation facilities. Conduct impact assessment, and carry out climate "mitigation" and climate "adaptation" coping strategies for possible shocks.

__Risk Response Strategy

Risk 1: Physical Risk(Acute)- Increased severity of extreme weather events such as typhoons and floods

Impact Content		Coping Strategy		
Impact Category	Description	Strategy	Time	Evaluate benefits
Product or Service	<ul style="list-style-type: none"> • Damage to production base equipment, resulting in interruption of production lines and suspension of services. • Power outage of IT facilities such as the information room, resulting in the failure of the operating system, resulting in interruption of operations. • The cloud application software encountered a power outage, resulting in service interruption, affecting continuous update services and maintenance. 	<ul style="list-style-type: none"> • Add automatic drainage system equipment and water level warning system. • Remote backup (or partial outsourcing) to support production and service. 	2023-2025	<ul style="list-style-type: none"> • Reduce personal injury and loss of machinery and equipment
	<ul style="list-style-type: none"> • Deterioration of inventory products, resulting in increased costs and additional maintenance costs. 	<ul style="list-style-type: none"> • Establish contingency plans for production and supply (off-site production and supply). 	2023-2025	<ul style="list-style-type: none"> • Lower costs
	<ul style="list-style-type: none"> • Decreased work efficiency, employee accidents may increase; it may also affect the manpower deployment of the manufacturing department due to the shutdown, resulting in operational disruption and reduced work efficiency. 	<ul style="list-style-type: none"> • Long-term readiness for equipment needs from working from home (WFH). • Add automated process equipment. 	2023-2025	<ul style="list-style-type: none"> • Reduce labor costs
Supply Chain or Value Chain	<ul style="list-style-type: none"> • Due to the loss of equipment assets in the supply chain, the procurement time is prolonged and the products cannot be supplied on schedule. 	<ul style="list-style-type: none"> • Carry out risk assessments for operations, warehousing sites, and suppliers located in areas with high flood risk or vulnerable to typhoons, and reduce the impact of disasters through insurance planning, decentralized procurement and other strategies. • Require suppliers to have safety stock. • Decentralized supply chain regions. 	2025-2050	<ul style="list-style-type: none"> • Reduced loss costs • Improving supply chain resilience • Reduce the probability of supply chain disconnection
	<ul style="list-style-type: none"> • Due to the extended delivery time of products or materials, the delivery time is delayed, resulting in damage to corporate image and loss of trust. 	<ul style="list-style-type: none"> • Monitor locations of suppliers, storage locations, and logistics routes that may be impacted for rapid response and preparation. • Instantly update the delivery status of raw materials and provide customers with the latest delivery progress. 	2023-2025	<ul style="list-style-type: none"> • Reduce downtime costs due to material breaks • Increased trust

Impact Content		Coping Strategy		
Impact Category	Description	Strategy	Time	Evaluate benefits
Climate adaptation or mitigation activities	<ul style="list-style-type: none"> Transportation carbon emissions are restricted, and logistics and transportation costs are rising. Levy carbon fee or carbon tax, increase operating cost. 	<ul style="list-style-type: none"> Find low-carbon transport pipelines and optimize delivery routes. 	2023-2050	<ul style="list-style-type: none"> Reduce carbon emissions
	<ul style="list-style-type: none"> Increased overhead and production costs to maintain roads and equipment. 	<ul style="list-style-type: none"> Regularly strengthen and repair the anti-flooding facilities every year. 	2022-2023	<ul style="list-style-type: none"> Reduced risk of climate impacts
R&D or investment	<ul style="list-style-type: none"> Reputational damage due to extended development schedules due to extreme weather requiring temporary or prolonged work from home, resulting in delayed publication schedules. If the number of occurrences increases, it may be necessary to invest in additional equipment to support design and development activities for working from home, resulting in extended product development time. 	<ul style="list-style-type: none"> Provide necessary hardware for employees to work from home. Schedule two two-week work-from-home sessions per quarter. 	2023-2025	<ul style="list-style-type: none"> Reduce impact on design development timelines and assess cost of additional equipment purchases
Type of business operation or Business operation facility location	<ul style="list-style-type: none"> Changes in marketing plan due to delay in delivery due to rain. 	<ul style="list-style-type: none"> Flexible adjustments to new product promotion plans, or matching accessories discounts. Plan for alternate materials to facilitate just-in-time refills on-line. 	2023-2025	<ul style="list-style-type: none"> Increase sales and competitiveness

Risk 2: Physical Risk (Chronic)- Changes in rainfall (water) patterns and extreme changes in climate patterns

Impact Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Product or Service	<ul style="list-style-type: none"> Lack of water for people’s livelihood caused shutdowns, affecting production capacity and delaying shipments. 	<ul style="list-style-type: none"> Deduce the business operation plan every year. Through the business operation plan, familiarize yourself with contingency measures such as heavy rainfall, shortage of parts and components caused by long-term non-rainfall, damage to transportation means, and limited manpower. 	2023-2025	<ul style="list-style-type: none"> Improve corporate resilience
Supply Chain or Value Chain	<ul style="list-style-type: none"> The factory is short of water and electricity, which affects the daily operation of production and shipment, resulting in a decline in revenue. 	<ul style="list-style-type: none"> Introduce low-energy manufacturing procedures or technologies. Contingency plans for suppliers’ production and supply (off-site production suppliers), increasing alternative materials and decentralizing supply chain areas. 	2023-2025	<ul style="list-style-type: none"> Reduce energy dependence Reduce dependence on a single resource
Climate adaptation or mitigation activities	<ul style="list-style-type: none"> Stakeholders are asking companies to be increasingly committed to climate adaptation or mitigation activities. 	<ul style="list-style-type: none"> Plan and execute the company’s net-zero emission reduction path and strategy. Integrate carbon reduction actions into corporate culture and link with employee performance. 	2023-2050	<ul style="list-style-type: none"> Improve reputation Targeted reduction of carbon emissions
	<ul style="list-style-type: none"> Increased overhead and production costs due to water scarcity adaptation measures. 	<ul style="list-style-type: none"> Find new water vendors and storage locations. 	2023-2025	<ul style="list-style-type: none"> Lower costs Improve operational resilience
R&D or investment	<ul style="list-style-type: none"> The risk of uncertainty in the supply chain has increased, resulting in delays in the company’s new product development progress and increased production costs. Unable to meet customer needs and expectations, affecting brand image and reputation. 	<ul style="list-style-type: none"> Select domestic material suppliers of the same quality and develop alternative materials. 	2025-2050	<ul style="list-style-type: none"> Reduce single resource dependency Improved coping capacity
Type of business operation or Business operation facility location	<ul style="list-style-type: none"> The extreme high temperature of the production base caused an increase in electricity consumption and increased production costs. The temperature of the computer room and equipment is too high, and the probability of thermal hazards for personnel work is greatly increased. 	<ul style="list-style-type: none"> Incorporate work hazards caused by climate change into safety regulations and conduct hazard notification. 	2023-2025	<ul style="list-style-type: none"> Improved coping capacity

Risk 3: Physical Risk (Chronic)- Increase of average temperatures

Impact Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Product or Service	<ul style="list-style-type: none"> Stakeholders are concerned about HTC’s net-zero initiatives for products and services. HTC needs to invest more resources in greenhouse gas emission management and reduction. Decreased work efficiency and customer satisfaction: due to power shortages or outages caused by high temperatures, as well as manpower impacts from extreme temperatures, will directly affect raw material delivery times, production plans, and distribution services, causing changes in customer sales plans and a decline in consumer satisfaction. 	<ul style="list-style-type: none"> Integrate the net-zero pathway for climate change into the overall strategy and apply to join SBTi. Establish contingency plans for production and supply (alternative production sites). Increase automated process equipment and smart manufacturing to reduce carbon emissions. 	2023-2050	<ul style="list-style-type: none"> Lower costs Reduce carbon emissions Improve equipment performance
	<ul style="list-style-type: none"> Water shortages affecting daily life causing work stoppages, impacting production capacity and delaying shipments. 	<ul style="list-style-type: none"> Annually simulate the corporate operation plan to become familiar with contingency measures for component shortages, damaged transportation tools, and manpower limitations caused by heavy rains or prolonged droughts. 	2022-2025	<ul style="list-style-type: none"> Improve corporate resilience
Supply Chain or Value Chain	<ul style="list-style-type: none"> Rising costs: higher temperatures will impact the cost of raw materials, production, and distribution, such as increased electricity prices, leading to higher operating costs. Power restrictions could prevent data centers or production lines from operating, affecting company operations and downstream suppliers’ shipments, causing extended procurement and shipment times. 	<ul style="list-style-type: none"> Negotiate with suppliers to consolidate and promote unnecessary packaging, and select suppliers with carbon reduction plans. Plan shipping routes and use packing space efficiently. 	2025-2050	<ul style="list-style-type: none"> Lower expenses Reduce transportation and production carbon emissions Control upstream carbon emissions
	<ul style="list-style-type: none"> Customers demand net-zero commitments, and HTC needs to be more proactive in carbon reduction efforts; suppliers responding to the zero-carbon trend will see increased management fees and production costs, leading to higher product prices. Influenced by international trends, such as the imposition of carbon tariffs.. 	<ul style="list-style-type: none"> Greenhouse gas emission inventory. Promote life cycle and low-carbon product concepts and introduce them into design concepts. Conduct product carbon footprint assessments and energy-saving designs to reduce or avoid carbon border taxes. Strengthen supply chain negotiations to align with HTC’s overall net-zero pathway goals. 	2023-2025	<ul style="list-style-type: none"> Reduce or avoid the likelihood of being charged a carbon border tax Improving supply chain resilience

Impact Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Climate adaptation or mitigation activities	<ul style="list-style-type: none"> Implement internal energy use control to actively achieve greenhouse gas emission reduction targets. 	<ul style="list-style-type: none"> Establish a sustainable management platform. Increase green building designs to mitigate the impact of high temperatures through building renovations. Invest in solar power generation equipment and power storage systems to increase the use of green electricity. Internal carbon pricing—concretize carbon costs/fees through internal carbon pricing and integrate carbon costs into daily operations. 	2023-2025	<ul style="list-style-type: none"> Reduce carbon emissions
	<ul style="list-style-type: none"> International concern over the rise in average temperatures is increasing rapidly, gradually shifting from encouraging carbon reduction to mandating it through regulations. Failure to respond in a timely manner may result in unnecessary expenses. 	<ul style="list-style-type: none"> Continue to pay attention to government regulations, international and industrial trends, and establish corresponding internal response and adjustment mechanisms. Plan and execute the company's net-zero emission reduction path and strategy. 	2023-2050	<ul style="list-style-type: none"> Lower costs Improve corporate resilience
R&D or investment	<ul style="list-style-type: none"> Increase online R&D and design development activities. Integrate low-carbon concepts into R&D design, requiring additional manpower and R&D expenses to find new suppliers, new materials, and new process flows to design low-carbon products. 	<ul style="list-style-type: none"> Establish remote access mechanisms and online collaboration systems. Select low-carbon or recyclable materials during the development stage to increase the material recycling rate. 	2025-2050	<ul style="list-style-type: none"> Reduce commuting or transportation risks for personnel Reduce the product carbon footprint
	<ul style="list-style-type: none"> Invest in low-carbon energy and actively use more low-carbon energy. 	<ul style="list-style-type: none"> Participate in the green energy industry and develop related value chains. 	2023-2025	<ul style="list-style-type: none"> Lower carbon emission risks and associated costs
	<ul style="list-style-type: none"> Financial institutions will increase the risk of asset value impairment for companies, such as revenue reduction and asset revaluation caused by low-carbon transition and new product R&D due to climate change, and adjust investment credit limits. 	<ul style="list-style-type: none"> Implement low-carbon transition plans by establishing a carbon management platform and increasing low-carbon energy equipment. Set up carbon reduction R&D projects to boost financial institutions' confidence in green and sustainable investments. 	2025-2030	<ul style="list-style-type: none"> Improve reputation
Type of business operation or Business operation facility location	<ul style="list-style-type: none"> Stakeholders are concerned about net-zero commitments, leading to increased expenditures to meet stakeholder expectations. Increased electricity usage at production sites, raising production costs. Overheating in server rooms and equipment, significantly increasing the risk of heat hazards for personnel. 	<ul style="list-style-type: none"> Optimize energy management systems. Incorporate climate change-induced work hazard factors into safety regulations and conduct hazard notifications. 	2023-2025	<ul style="list-style-type: none"> Reduce electricity consumption/ carbon emissions Improve reputation
	<ul style="list-style-type: none"> Reduce carbon emissions in daily operations and increase energy-saving equipment, but the replacement of machinery may affect production line expansion. Increase in employee commuting and business travel carbon emissions, leading to higher expenses. 	<ul style="list-style-type: none"> Enhance the use of video conferencing and virtual product demonstrations. Plan to incorporate ESG awareness into new employee training in Taiwan and encourage practical actions to reduce carbon emissions. 	2025-2050	<ul style="list-style-type: none"> Reduce carbon emissions Improve reputation

Opportunity Coping Strategy

Opp 1: Products and Services: Diversification of business activities

Opportunity Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Product or Service	<ul style="list-style-type: none"> Research and develop low-carbon products and expand the market with diversified sales and operation methods, and establish consumers' image of HTC brand as being friendly to the environment. Continue to research and develop products that maintain remote business operations, such as virtual platforms, Mars CamTrack, etc., to effectively reduce energy and resource consumption, enhance market competitiveness, and expand business scope. 	<ul style="list-style-type: none"> Products, equipment and traffic management tools related to business use, using products that focus on environmental protection and eco-friendliness and reduce greenhouse gas emissions. 	2023-2030	<ul style="list-style-type: none"> Promoting symbiosis and co-prosperity in the development of the park
		<ul style="list-style-type: none"> Cooperate with government departments to build VIVERSE Educational Ecological Park, evaluate the product market and demand, and meet the changing needs of the market through continuous improvement. 	2023-2025	<ul style="list-style-type: none"> Increase the competitiveness of HTC products
Supply Chain or Value Chain	<ul style="list-style-type: none"> Suppliers participate in the development of low-carbon products and diversified services, which not only benefit low-carbon products, but also enhance market competitiveness and drive demand for related products. Use a common platform solution for remote work, affecting all upstream and downstream manufacturers to use the same platform to communicate. Simplify the business and manpower of manufacturers to further reduce greenhouse gas emissions. 	<ul style="list-style-type: none"> Diversify the businesses of cleaning, security, catering and other manufacturers to optimize and simplify business content and manpower. 	2022-2050	<ul style="list-style-type: none"> Increase revenue Reduce greenhouse gas emissions
		<ul style="list-style-type: none"> Continued development of Vive Sync products to enable remote working solutions. 	2023-2025	<ul style="list-style-type: none"> Increase the competitiveness of HTC products
		<ul style="list-style-type: none"> Use zero-carbon cloud services. 	2023-2025	<ul style="list-style-type: none"> Net-zero carbon footprint of cloud services
Climate adaptation or mitigation activities	<ul style="list-style-type: none"> Actively seek green transportation to reduce carbon emissions due to increased sales. Plan public welfare leave feedback system to encourage employees to participate in energy-saving and carbon-reduction activities. Join external ESG and green public welfare foundation initiatives to meet the expectations of stakeholders. 	<ul style="list-style-type: none"> Choose a carrier that actively invests in land, sea, air, and green energy transportation. Adjust the proportion of sea and air transportation, reduce air transportation and increase sea transportation. 	2022-2050	<ul style="list-style-type: none"> Reduce energy consumption and environmental pollution caused by transportation
		<ul style="list-style-type: none"> Public welfare leave feedback system. 	2022-2050	<ul style="list-style-type: none"> Respond to demand for low-carbon products Improve brand reputation

Opportunity Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Climate adaptation or mitigation activities	<ul style="list-style-type: none"> Actively seek green transportation to reduce carbon emissions due to increased sales. Plan public welfare leave feedback system to encourage employees to participate in energy-saving and carbon-reduction activities. Join external ESG and green public welfare foundation initiatives to meet the expectations of stakeholders. 	<ul style="list-style-type: none"> Choose a carrier that actively invests in land, sea, air, and green energy transportation. Adjust the proportion of sea and air transportation, reduce air transportation and increase sea transportation. 	2022-2050	<ul style="list-style-type: none"> Reduce energy consumption and environmental pollution caused by transportation
		<ul style="list-style-type: none"> Public welfare leave feedback system. 	2022-2050	<ul style="list-style-type: none"> Respond to demand for low-carbon products Improve brand reputation
R&D or investment	<ul style="list-style-type: none"> Diversify input products and consider whether the overall benefit meets the economic scale. Develop a working model for business and manpower optimization. Expansion of commercial applications of related products helps to enter new markets, increase revenue and obtain investment opportunities. 	<ul style="list-style-type: none"> To expand market competitiveness through innovative product design and development. 	2023-2030	<ul style="list-style-type: none"> Increase the competitiveness of HTC products
Type of business operation or Business operation facility location	<ul style="list-style-type: none"> Diversified management methods, increase brand value, and stimulate consumer product recognition. Strengthen the marketing of green products and overall solutions to increase revenue. Cloud solutions to reduce the impact of regional disasters. 	<ul style="list-style-type: none"> Strengthen the promotion of green product design and promote MARS and VIVERSE products. 	2022-	<ul style="list-style-type: none"> Reflected in revenue

Opp 2: Products and Services: Develop and increase low carbon goods and services

Opportunity Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Product or Service	<ul style="list-style-type: none"> Develop low-carbon products, low-carbon recycled materials (PCR), and enhance hardware life-cycle. Reduce the use of paper, printing and packaging, integrate sustainable design and product appearance into green design, and gain market recognition. 	<ul style="list-style-type: none"> Create an ecological chain of low-carbon products and services. The product User manual is digitized using QR code. 	2023-2025	<ul style="list-style-type: none"> Reduce resource consumption and waste
		<ul style="list-style-type: none"> Replacing outdated and energy-consuming equipment to achieve low-carbon production. 	2022-2025	<ul style="list-style-type: none"> Effectively reduce energy consumption and lower electricity bills

Opportunity Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Supply Chain or Value Chain	<ul style="list-style-type: none"> Encourage upstream manufacturers to design green, increase the number of green design shipments, reduce carbon emissions, and help achieve the goal of net zero emissions. Create a green energy supply chain to achieve net zero emissions. Cooperate with the whole value chain to implement R&D and production of low-carbon products. 	<ul style="list-style-type: none"> Continuously strengthen the carbon reduction and energy saving of the manufacturing process with the supply chain. Promote supplier sustainability projects and introduce 3R design (Reduce + Reuse + Recycle) . 	2023-2025	<ul style="list-style-type: none"> Achieve net zero goal Reduce resource consumption and waste
		<ul style="list-style-type: none"> Encourage suppliers to participate in renewable energy programs. 	2025-2050	<ul style="list-style-type: none"> Achieve net zero goal
Climate adaptation or mitigation activities	<ul style="list-style-type: none"> Improve the efficiency of internal energy control, prolong the service life of products, establish a more stable system, and reduce costs in the long run. Actively achieve greenhouse gas emission reduction targets through a carbon management platform and the implementation of internal carbon pricing. 	<ul style="list-style-type: none"> Adopt green buildings, use renewable energy, switch to energy-saving equipment, and introduce energy management systems. 	2023-2030	<ul style="list-style-type: none"> Improve energy efficiency and reduce production and operating costs
		<ul style="list-style-type: none"> Internal carbon pricing – concretize carbon costs/carbon fees through internal carbon pricing and integrate these costs into daily operations. 	2023-2025	<ul style="list-style-type: none"> Reduce carbon emissions
R&D or investment	<ul style="list-style-type: none"> Respond to external requirements, integrate green design principles into products, reduce environmental impact to meet customers' requirements for green and low-carbon products, generate revenue and attract investment willingness. Make technical investment in products and services from the perspective of life cycle, and add the concept of carbon emissions, develop low-energy products, and expand the low-carbon market; if a carbon tax is introduced in the future, it can reduce costs for the company. 	<ul style="list-style-type: none"> In the product research and development stage, that is to formulate ecological design guidelines, including material research and development and selection, product design, product development evaluation, process research and development design and packaging design, based on the principle of energy saving and carbon reduction. 	2022-2050	<ul style="list-style-type: none"> Increase the competitiveness of HTC products Reduced carbon footprint
Type of business operation or Business operation facility location	<ul style="list-style-type: none"> Respond to the requirements of stakeholders for low-carbon products, and promote the promotion of ESG by integrating a full range of products and low-carbon production design. Discuss with customers to merge and promote the concept of sustainable and green consumption, and enhance customers' trust in HTC products. 	<ul style="list-style-type: none"> Strengthen courses and training related to products and services, so that business executives can clearly understand the design and practical advantages of low-carbon products, and then promote them to local customers. 	2025-2030	<ul style="list-style-type: none"> Respond to demand for low-carbon products Improve brand reputation
		<ul style="list-style-type: none"> Implementation of Fully Paperless, Digitalized, and Optimized Internal Operations Processes. Coordinating with the sports season to organize activities to encourage public transportation and walking. 	2023-2025	<ul style="list-style-type: none"> Reduce carbon emissions
		<ul style="list-style-type: none"> Continuous innovation and optimization of VIVERSE-related applications, meeting/ co-development through online or virtual reality space. 	2023-2025	<ul style="list-style-type: none"> Reduce energy consumption and environmental pollution caused by transportation

Opp 3: Products and Services: R&D and innovation to develop new products and services

Opportunity Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Product or Service	<ul style="list-style-type: none"> • Lifestyle transformation: Due to the government’s vigorous promotion of net-zero carbon reduction and digital transformation, both enterprises and the public have become more aware of carbon reduction. They are willing to gradually change their work/life styles, using new technologies (VR/XR/AI) to reduce carbon emissions, improve production efficiency, and solve environmental problems. 	<ul style="list-style-type: none"> • Leverage the advantages of VR/XR to promote VR/XR/AI products and services, continuously explore new markets, and support the government’s 2050 net-zero initiative by promoting lifestyle transformation. • Continue to invest in R&D resources, integrate resources and hardware products from various business units as the market evolves, and provide one-stop services. 	2023-2030	<ul style="list-style-type: none"> • Enhance corporate image • Increase product and service visibility • Improve customer loyalty • Enhance service resilience
	<ul style="list-style-type: none"> • Establish an overall virtualization platform to increase computational load capacity. • High-efficiency production management and distribution processes to shorten production time. 	<ul style="list-style-type: none"> • Introduce automated equipment and cloud platforms to reduce labor demand. • Improve factory production processes by integrating 5G private networks with AI for automatic recognition and screening. 	2023-2025 2025-2050	<ul style="list-style-type: none"> • Increase production efficiency • Reduce resource consumption and waste
	<ul style="list-style-type: none"> • Develop new products with a concept of low carbon and environmental protection, using low-carbon, eco-friendly materials that are recyclable or reusable, establishing HTC’s image as an environmentally friendly company. • Enhance user recognition of products through software application services. 	<ul style="list-style-type: none"> • Upgrade hardware specifications, enhance software services, reduce product packaging, and extend the product lifecycle. • Promote sustainable projects with suppliers, implementing 3R (Reduce, Reuse, Recycle) design for components. • Provide transparent carbon emission data for consumer reference. 	2023-2025	<ul style="list-style-type: none"> • Reduce the product carbon footprint • Lower inventory rates and increase production efficiency
Supply Chain or Value Chain	<ul style="list-style-type: none"> • Supply chain: Develop low-carbon, eco-friendly materials or reduce carbon emissions in the manufacturing process in line with the low-carbon concept. 	<ul style="list-style-type: none"> • The procurement department explores the feasibility of sustainable design and continues to work with the supply chain to reduce carbon emissions and save energy in manufacturing processes. • Promote sustainable projects with suppliers, implementing 3R (Reduce, Reuse, Recycle) design for components. • Reduce shipping and material preparation time within the supply chain. 	2023-2025	<ul style="list-style-type: none"> • Reduce the product carbon footprint • Lower inventory rates and increase production efficiency.
	<ul style="list-style-type: none"> • Value chain: Through innovation and enhancement of product specifications, meet consumers’ higher expectations for visual and usage convenience. Embrace the changes in work and lifestyle brought by new technologies, which can also reduce carbon emissions. 	<ul style="list-style-type: none"> • Enhance product innovation and differentiation from similar products. • Use a carbon management platform to monitor product carbon emissions. • Encourage suppliers to participate in sustainability initiatives to achieve low-carbon goals. 	2023-2050	<ul style="list-style-type: none"> • Generate revenue

Opportunity Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Climate adaptation or mitigation activities	<ul style="list-style-type: none"> • Smart manufacturing processes. 	<ul style="list-style-type: none"> • Networking of manufacturing equipment to promote smart, carbon-reducing processes, applying AI technology to product manufacturing to increase yield and output. 	2023-2025	<ul style="list-style-type: none"> • Increase yield and output • Reduce the product carbon footprint
	<ul style="list-style-type: none"> • Lifestyle transformation: Due to the government's vigorous promotion of net-zero carbon reduction and digital transformation, both enterprises and the public have become more aware of carbon reduction. They are willing to gradually change their work/life styles, using new technologies (VR/XR/AI) to reduce carbon emissions, improve production efficiency, and solve environmental problems. • Utilize innovation in software services to strengthen consumer awareness of environmental protection. 	<ul style="list-style-type: none"> • Promote VR/XR/AI products, increasing user adoption and reducing daily carbon emissions. • Constantly monitor the inconvenience caused by climate change in transportation, assess, and provide contingency measures in advance. 	2023-2050	<ul style="list-style-type: none"> • Reduce the product carbon footprint
R&D or investment	<ul style="list-style-type: none"> • Improving and integrating smart production from the R&D phase of new products enhances production efficiency. • Adopt simplified structures and fewer components in product design to improve production efficiency. • Leverage advanced AI technology in conjunction with physical operations to attract investors. 	<ul style="list-style-type: none"> • Smart manufacturing processes require investment in new server equipment. • Collect data from physical operations to innovate net-zero carbon products and apply AI in daily life, enhancing investor interest. • R&D direction aligns with factory automation production. • Simplify product design and reduce the number of components used. 	2025-2030	<ul style="list-style-type: none"> • Improve factory production efficiency • Reduce carbon emissions generated during the manufacturing stage
	<ul style="list-style-type: none"> • Traditional business models relied heavily on face-to-face meetings and negotiations, leading to significant energy consumption and environmental pollution. Reduce travel-related carbon emissions through VIVERSE applications. 	<ul style="list-style-type: none"> • Continuous innovation and optimization of VIVERSE-related applications, meeting/ co-development through online or virtual reality space. • Promote the design and tangible benefits of low-carbon products and services. • Use a sustainability management platform to provide information of interest to stakeholders. 	2023-2050	<ul style="list-style-type: none"> • Support the government's net-zero transformation initiatives • Improve brand reputation

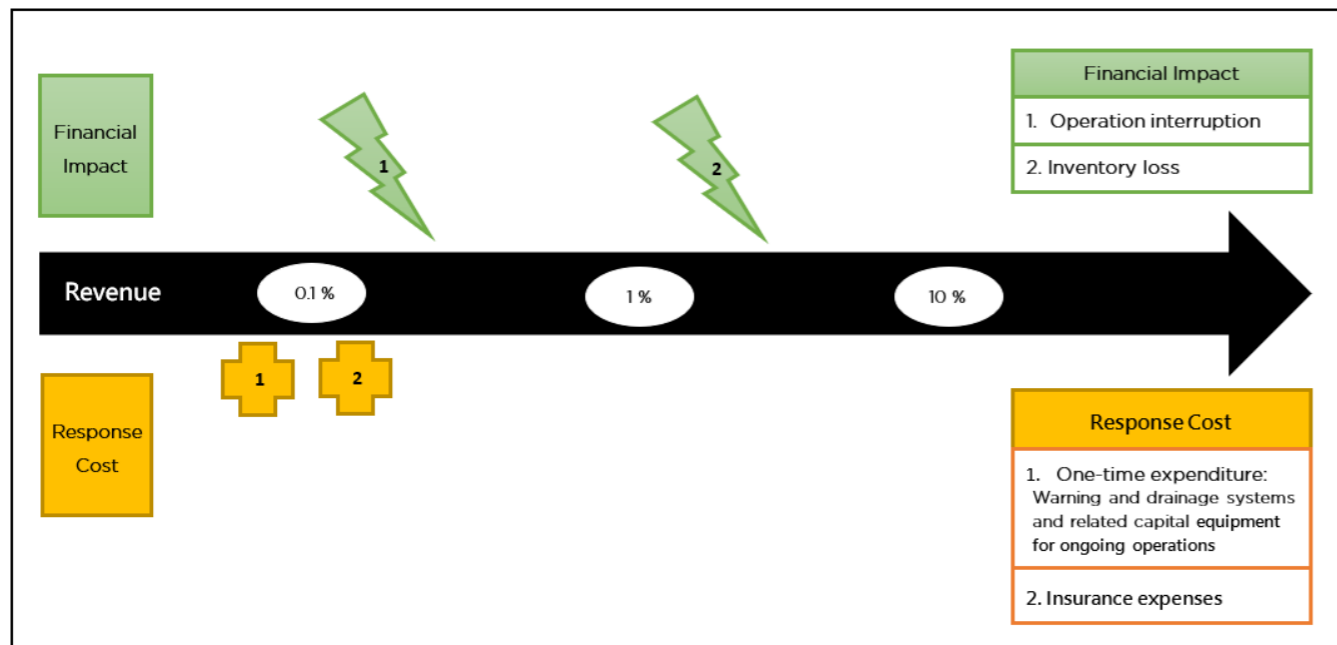
Opportunity Content		Coping Strategy		
Impact Category	Description	Impact Category	Time	Evaluate benefits
Type of business operation or Business operation facility location	<ul style="list-style-type: none"> • Electronic internal documents and forms to achieve carbon reduction goals. • Encourage employees to take public transportation and walking activities, and reduce high-carbon emission activities such as driving and riding motorcycles. 	<ul style="list-style-type: none"> • Implementation of Fully Paperless, Digitalized, and Optimized Internal Operations Processes. • Coordinating with the sports season to organize activities to encourage public transportation and walking. 	2023-2025	<ul style="list-style-type: none"> • Reduce carbon emissions
	<ul style="list-style-type: none"> • Hold large-scale conferences online through the platform to reduce carbon emissions generated by transportation. 	<ul style="list-style-type: none"> • Continuous innovation and optimization of VIVERSE-related applications, meeting/ co-development through online or virtual reality space. 	2023-2025	<ul style="list-style-type: none"> • Reduce travel-related carbon emissions • Save time and improve efficiency
	<ul style="list-style-type: none"> • Implement AI technology in information services and system development to enhance overall corporate resilience. 	<ul style="list-style-type: none"> • Implement AI technology in information services and system development to enhance overall work efficiency, thereby strengthening the company's competitiveness. 	2023-2025	<ul style="list-style-type: none"> • Enhance corporate resilience
	<ul style="list-style-type: none"> • Respond to the requirements of stakeholders for low-carbon products, and promote the promotion of ESG by integrating a full range of products and low-carbon production design. • Discuss with customers to merge and promote the concept of sustainable and green consumption, and enhance customers' trust in HTC products. 	<ul style="list-style-type: none"> • Strengthen courses and training related to products and services, so that business executives can clearly understand the design and practical advantages of low-carbon products, and then promote them to local customers. 	2025-2030	<ul style="list-style-type: none"> • Respond to demand for low-carbon products • Improve brand reputation

Financial Quantification - Risk

Based on the identified risk/opportunity items, HTC estimates the financial changes that climate change may cause to HTC, and develops various risk response strategies, evaluates and estimates "management costs" and "management benefits", based on each risk/ The short-, medium- and long-term characteristics of opportunities, and the estimated impact of climate change risks/opportunities on HTC's finances.

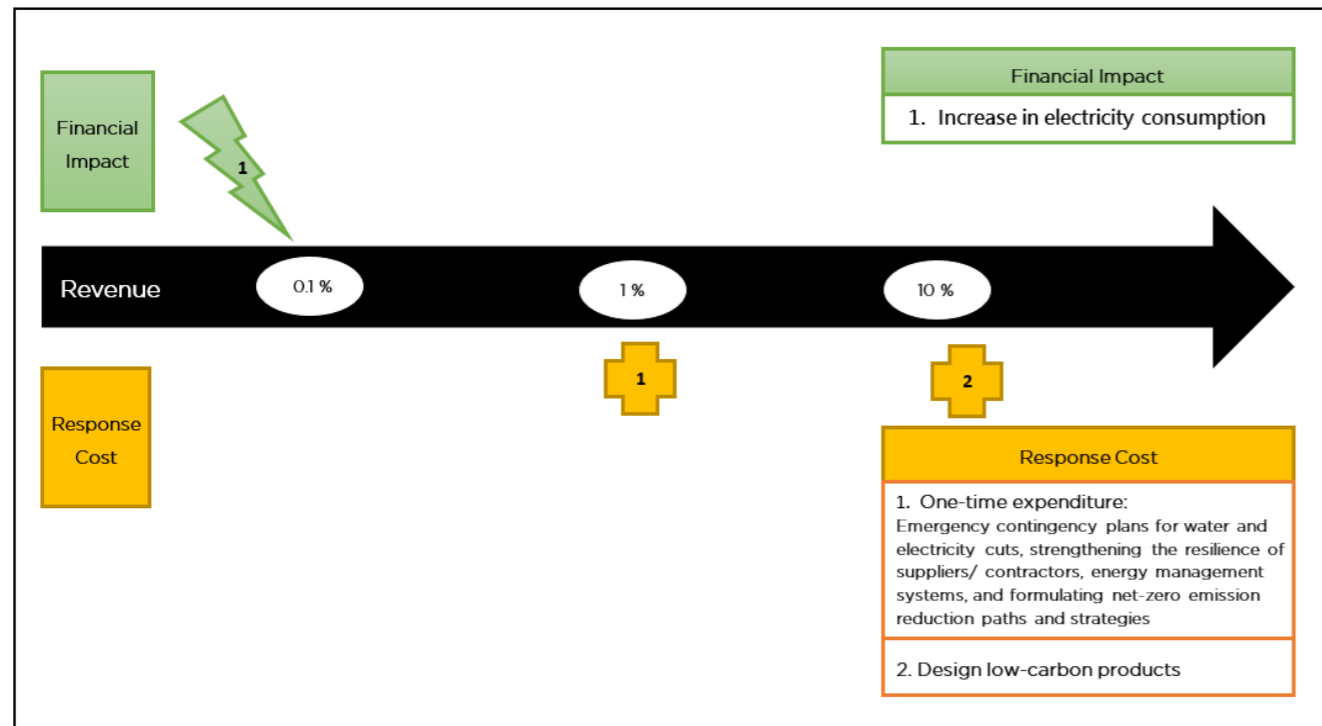
Risk 1: Physical Risk(Acute)- Increased severity of extreme weather events such as typhoons and floods

	Statement of Financial Impact	Calculation of Financial Impact (Annualized)
Financial Impact Analysis	<p>In the short-to-medium term (3-8 years), extreme weather events such as typhoons and floods occur, financial data that have an impact on business operations, and conduct risk assessments in the following aspects:</p> <ol style="list-style-type: none"> 1. Operation interruption (decrease in revenue): The occurrence of extreme weather events, resulting in the estimation of the interruption of business operations, and the estimated number of days of potential extreme weather occurrence based on scenario analysis, multiplied by the annual consolidated revenue. 2. Inventory loss (decrease in assets): Consider Taiwan, the proportion of inventory at high flood risk (Taoyuan warehouse), and multiply by the number of potential extreme weather occurrences. 	<p>Since HTC has not had any interruption of operations due to extreme weather events in the past, the assessment of the relevant financial impact is based on the most serious situation. suffer:</p> <ol style="list-style-type: none"> 1. Operating loss, approximately 0.3% of consolidated operating income. 2. Inventory loss, accounting for less than 4.5% of consolidated operating income.
Cost Analysis of Coping Strategies	<p>Actions taken by HTC in response to the above risks, as well as the assessment of executable actions to mitigate or transfer related climate risks:</p> <ol style="list-style-type: none"> 1. Increase early warning capabilities (increased costs and expenses): Capital expenditures for setting up early warning systems and disaster prevention systems. 2. Increased ability to continue operations (increased costs and expenses): capital expenditures and expenses for the purchase and use of emergency generators, and the cost of additional equipment for remote office colleagues. 3. Insurance costs (increased costs and fees): the cost of purchasing insurance related to natural disasters. 	<p>The financial impact of the associated response costs is:</p> <ol style="list-style-type: none"> 1. Purchase of water level warning system, automatic drainage system equipment, and emergency notification system; capital expenditure and expenses for purchasing and using emergency generators; additional one-time expenditures for setting up backup resources for the equipment room, accounting for less than 0.1% of consolidated operating income. 2. Annual insurance expenses account for less than 0.2% of consolidated operating income.



Risk 2: Physical Risk (Chronic)- Changes in rainfall (water) patterns and extreme changes in climate patterns

	Statement of Financial Impact	Calculation of Financial Impact (Annualized)
Financial Impact Analysis	<p>Under the RCP8.5 scenario, the global temperature in 2030 will rise by 0.42-0.77°C compared to 2010, and according to the Taiwan Energy Bureau, every 1°C increase will increase electricity consumption by 6%. Due to limited power resources and the continuous rise in operational costs, power companies will raise electricity rates to maintain supply stability and indirectly encourage energy-saving measures among users, leading to increased costs for businesses.</p> <ol style="list-style-type: none"> 1. Electricity consumption (increase costs and expenses): 2023 electricity usage × Estimated electricity rate for 2030. 	<ol style="list-style-type: none"> 1. Based on industry conditions, evaluate current electricity usage and the potential increase in electricity prices by 2030, which may result in an expenditure increase of less than 0.1% of consolidated revenue.
Cost Analysis of Coping Strategies	<p>Actions taken by HTC in response to the above risks, as well as the assessment of executable actions to mitigate or transfer related climate risks:</p> <ol style="list-style-type: none"> 1. Increased ability to continue operations (increased costs or expenses) 2. Increase supplier resilience (increased fees) 3. Build an energy management system to increase energy efficiency (cost or expense increase) 4. Implementation of climate adaptation strategies (increased cost or expense) 5. Design low-carbon products (increased costs and fees) 	<p>The financial impact of the associated response costs is:</p> <ol style="list-style-type: none"> 1. Set up emergency contingency plans for water/power rationing; strengthen the resilience of suppliers and contractors; introduce and implement energy-saving measures in the energy management system; formulate net-zero emission reduction paths and strategies, and other one-time expenditures, accounting for about 10% of the consolidated operating income 1% 2. Incorporating low-carbon design concepts or choosing low-carbon emissions/recyclable materials will increase purchase costs, research and development costs, and other derivative costs by 0.1%-15% after evaluation, accounting for about 11% of consolidated operating income. This response The cost of measures is also identified as the financial impact of risk 3 and the realization costs of opportunity 2 & 3, which is hereby explained.



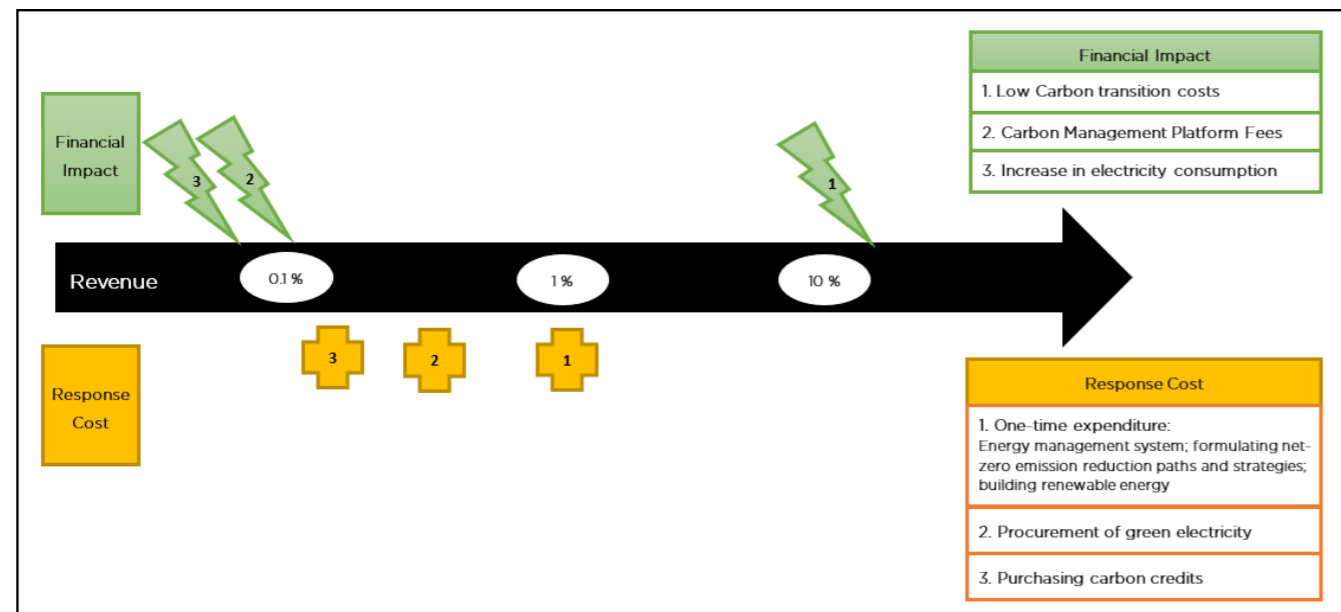
Designing low-carbon products is one of the main axes of HTC’s sustainable development, and it is also an important strategy for the net-zero path. The implementation of relevant strategies can mitigate climate risks and realize climate opportunities at the same time. The formulation and implementation of relevant indicators can be determined by Refer to 4.1 Indicator Target Setting and 4.2 Implementation.

Risk 3: Physical Risk (Chronic)- Increase of average temperatures

Statement of Financial Impact

Calculation of Financial Impact (Annualized)

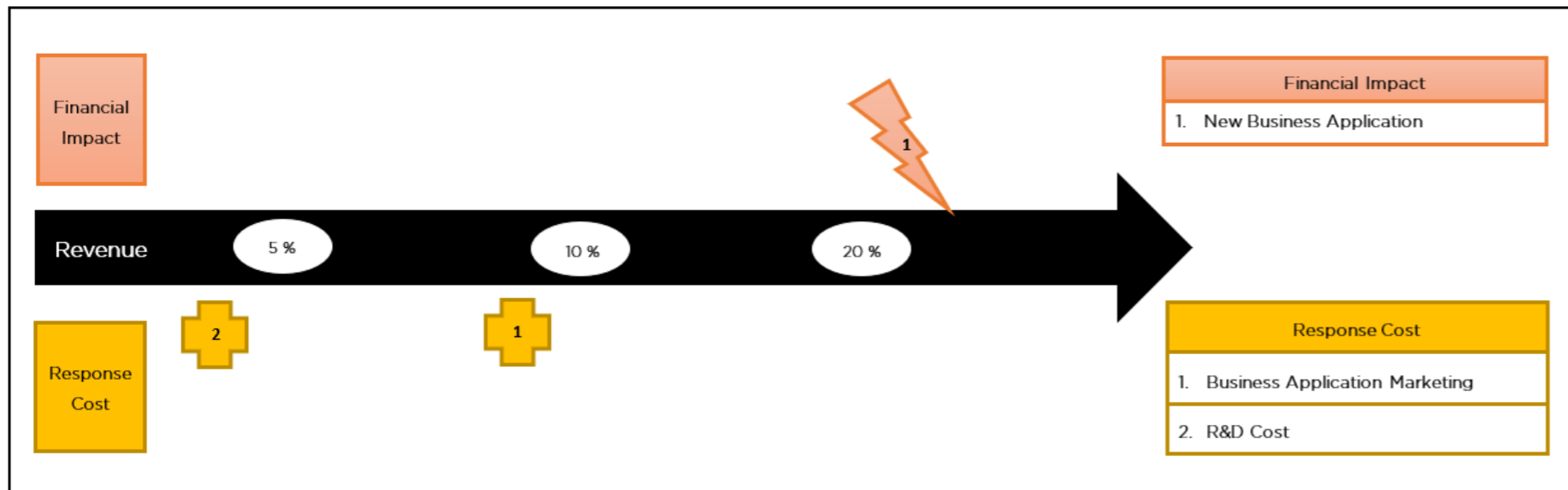
<p>Financial Impact Analysis</p>	<p>The global average temperature rise, including heatwaves leading to power restrictions/shortages, results in an increase in electricity costs. In addition, the global temperature rise has intensified countries' efforts to implement policies to mitigate global warming. The global focus is on achieving net zero emissions, and there is a growing demand for disclosing domestic and international carbon emissions. This increased demand for disclosing and managing carbon emissions within the enterprise and its value chain. Companies urgently need to establish a comprehensive collection of carbon emission information for new business, including platform and software application services. Establishing and managing carbon emission data for the enterprise and its value chain increases management costs, with financial impacts including:</p> <ol style="list-style-type: none"> 1. The cost of investing in the low-carbon transition (increased costs and fees) 2. Greenhouse gas emission disclosure and management (cost increase) 3. Electricity consumption (increase costs and expenses): 2023 electricity usage × Estimated electricity rate for 2030. 	<ol style="list-style-type: none"> 1. Incorporate low-carbon design concepts or choose low-carbon emission/recyclable materials. After evaluation, it is necessary to increase purchase costs, R&D costs, and other derivative expenses by 0.1%-15%, and increase the current annual cost, accounting for about 11% of the consolidated operating income. This financial impact is also identified as the response cost of risk 2 and the realization costs of opportunity 2 & 3, which is hereby explained. 2. The carbon management platform construction cost and annual maintenance cost account for less than 0.1% of the consolidated operating income. This financial impact is also recognized as the realization cost of opportunity 3, which is hereby explained. 3. Assess current electricity usage based on industry conditions and the potential increase in electricity prices by 2030, which may result in an expenditure increase of less than 0.1% of consolidated revenue.
<p>Cost Analysis of Coping Strategies</p>	<p>Actions taken by HTC in response to the above risks, as well as the assessment of executable actions to mitigate or transfer related climate risks:</p> <ol style="list-style-type: none"> 1. Build an energy management system to increase energy efficiency (cost or expense increase) 2. Implementation of climate adaptation strategies (increased cost or expense) 3. Build renewable energy (increased cost or fee) 4. Procurement of green electricity (increased costs or fees) 5. Purchasing carbon credits (increased costs or fees) 	<p>The financial impact of the associated response costs is:</p> <ol style="list-style-type: none"> 1. Introduce an energy management system; formulate a net zero emissions path and strategy, and execute a net zero carbon reduction plan; build renewable energy and other one-time expenditures, accounting for about 1% of consolidated operating income 2. The cost of purchasing green electricity every year accounts for about 0.6% of the consolidated operating income without considering any adjustments and buffering impacts 3. Without considering any adjustments and impact mitigation, it is estimated based on the current year's greenhouse gas emissions that the annual cost of purchasing carbon rights accounts for about 0.2% of the consolidated operating income



Financial Quantification - Opportunity

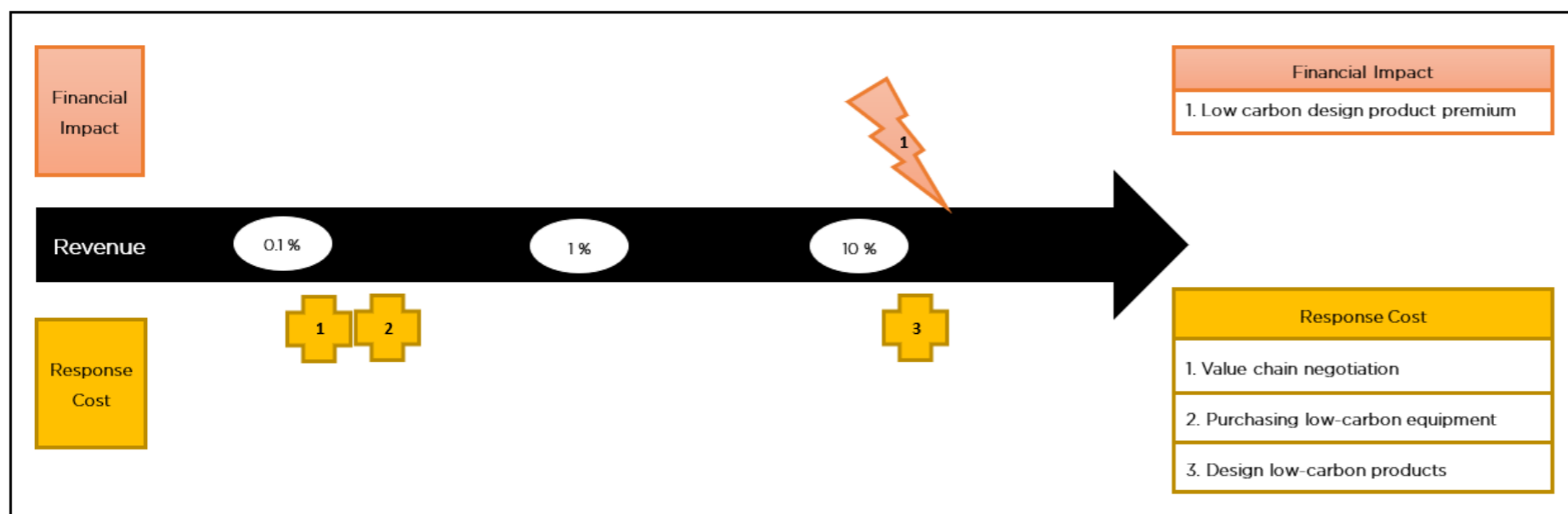
Opp 1: Products and Services: Diversification of business activities

	Statement of Financial Impact	Calculation of Financial Impact (Annualized)
Financial Impact Analysis	<p>To avoid operational interruptions caused by extreme weather, the company continues to develop products such as virtual platforms, Mars CamTrack, and remote office to maintain remote business operations, enhance market competitiveness, and expand business scope. The development of related products and the expansion of commercial applications will help enter new markets, increase revenue, and obtain investment opportunities. The financial impact includes:</p> <ol style="list-style-type: none"> Diversification of business applications and expansion of business scope (increased revenue) 	<ol style="list-style-type: none"> The growth of new commercial applications can increase the consolidated operating income by 20%-50% after evaluation
Cost Analysis of Coping Strategies	<p>HTC's actions to realize the above opportunities, as well as assessing the actions that can be implemented, include:</p> <ol style="list-style-type: none"> Empower consumers and expand applications (cost increase) Invest in research and development to expand commercial applications (cost increase) 	<p>The financial impact of the associated input costs is:</p> <ol style="list-style-type: none"> Marketing expenses for promoting the commercial application of the subject product, assessed at 0%-10% of consolidated operating income Optimizing the development of new business-related applications and increasing research and development expenses, which is estimated to be 0%-5% of consolidated operating income. This financial impact is also recognized as the realization cost of Risk 3, which is hereby explained.



Opportunity 2: Products and Services: Develop and increase low-carbon goods and services

	Statement of Financial Impact	Calculation of Financial Impact (Annualized)
Financial Impact Analysis	<p>In response to the trend of carbon reduction, the company invests in the development of low-carbon businesses, including VIVERSE, VIVE Arts, VIVE Originals and G REIGNS; and integrates green design principles into product design to extend product life and reduce environmental impact. The development of low-carbon businesses and green products will attract consumers and investors, help increase revenue and obtain investment opportunities. The financial impact includes:</p> <ol style="list-style-type: none"> 1. Low-carbon products increase product competitiveness (increased revenue) 	<ol style="list-style-type: none"> 1. The percentage of premium that can be charged to customers due to the introduction of low-carbon design is estimated to be about 0.7%.
Cost Analysis of Coping Strategies	<p>HTC's actions to realize the above opportunities, as well as assessing the actions that can be implemented, include:</p> <ol style="list-style-type: none"> 1. Value chain negotiation (increased costs and fees) 2. Empower consumers and expand applications (increased costs and fees) 3. Design low-carbon products (increased costs and fees) 	<p>The financial impact of the associated input costs is:</p> <ol style="list-style-type: none"> 1. The value chain is negotiated to reduce relevant carbon emissions, and the evaluation encourages suppliers to participate in renewable energy projects to increase procurement costs by 0.25% and to promote the concept of sustainable and green consumption to customers and suppliers, accounting for about 0.2% of consolidated operating income 2. Use low-carbon equipment to reduce carbon emissions in the manufacturing and operation process, and invest in one-time expenditures, accounting for about 0.3% of consolidated operating income 3. Incorporate low-carbon design concepts or choose low-carbon emission/recyclable materials. After evaluation, it is necessary to increase purchase costs, R&D costs, and other derivative costs by 0.1%-15%, accounting for about 11% of consolidated operating income. This investment The cost is also identified as the response cost of risk 2 & opportunity 3, and the financial impact of risk 3 at the same time, which is hereby explained.

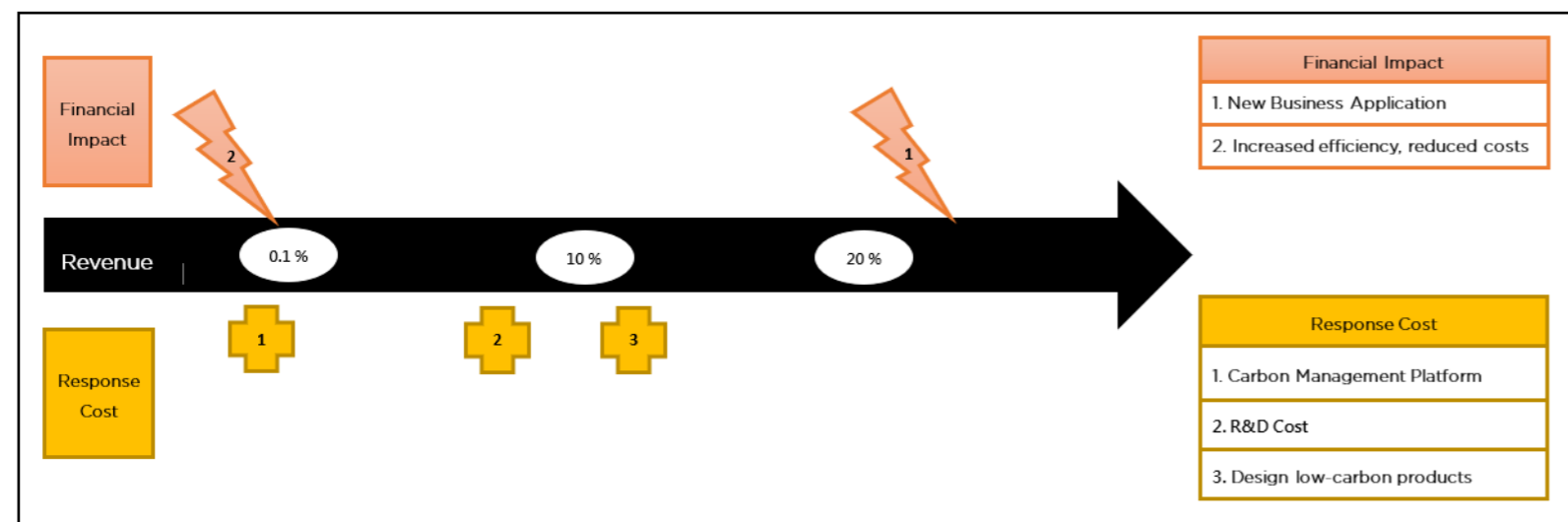


Opp 3: Products and Services: R&D and innovation to develop new products and services

Statement of Financial Impact

Calculation of Financial Impact (Annualized)

<p>Financial Impact Analysis</p>	<p>In response to the government's 2050 dual-axis transformation towards digitalization and net-zero emissions, HTC is addressing lifestyle changes brought about by this transformation. This not only improves quality of life, enhances productivity, and tackles environmental issues but also creates new business opportunities. HTC continues to incorporate the concept of simplified repair in the design of new products. Additionally, DeepQ integrates advanced AI and virtual reality technologies into both software and hardware, supporting the goals of healthcare professionals and government initiatives in various ways, which helps increase revenue and reduce costs through improved production efficiency.</p> <ol style="list-style-type: none"> 1. Diversification of commercial applications and expansion of business scope (increased revenue) 2. Increased operational efficiency, leading to cost reduction (cost reduction) 	<ol style="list-style-type: none"> 1. The growth in new business applications is estimated to increase combined operating revenue by 20%-50%. 2. Increased operational efficiency and cost reduction are evaluated to decrease annual operating costs by approximately 0.1% of combined operating revenue.
<p>Cost Analysis of Coping Strategies</p>	<p>Actions taken by HTC to realize these opportunities and evaluate feasible actions include:</p> <ol style="list-style-type: none"> 1. Investing in costs to increase operational efficiency (cost or expense increase) 2. Investing in R&D to expand commercial applications (expense increase) 3. Designing low-carbon products (cost and expense increase) 	<p>The financial impact of the related investment costs includes:</p> <ol style="list-style-type: none"> 1. The cost to establish the carbon management platform, annual maintenance fees, and the introduction of AI technology to improve information services and intelligent manufacturing processes are estimated to be less than 0.1% of combined operating revenue. This cost is also identified as the financial impact of Risk 3, as noted. 2. Optimizing the development of new business-related applications and increasing R&D expenses are evaluated to be 0%-5% of combined operating revenue. This cost is also identified as the response cost for Opportunity 1, as noted. 3. Incorporating low-carbon design concepts or selecting low-carbon/recyclable materials is evaluated to increase procurement costs, R&D costs, and other derived expenses by 0.1%-15%, accounting for about 11% of consolidated operating income. This investment The cost is also identified as the response cost of risk 2 & opportunity 2, and the financial impact of risk 3 at the same time, which is hereby explained.



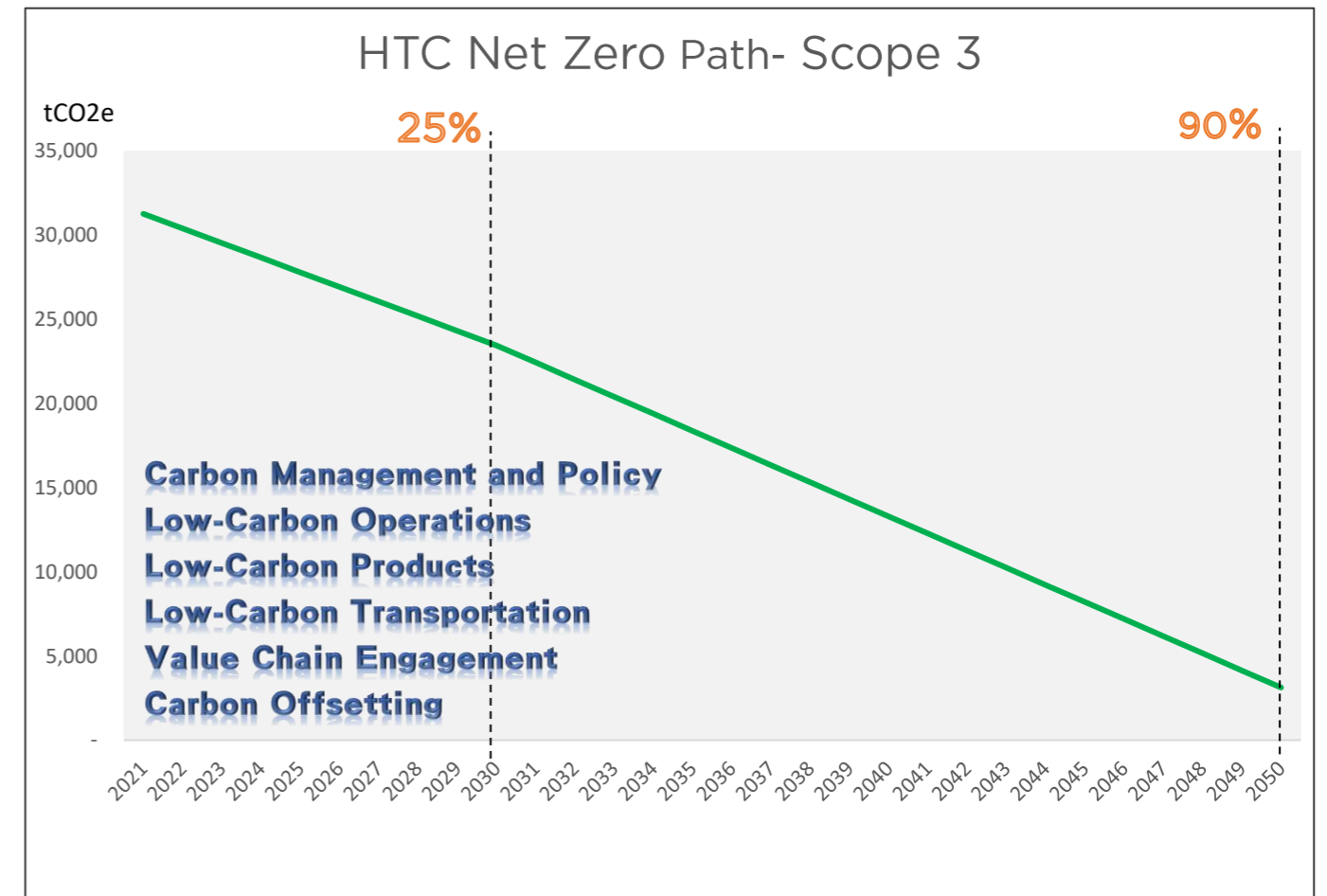
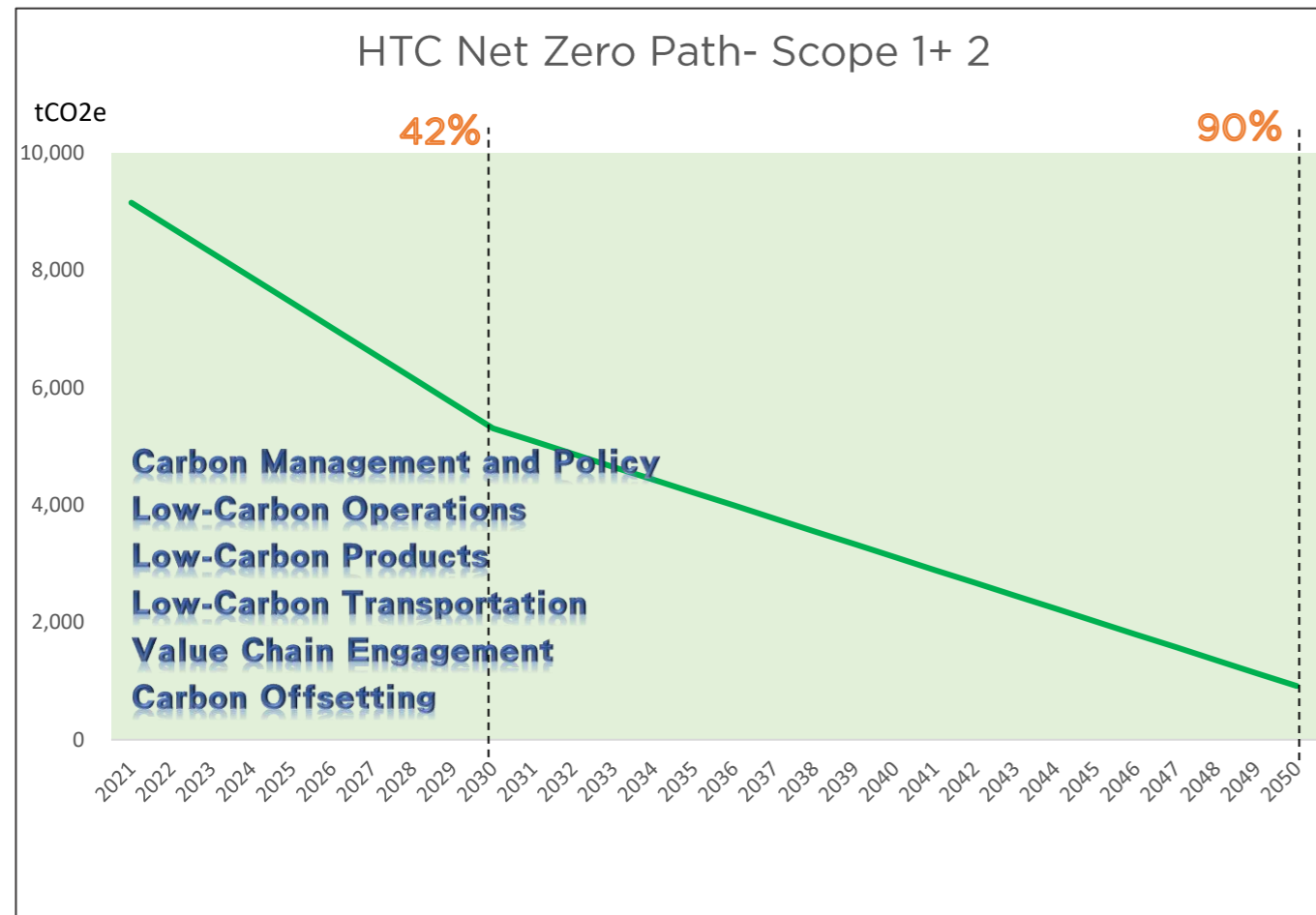
Metrics and Targets

Metric Goal Setting

HTC has signed a commitment with SBTi in 2022 to set the company’s net zero pathway based on its published decarbonization guidelines and methodologies, aiming to achieve net zero emissions by 2050. By linking its core business with concrete quantified management, HTC has established a clear decarbonization pathway, including six major decarbonization strategies: “carbon management and policy,” “low-carbon operations,” “low-carbon products,” “low-carbon transportation,” and “value chain engagement,” with “carbon offsetting” as a final measure. In addition, the company submitted its SBTi target review in January 2024, moving towards the 2050 net zero goal through integrated efforts.

HTC SBTi Net Zero Target: (Based Year: 2021)

- Scope 1 and 2 reduction targets are 42% reduction compared with the base year in 2030, and 90% reduction compared with the base year in 2050
- Scope 3 reduction target is 25% reduction compared with the base year in 2030; and 90% reduction compared with the base year in 2050



Carbon Management and Policy

Completely Policy and Risk Management

HTC plans to formulate global warehouse control plans and off-site office management methods through risk assessment of all operating bases, strengthen corporate resilience in the face of climate risk scenarios, and set up early warning mechanisms in high-risk bases to increase natural disaster risk coverage rate, in order to minimize the interruption of operations or the loss of plant and equipment caused by the weather.

Item	Metrics	Targets
Risk Assessment	The number of risk assessments of operating bases completed	
Risk Mitigation Plan	Develop global cargo warehousing locations	<ul style="list-style-type: none"> • 2025- 100% complete the risk assessment of high flooding of operating bases according to RCP8.5. • 2030- Number of risk mitigation plans (or asset value) for 100% of operating bases. • The number of days of operational interruption caused by weather is 0 days. • The loss of plant and equipment caused by climate is 0. • 100% natural disaster insurance coverage.
	Begin to develop basic emergency response / business continuity management plan	
	Formulate remote office management methods (policies, drills)	
	Increase the water level warning system of Dongmen River and the installation of manpower support waterproof gates	
	Adding automatic drainage system equipment	
	Addition of an emergency notification system as a contingency mechanism	
Products transfer		
Natural Disaster Insurance	Natural disaster insurance fixed assets and inventory coverage ratio (%)	

Carbon Management Mechanism

To effectively manage and monitor the company's overall carbon emissions in real-time, establishing a carbon management platform is a crucial infrastructure for HTC's carbon management efforts. Coupled with internal carbon pricing measures, this will internalize external costs by setting a carbon pricing mechanism and rates. These factors will be considered in operational decision-making to enhance the overall strength of operations and supply chain management, with the goal of achieving HTC's net-zero emissions target.

Item	Metrics	Targets
Carbon data management platform	Systematize the carbon inventory process and improve management quality	<ul style="list-style-type: none"> • 2023- <ul style="list-style-type: none"> • Establish a carbon data collection system and carbon index database. • Connect internal data (domestic & overseas). • Establish a carbon data tracking and application system, and establish a carbon data analysis methodology. • 2024- Begin to produce carbon data analysis report every year.
	Complete the end-to-end integration of carbon emission data source systems to enhance accuracy and simplify processes	
	Track and analyze carbon data to facilitate the review and iterative adjustment of carbon strategies	
ICP	Establish a carbon pricing mechanism and rates to factor into operational decision-making	<ul style="list-style-type: none"> • 2023- Establish an internal carbon pricing task force • 2024- Introduce carbon pricing methodologies and rate-setting mechanisms, along with performance evaluation and incentive systems
	Develop financial processes and management systems to internalize external costs	

Low-Carbon Operations

Energy-saving and Low-carbon Operation Management

For operational equipment and behaviors, HTC integrates the concepts of energy saving, power saving, and low-carbon into daily operations and management. Through green buildings, energy-saving solutions, and renewable energy purchases, it can effectively reduce carbon emissions and energy use generated by operating behaviors.

Item	Metrics	Targets
Green building	Improvement in energy and water efficiency (%)	<ul style="list-style-type: none"> • 2050- Improve electricity and water efficiency by 30%
	Whether to carry out energy-saving scheme planning, replace energy-saving lamps or chilled water hosts	<ul style="list-style-type: none"> • 2023- Take inventory of lamps and ice water host models and produce a carbon reduction assessment report • In 2024, manufacturers negotiate or seek cooperation with manufacturers
Energy saving project	Introduction of energy automation/digital management	<ul style="list-style-type: none"> • Formation of an energy saving working group in 2023 • Identify the processes that can be automated or digitized in offices and factories by 2023 • In 2024, manufacturers negotiate or seek cooperation with manufacturers
	Set up an energy-saving/cloud-based computer room	<ul style="list-style-type: none"> • 2023- Formation of an energy saving working group. • 2023- Identify computer room equipment that can be cloudified. • 2024- Manufacturers negotiate or seek cooperation with manufacturers.
Build/ Buy renewable energy	Completion of renewable energy building/ outsourcing	<ul style="list-style-type: none"> • 2023- Establish a renewable energy working group and produce an assessment report on self-generation of renewable energy. • 2023- Search for and compile a list of renewable energy construction manufacturers. • 2024- Continuously increase the installation/purchase of renewable energy starting

Low-Carbon Products

Extend Product Life Cycle

Whether it is the product itself or product parts, HTC uses the concept of recycling and shared use to design production components that are easy to disassemble and assemble, and is committed to reducing product waste. life cycle and reduce the use of raw materials.

Item	Metrics	Targets
Extend product life	Provide refurbished and reassembled products	<ul style="list-style-type: none"> From 2023- Conduct annual reviews on material supply and demand, market prices and inventory starting. 2050- Increase the number of re-sell products by 30%.
	Reduce product material waste	<ul style="list-style-type: none"> Continuously review material supply and demand, market price and inventory 2050- Increase the number of re-sell products by 30%.
Product Cycle Mechanism	Design products that are easy to disassemble and allow parts to be reused	<ul style="list-style-type: none"> 2025- Count and track the purchase of commodity DIY repair parts. 2030- Increase purchases of DIY repair parts by 10%. 2050- Increase purchases of DIY repair parts by 30%.
	Use of recycled materials such as recycled plastic	
	Use environmentally friendly materials	
	Reduce packaging materials	
	Voluntary Take Back Policy	

Low Carbon Business Model

HTC has planned to carry out low-carbon innovative design, through low-carbon alternative materials and design options, to reduce the carbon footprint of products, and appeal to consumers to rent instead of buy, develop a new low-carbon business model, and expand new consumer groups. In addition, it cooperates with sustainable advocacy organizations to increase sustainability-related content in VIVERSE and increase users' awareness of sustainability; through virtual reality features, users can experience the impact of climate change and motivate customers to act sustainably.

VIVERSE will provide a supply chain management platform to solve the difficulties in sustainable management of small and medium-sized enterprises, and assist enterprises and organizations to manage sustainable and low-carbon related issues, link products/services with sustainable indicators, and expand more diverse business models, and achieve low-carbon operation of the entire value chain.

Item	Metrics	Targets
New market/ Customer Development	Cooperate with sustainability advocacy organizations to increase sustainability-related content in VIVERSE and increase users' awareness of sustainability; and through virtual reality features, users can experience the impact of climate change and encourage sustainable actions <hr/> To assist users and SMEs in sustainable growth, VIVERSE provides a platform to manage the supply chain, and provides specific sustainable suggestions to solve the difficulties in sustainable management of SMEs <hr/> Assist enterprises and organizations in managing sustainable and low-carbon issues <hr/> Link products/services with sustainable indicators such as SDGs <hr/> Build a virtual platform to enhance the strength of supply chain management	<ul style="list-style-type: none"> • From 2022- The number of VIVERSE subscription users grows by 10% every year
Formulate and implement low-carbon product management strategies	Complete the carbon footprint inventory of each product line, and set the carbon footprint reduction KPI of the target product	<ul style="list-style-type: none"> • 2023- A series of products that can calculate the carbon footprint of products will be counted (self-counted), and a list of target products will be produced • 2024- Produce the target product life cycle assessment report • 2025- Complete ISO 14067 for the target product • 2026- Complete the target setting report on product carbon footprint reduction

Item	Metrics	Targets
Low-Carbon Innovative Design	Carry out low-carbon innovative design, reduce product carbon footprint, and create new markets	<ul style="list-style-type: none"> • 2023- Formation of a low-carbon materials and design working group. • 2024- Feasibility assessment of low-carbonization of materials used in the process. • 2025- Low carbon material selection and design.
Smart manufacturing processes	Low-carbon manufacturing process and supply chain transformation promotion project (including smart manufacturing for carbon reduction)	<ul style="list-style-type: none"> • 2024- Evaluate resources and begin implementation. • 2025- Complete according to plan.
Low Carbon Business Model	Encourage consumers to rent equipment instead of buying	<ul style="list-style-type: none"> • 2024- Assess the feasibility of launching a rental subscription service.

Low-Carbon Transportation

On the other hand, in 2023, HTC will set up a working group for the electrification of shuttle vehicles and transportation vehicles, including low-carrying vehicles as one of the low-carbon management operating guidelines, and plans to encourage colleagues to refer to the Environmental Protection Agency of the Executive Yuan when they are on business trips. The list of environmentally friendly hotels, while taking public transportation more during normal commuting, under the goal of low-carbon operation, at the same time achieve low-carbon commuting for employees.

Item	Metrics	Targets
Low-carbon vehicle	Electrification of the shuttle bus	<ul style="list-style-type: none"> • 2023- Establish a working group on the electrification of shuttle vehicles and transit vehicles. • 2024- Evaluate cooperative connection vendors.
Low-carbon commuting	When staying in an eco-friendly hotel during a business trip, can refer to the list of eco-friendly hotels issued by the Environmental Protection Agency(Taiwan)	<ul style="list-style-type: none"> • From 2023- Colleagues will stay in eco-friendly hotels when traveling on business. You can refer to the list of eco-friendly hotels issued by the Environmental Protection Agency(Taiwan).
	Low Carbon Commuting/ Transportation	<ul style="list-style-type: none"> • From 2023- Encourage colleagues to take more public transportation when commuting. • 2024- Shuttle services at operational sites will be further optimized through passenger count statistics to improve service frequency.

Supply chain Engagement

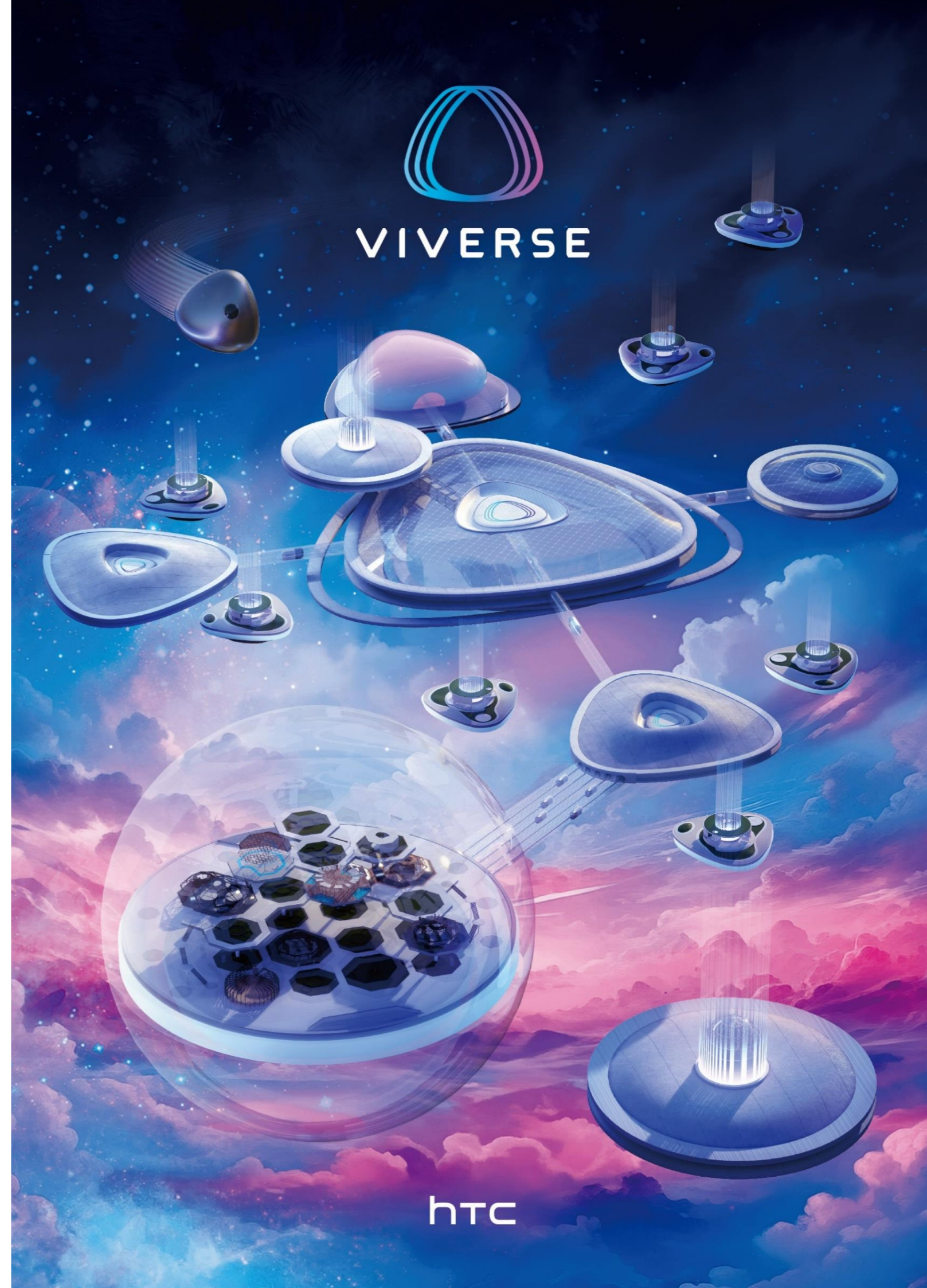
Supply Chain Management

The countermeasures related to climate change are not limited to HTC itself. HTC has extended the actions and policies of climate change to the entire value chain, including prioritizing the negotiation of sustainable management with key suppliers; , Water-saving measures and goals are included in procurement standards, etc. In addition to requiring suppliers to take relevant implementation actions, an assistance plan is also set up for suppliers in difficulties, and through counseling, we will work with suppliers to implement carbon reduction goals. At the same time, HTC also considers climate risk events such as heat exhaustion and snowstorms that suppliers' employees may face, and requires identification and provision of safety maintenance for its employees' occupational safety and health.

Item	Metrics	Targets
Supplier Sustainability Scoring Mechanism	Evaluate suppliers' ESG-related actions and identify key suppliers	<ul style="list-style-type: none"> Starting in 2022- Include ESG scores in the scorecards during Quarterly Business Review (QBR) meetings
Supply Chain Negotiation Object Identification	Identify key suppliers and concentrate resources on priority negotiating partners	<ul style="list-style-type: none"> 2023- Establish key supplier standards 2024- Set standards for supplier classification
Set up a supply chain assistance program	Suppliers with higher power consumption/carbon emissions are required to implement data management and set trackable medium and long-term goals	<ul style="list-style-type: none"> 2024- Types of Assistance Programs to be Assessed 2025- Establish a working group to implement the plan
	Assist/guide suppliers in identifying carbon reduction opportunities and transitioning to low-carbon practices (Low-Carbon Process and Supply Chain Transformation Promotion Plan)	<ul style="list-style-type: none"> 2024- Evaluate the types of assistance plans and start implementation 2025- complete the identification of carbon reduction opportunities and set carbon reduction targets
Incorporate suppliers' carbon measures into procurement criteria	Require suppliers to conduct data audits and report the results on the CDP/HTC Supply Chain Carbon Management Platform	<ul style="list-style-type: none"> Starting in 2023- Carbon data provided by suppliers will be progressively verified through internal and external audits
	Develop procurement policies and selection criteria - Incorporate suppliers' energy-saving measures into procurement criteria	<ul style="list-style-type: none"> 2024- Aggregate commodity carbon emission data 2025- Set a low-carbon commodity definition
Identification of security protection	Assess the occupational safety and health protection actions of suppliers' employees	<ul style="list-style-type: none"> Suppliers are required to add new employees. If they encounter climate risk-related events such as heat exhaustion and blizzards, the company's countermeasures Incorporate climate-related risk management questions into supplier self-assessment/ audit questionnaires

Carbon Offsetting

Carbon offsets serve as a last resort on the path to net-zero emissions and play an important role in addressing climate change. To effectively manage carbon emissions and achieve sustainable development goals, HTC is proactively establishing a carbon credits task force. This team will periodically assess the optimal timing for entering the carbon market to ensure that the company maximizes its benefits from carbon trading.



HTC Executive Overview

Overall Goal

HTC Group Global Greenhouse Gas Emissions in the Past Three Years

Based Year: 2021 (Unit: t-CO ₂ e)		2021	2022	2023	Verified by
ISO14064-1	GHG Protocol				ISO14064-1 (%)
Category 1	Scope 1	209.6461	179.1419	163.7687	99.9%
Category 2	Scope 2 Location-Based	8,828.4273	8,165.1838	7,850.1365	99.9%
	Scope 2 Market-Based	8,828.4273	8,165.1838	7,850.1365	99.9%
Category 3-6	Scope 3 *	31,143.5240	26,210.1295	19,211.8767	15.5%
Total		40,181.5975	34,554.4552	27,225.7818	40.3%
Revenue(NTD\$ Million)		5,253	4,409	4,418	
Intensity(t-CO ₂ e/NTD\$Million)		1.72	1.89	1.81	
Number of increases and decreases compared to the previous year (Metric Tones)		N/A	-5,627.1423	-7,328.6733	
Increase/decrease compared to the previous year(%)		N/A	-14%	-21.2%	
Scope 1+2 vs Based Year(%)		0%	-7.7%	-11.3%	
Scope 3 vs Based Year(%)		0%	-15.8%	-38.3%	

- Note
- The scope of inventory covers the main global operating sites of HTC below (since some subsidiaries belong to BVI, they are not included in the scope): Taiwan, mainland China, Japan, the United States, the UK, and Poland.
 - Power Conversion CO₂ equivalent emissions are calculated in accordance with the power emission coefficient (0.495 kg/CO₂e) of the year announced by the Energy Administration.
 - The carbon emissions of overseas subsidiaries were determined according to the power coefficient of each country.
 - GWP: IPCC 2014 5th Assessment Report (AR5)
 - Intensity = (Scope 1 + Scope 2)/ Revenue (NTD\$ Million)
 - Verified by ISO14064-1 %: The scope verified under ISO14064-1 for the year 2023 is determined based on the results of the materiality analysis.

* HTC conducts an inventory of projects in three parts of the scope. For detailed figures, please refer to the HTC ESG Report

Carbon Management and Policy

“HTC has established a Climate Change Management Policy which was submitted to the Board of Directors for deliberation and implementation in May 2023, with the objective of realizing the goal of corporate sustainable management.”

Completely Risk Management

With reference to relevant information and laws and regulations, HTC started to formulate a climate change risk management procedure book as an operational basis for internal risk management. It has been completed and published in the company's internal management system in 2023.

As the basis for setting TCFD goals and indicators so that it can respond early to reduce the risks and challenges of climate change, the company regularly reviews and manages scope 1, scope 2, and scope 3 greenhouse gas emissions, and follows the SBTi 1.5° C climate scenario specification setting Net-zero emission goals and paths, formulate corporate carbon reduction policies and promote carbon emission reductions in a more systematic and scientific manner. At the same time, referring to SBTi's carbon reduction proposals, the carbon reduction practices of peers and domestic and foreign benchmark companies, and considering the results of HTC's annual carbon inventory and current related practices, a blueprint for net zero emission strategies has been developed, and a series of action recommendations have been developed as a basis for various departments. The reference for promotion, and by holding a target meeting, track and review the difference between the actual performance of greenhouse gas emission intensity and the target, and formulate necessary measures.

Carbon Management Platform

As a leading brand in the virtual reality industry, HTC VIVE has always been committed to environmental protection and sustainability. On the road to net zero, in addition to meeting the compliance requirements of the law and the expectations of stakeholders, HTC has also made active plans ahead of time:

1. The "HTC Carbon Management Platform" has been established by the end of 2023. This cloud-based platform enables real-time, digitalized, and transparent accounting, disclosure, and target management of greenhouse gas emissions across all company scopes.
2. Using the HTC Carbon Management Platform as a tool,
 - ✓ March 2024- Completed the 2023 ISO14064-1 greenhouse gas inventory and verification (with the scope of the parent company and consolidated subsidiaries), achieving this milestone 3-4 years ahead of regulatory requirements!
 - ✓ March 2024- We completed the third-party verification of the product carbon footprint of the annual flagship VIVE XR ELITE ISO 14067:2018 and obtained the verification opinion!
3. HTC plans to introduce Internal Carbon Pricing (ICP) in 2024, internalizing carbon costs to stay aligned with global trends and enhance ESG competitiveness.

Low-Carbon Operations

Energy-saving and Low-carbon Operation Management

Our company has been implementing ISO 14064-1:2006 for greenhouse gas accounting since 2008 and ISO 50001 energy management system since 2011. These initiatives help monitor emission hotspots within the enterprise and establish energy-saving strategies and actions to address international greenhouse gas and global warming issues.

In 2023, we continued to execute reduction measures for emission hotspots during our operations and promoted various energy performance management initiatives. We started with energy-saving improvement management programs for building lighting and air conditioning equipment. We invested a total of TWD 1.63 million in the replacement and addition of energy-saving equipment, which resulted in saving approximately 370,000 kWh of electricity and reducing carbon emissions by about 184 tCO₂e, ultimately saving TWD 1.11 million in electricity costs.

Additionally, HTC continues to use green energy:

- ✓ Solar power generation at our Taoyuan headquarters and factory, as well as the Taipei office, achieving a self-use carbon reduction performance of 10.788 tCO₂e.
- ✓ Installation of dedicated charging stations for electric vehicles and provision of bicycle parking spaces, with a total of 12 new electric vehicle charging piles installed within the building.

For more information, please refer to the chapter of HTC's ESG Report - Climate Change Management.

Comprehensive Paperless Organization and Operation, Digitalization and Optimization

At the beginning of 2023, Chief Sustainability Officer established a vision of a fully paperless, digitalized, and optimized internal operations processes. In order to achieve this goal, we have comprehensively reviewed the company's internal operating processes and implemented comprehensive paperless and fully digital planning and improvement. Through well-designed process optimization, we eliminate unnecessary tedious steps, improve efficiency and work quality, and ensure that the company operates more smoothly, optimizes environmental protection and cost-effectiveness. This is not only for energy saving and carbon reduction, but also it is the turning point of all employees' mindsets and the company's culture. This important transformation will enable us to be more competitive and continue to pursuit excellence.

Through the ESG Committee, we took stock of all the company's work processes. After a year of continuous efforts and improvements, in addition to meeting external requirements and regulatory restrictions, we successfully achieved the results of the first phase and carried out the work proactively. With the active participation and cooperation of all employees, we successfully reduced paper usage by nearly 80% in 2023 compared with 2022, further improving organizational efficiency and environmental awareness.

In 2024, HTC will continue to promote the second phase of paperless office, integrating the concept of paperless into all aspects of business operations, hoping to contribute to the protection of the environment.

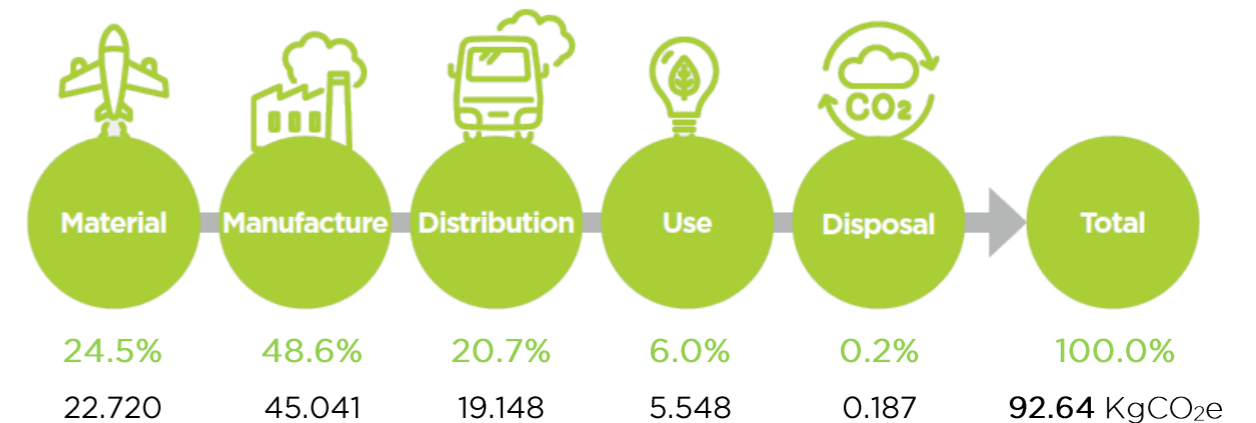
Low-Carbon Products

Product Carbon Footprint



HTC conducted a comprehensive carbon footprint assessment of each stage of the annual flagship model, VIVE XR ELITE, including raw material selection and packaging methods, and obtained ISO 14067: 2018 verification statement, covering from cradle to grave. The carbon footprint of each VIVE XR ELITE (including packaging) is 92.64 kgCO₂e, and the main carbon emission hotspots are concentrated in the raw material manufacturing and distribution and product manufacturing stage.

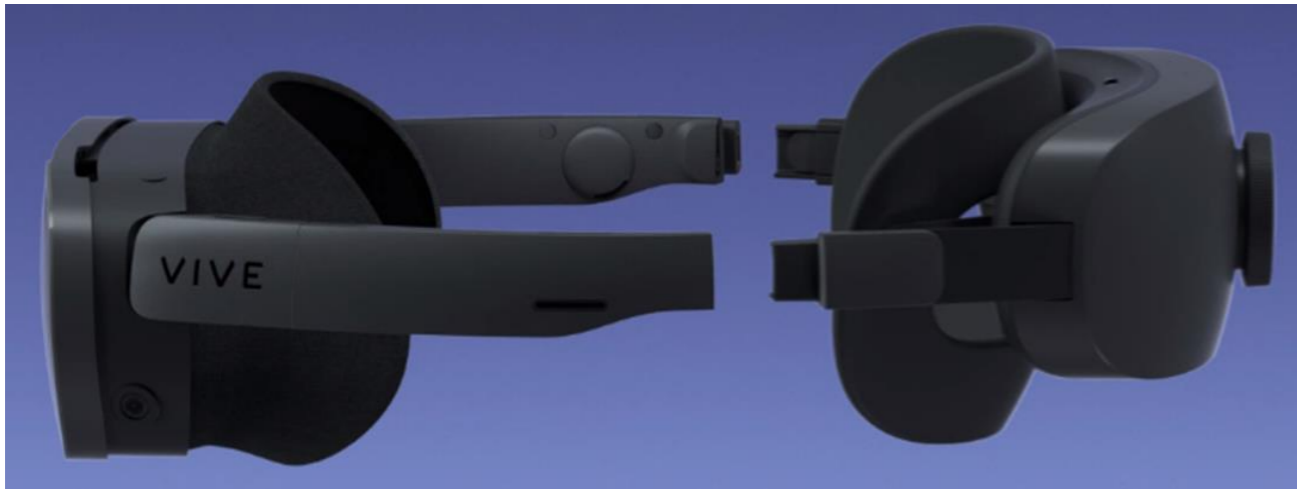
HTC VIVE XR ELITE Product Carbon Footprint



Extend Product Life Cycle

The HTC design team will consider the use of green materials that are easy to recycle and reuse in the early stage of product design, and the selection of materials is in line with international regulations and customer requirements. In addition to minimizing the carbon emissions of the product, it will also avoid the use of raw materials. The process causes environmental damage and affects the surrounding areas, and actively plans to extend the service life and life cycle of products, avoid using any toxic materials, commit to reducing product energy consumption, increase the proportion of recyclable materials, and reduce the environmental impact of the manufacturing process.

✓ Modular Design



One key aspect of HTC's sustainable products is the company's embrace of modular design, particularly in all-in-one headsets. The VIVE XR Elite and VIVE Focus 3 headsets have a detachable battery, which allows users to easily replace the battery by themselves rather than having to discard the whole device. This not only extends the product's usable lifespan but also reduces waste and optimizes usage of nonrenewable resources.

✓ Enhancement of Energy Efficiency

Making the battery easily replaceable is just one part of HTC efforts to improve energy efficiency. All power supplies used in HTC products adhere to relevant international energy regulations, including those set by the California Energy Commission and the European Union. Power supplies must be verified by a third-party agency to meet the highest "Level VI" requirements established by the U.S. Department of Energy. While the Level VI designation requires a standby power supply of less than 0.1W, HTC's chargers have a minimum standby power of 0.025W, outperforming the requirement by 75%.

Among the new HTC VIVE products launched in 2023, the VIVE series battery holders boast large power capacity, enabling up to 2 hours of continuous power usage. But even with more power, the performance per unit energy consumption (UEC) is actually 6.11% lower than both the U.S. Department of Energy and Natural Resources Canada standards.

For more information, please refer to the chapter of HTC's ESG Report - Sustainable Design.

Low Carbon Innovative Design

Based on the concept of green product design, HTC continues to increase the proportion of materials recycled in virtual reality products, and uses sustainable packaging to be more environmentally friendly: HTC puts environmental friendliness and sustainability as the top priority in the design of product packaging reduction, and strives to reduce the environmental impact while ensuring the safety and aesthetics of product packaging.

Since 2022, HTC has been using paper with **99% recycled** content for packaging while maintaining the packaging's sophistication. In 2023, this practice was fully implemented in the latest VIVE XR Elite series project, where all packaging materials are made from 100% recyclable materials, with **99.99% derived from plant fibers**, actively promoting the maximized use of plant fiber in packaging. This demonstrates HTC's relentless pursuit of corporate social responsibility. In terms of sustainable packaging design, the battery compartment of the VIVE XR series and paper packaging materials for VIVE accessories have a **recycling content rate of up to 99%**, confirming HTC's active efforts in promoting the circular economy and its firm commitment to environmental sustainability through attention to detail.

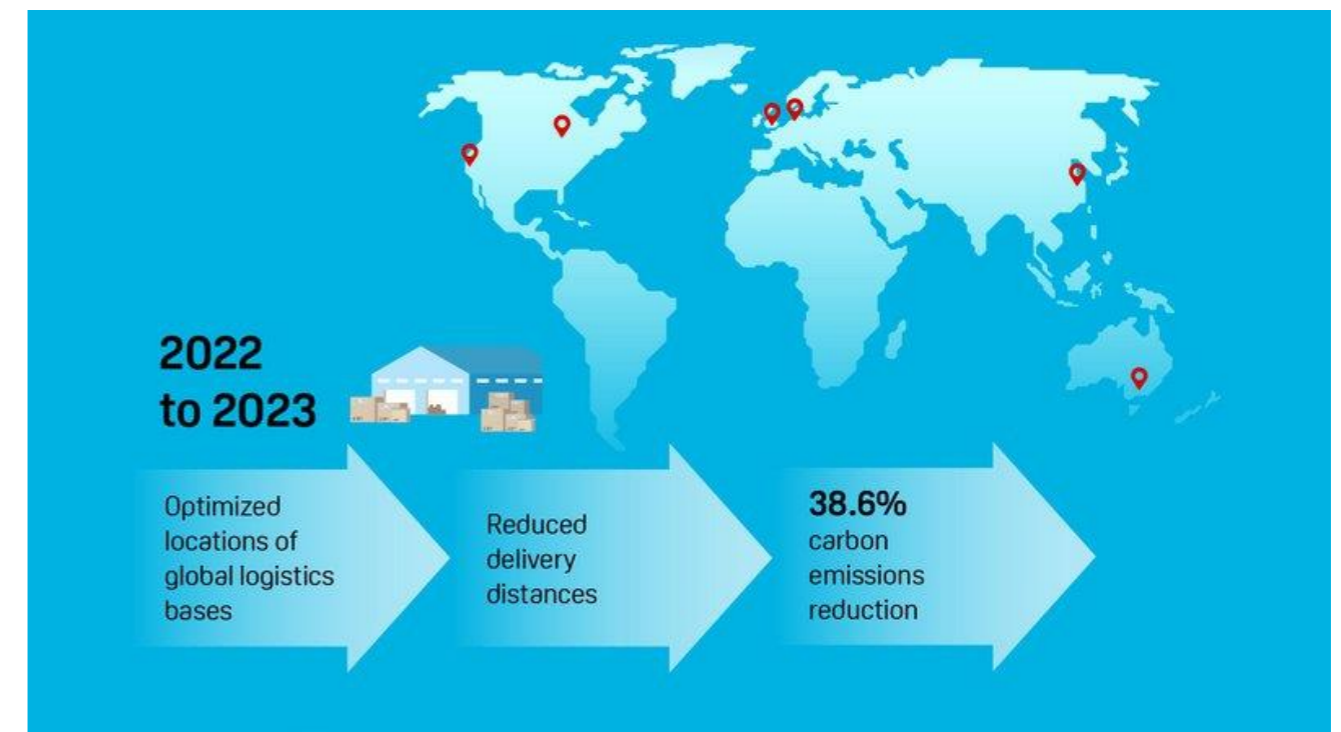


For more information, please refer to the chapter of HTC's ESG Report - Sustainable Product.

Low-Carbon Transportation

HTC has demonstrated a strong commitment to sustainability through its strategic approach to shipping and logistics, making improvements along the way for environmental impact and efficiency. Through careful analysis of customer distribution and transportation distances, HTC selected warehouse locations that minimize carbon emissions by shortening the distance from international airports and ports, as well as increasing the use of sea and rail transportation over air transportation. These efforts have resulted in a substantial decrease in carbon emissions, with new VIVE XR Elite ground shipments achieving an average carbon emission reduction of 38.6% due to the reduction of delivery distances between global logistics bases.

In 2023, HTC's average consolidation rate of air, sea, and land transportation reached 72%. This reworking of logistics helped cut carbon emissions and contribute to a more sustainable supply chain and distribution network.



For more information, please refer to the chapter of HTC's ESG Report - Sustainable Product.

Supply Chain Engagement

To truly reduce environmental harm in a meaningful way, companies must connect with their entire supply chain and take collective action to assess and reduce supply chain climate risks. HTC's net-zero commitment represents not only HTC's determination to promote zero-carbon transformation, but also an oath to work with the supply chain to take positive actions towards low-carbon transformations. We are committed to reducing value chain carbon emissions by 25% in 2030 compared with the base year (2021) through initiatives, establishment of supplier climate capabilities, and supply chain greenhouse gas management strategies.

Climate Resilience Building

HTC uses various supply chain projects combined with education and training to enhance the supply chain's ability to respond to sustainable development challenges. We continue to invite suppliers to participate in supplier ESG communication meetings, CDP project briefings, and provide relevant social and environmental responsibility management training, so that suppliers can understand the latest knowledge and trends. We provide suppliers, HTC management, and industry experts with opportunities for multilateral communication.

In 2023, we focused our communication on the digitization of carbon management, strengthening supply chain climate management capabilities through the CDP supply chain program, and the new HTC supply chain carbon management system. Based on the life cycle assessment (LCA) carbon footprint system, we will effectively collect and manage carbon emissions at the supply chain end to build the foundation for the HTC's net-zero carbon emissions promotion.



HTC has made onto CDP's 2023 Supplier Engagement Leaderboard, which is the highest grade of Supplier Engagement Rating (Grade A). Among more than 11,500 companies around the world that participated in the rating, only 450+ companies can receive this highest honor.

To make truly meaningful reductions in harm to the environment, businesses must cascade action down the entire supply chain. We're proud to have earned a place as a leading company on CDP's 2023 Supplier Engagement Leaderboard, for taking action to measure and reduce climate risk within our supply chain. "As a Supplier Engagement Leader, HTC is demonstrating supply chain leadership, a prerequisite for the transition towards a net-zero, nature-positive future." - Simon Fischweicher, Director of Supply Chain and Reporter Services, CDP.

Supply Chain GHG Management

HTC has been participating in CDP since 2008, reporting regularly on carbon risks and the planning, systems, and outcomes of carbon management. Starting in 2023, HTC has also joined as a member of the CDP Supply Chain Program, inviting suppliers to disclose their carbon emissions to gain a clear understanding of their carbon management efforts.

In 2023, the CDP questionnaire response rate for Critical suppliers reached 94%. Among them, over 70% of suppliers reported on Scope 1/Scope 2, 77% included climate issues in board-level oversight, 62% set carbon reduction targets, and 30% used renewable energy. We will continue to communicate with tier-1 suppliers, gradually expand our influence, and work with upstream suppliers to deepen the carbon management capabilities of the industry chain.

2023 Supplier Performance Achievement

Supplier Achievement Rate	HTC Supplier Chain	Global average of CDP suppliers
Overall response rate	94%	66%
Inclusion of climate issues in board-level oversight	77%	74%
Climate risk analysis	73%	69%
Incorporating climate into business strategy considerations	80%	79%
Emission Reduction Target	62%	46%
Emission Reduction Initiatives	66%	56%
Scope 1 Emission Reporting	78%	67%
Scope 2 Emission Reporting	74%	62%

For more information, please refer to the chapter of HTC's ESG Report - Sustainable Supply Chain.

Prospects

In HTC's journey towards sustainability, when we reflect on how HTC has built HTC's own sustainability vision, we find that the most important thing is to integrate from the core business. Only by embracing the spirit of ESG can we find a balance between the company's growth and sustainable development, and only then can HTC's sustainability vision go hand in hand with the VIVERSE vision.

With the active efforts of the first two years, HTC has established a solid foundation for sustainable development. However, we know that this is just the beginning, and that the next third year will be a time for us to look for more opportunities and do more. With software and hardware support, HTC has shown a differentiator, and not only ours. The competitiveness of products is the key to achieving the goal of sustainability.

Looking to the future, HTC is committed to building a green future that takes sustainability into place from product design, manufacturing, transportation, use, and recycling, with innovative products, efficient logistics, and carbon reduction commitments as cornerstones to lead the XR industry towards a sustainable future.

We will continue to explore innovative technologies and solutions to meet sustainability challenges. Through continuous R&D and collaboration, we are committed to developing more environmentally friendly and socially valuable products and services to promote the realization of sustainable development goals and inject new vitality and hope into HTC's sustainable development. As a low-key and pragmatic sustainability practitioner, HTC expects HTC to take every step steadily on the road to net zero.

Appendix


TCFD Disclosure Index

Core Elements	Recommended Disclosures	Chapters	Page
Governance	Board's oversight of climate-related risks and opportunities	Climate Change Governance Framework	5
	Management's role in assessing and managing climate-related risks and opportunities	Management Responsibility	7
Strategy	The climate-related risks and opportunities the organization has identified over the short, medium, and long term	Risk and Opportunity	21
	The impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	Coping Strategy	23
		Financial Quantification -Risk	45
		Financial Quantification - Opportunity	51
The Company scenario analysis (including a 2°C or lower scenario)	Scenario Analysis	12	
Risk Management	The organization's processes for identifying and assessing climate-related risks	Climate Change Risk and Opportunity Identification Process	11
	The organization's processes for managing climate-related risks	Risk Management Process	9
	How processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	Risk Management Process	9
Metrics and Targets	The metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	Metrics and Targets	57
	Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks	Overall Goal	75
		Coping Strategy	23
	Management targets and related performances	Metrics and Targets HTC Executive Overview	57 75

HTC's Reports and Policies on Climate Change

- HTC ESG Report
- HTC ESG Policy
- Climate Change Management Policy
- HTC Environment Protection, Occupational Safety, Health, and Energy Policy

Assessment Statement




TCFD Performance Assessment Statement
 The process and procedures of
HTC Corporation
 23 Xinghua Road Taoyuan District,
 Taoyuan City 330, Taiwan

have been assessed from 03 April 2024 to 30 April 2024 and demonstrated the implementation status against the

Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures (29 June 2017)


The organization has incorporated climate-related governance organization
 The actual and potential impacts of climate-related risks and opportunities has been considered and identified over the relevant short-, medium-, and long-term time horizons
 The resilience of the organization's strategy were taking into consideration with different climate-related scenarios including SBTi-1.5°C, NDCs and RCP-8.5 or SSP5-8.5 scenarios
 The methodology of organization's climate-related risk management process has been adequately implement as well as integrated into organization's overall risk management.
 The scope 1 and scope 2 greenhouses gas emissions inventory has been conducted and verified annually in Taiwan, certain metrics and targets have been used by the HTC manage climate-related risks and opportunities and performance and against targets under SBTi-1.5°C.
 For the following activities
 Governance, Strategy, Risk Management, Metrics and Targets
 And cover the following operational locations:
 Headquarter of HTC Corporation.
 HTC meets SGS TCFD performance assessment at management level of "Pioneer"

Authorised by




Stephen Pao
 Business Assurance Director
 Issue Date: 17 June 2024
 Valid Date: 16 June 2025

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Disclaimer:
 The findings recorded herein demonstrated a level of performance against the Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) (29 June 2017) and are only valid at the time of the intervention and only as stated above. This document is not intended to be used for certification purposes or regulatory or contractual use and does not relieve the Client from compliance with any bylaws, federal, national or regional acts and regulations issued pursuant to TCFD.
 SGS Services are governed by and subject to the General Conditions of Customised Audit Services.



NATURE AND SCOPE OF THE ASSESSMENT
 SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by HTC Corporation. (hereinafter referred to as HTC) to conduct an independent performance assessment of the Task Force on Climate-related Financial Disclosures, (hereinafter referred to as TCFD).

The information in the HTC's TCFD disclosure framework and its presentation are the responsibility of the management of HTC. SGS has not been involved in the preparation of any of the material included in HTC's TCFD disclosure framework.

Our responsibility is to express an opinion on the report content within the scope of performance assessment with the intention to inform all HTC's stakeholders.

The SGS protocols are based upon the Fundamental Principles for Effective Disclosure contained within the TCFD and SGS Management System Manual and Global System procedures.

The performance assessment comprised a combination of pre-assessment research, interviews with relevant employees, superintendents, ESG committee members and the senior management in HTC's Headquarter; documentation and record review and validation with external bodies and/or stakeholders where relevant.

SCOPE OF PERFORMANCE ASSESSMENT AND DISCLOSURE CRITERIA
 The scope of the performance assessment included evaluation of quality, reliability of TCFD disclosure and performance information as detailed below and evaluation of adherence to the four core elements for the management process as well as seven principle for effective disclosures for the information to be disclosed.

PERFORMANCE ASSESSMENT METHODOLOGY
 The assurance comprised a combination of pre-assurance research, interviews with relevant employees; documentation and record review and validation with external bodies and/or stakeholders where relevant.

STATEMENT OF INDEPENDENCE AND COMPETENCE
 The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from HTC, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assessment team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, SRA, EMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the TCFD performance assessment service provisions.

ASSESSMENT OPINION
 On the basis of the methodology described and the verification work performed, we are satisfied that the management process and information demonstrated by HTC within the TCFD performance assessment evaluated is reasonable, reliable and provides a sufficient and balanced representation of HTC climate related risks and opportunities management activities and meets SGS TCFD performance assessment at management level of "Pioneer" .

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 SGS Services are governed by and subject to the General Conditions of Customised Audit Services.



Feedback _____

If you have any questions about the 2023 HTC Climate-related Financial Disclosure Report, you are welcome to provide feedback to help us continue to improve.

Contact Us _____

HTC Corporation

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