



ACER INCORPORATED 2023 TCFD REPORT

“Conscious Technology” Vision to Help Tackle Climate Change

As the impact of climate change becomes more significant, extreme weather events are occurring more frequently around the world. These include record-breaking high temperatures, heavy rainfall, and severe droughts. These phenomena remind us of the critical importance of addressing climate issues.

In 2023, we shared our climate strategy, sustainable logistics strategy, and methods for working with logistics partners to achieve low-carbon transportation at the 28th Conference of the Parties (COP28) to the UN Framework Convention on Climate Change. At the same time, we held a global press conference in Dubai to unveil our “Conscious Technology” vision for technology designed and made with consideration for the future. With a commitment to carbon neutrality for Acer’s Aspire Vero laptop, we also shared our ongoing climate efforts, showcased two new energy storage solutions, while a climate exhibition featuring technology with product and service concepts were made open to the public.

In 2023, we released our first Task Force on Climate-related Financial Disclosures (TCFD) Report, as we believe that adopting the TCFD recommendations will strengthen our efforts in climate governance, enabling us to identify and respond to climate risks and opportunities accordingly. Acer has thus formulated relevant strategies and adaptation measures to reduce climate risks and enhance its resilience against climate change. Looking ahead, we will continue to deepen our climate governance, strategy, and the management of risk and targets in alignment with the TCFD standards and structure. We will actively embrace the low-carbon economy and business model transformation driven by climate change. Our efforts will focus on improving energy efficiency, using renewable energy, proposing tangible products and solutions, and creating ESG value and corporate competitiveness.

Blueprint for low-carbon transition and climate strategy

While climate issues have driven the transformation of the global low-carbon economy and business models, Acer shoulders the mission of being a leader and promises to achieve net zero emissions by 2050 and increase the share of renewables in electricity consumption to 100% by 2035. It also looks to integrate existing and new business groups to formulate low-carbon sustainable business strategies, create ESG value and ultimately improve corporate competitiveness.

To achieve net zero carbon emission by 2050, Acer has announced the key strategies including 9 directions under 3 major pillars. We are committed to reducing carbon footprint and emissions with 3 dimensions of business operation,

product and service, and value chain. In business operations, Acer has introduced the Task Force on Climate-Related Financial Disclosures (TCFD) and the internal carbon pricing mechanism to monitor climate risks and opportunities fully and effectively. In response to the Science Based Targets (SBT) aligned with the 1.5°C carbon reduction pathway, we are committed to achieve a 50% carbon reduction in operations (Scope 1+2) by 2030 compared to 2019, and implement a number of carbon reduction and renewable energy actions to reduce operating carbon emissions. In addition, we conduct carbon-negative research, including carbon credit development, and carbon capture and utilization (CCU).

In product and service, Acer incorporates the circular economy concept and considers the product life cycle in R&D and design to reduce the environmental impact and balance product management and environmental performance. Acer has introduced the carbon footprint tool, completed the carbon footprint report of all commercial PC products (including Chrome book) and representative desktop PC and monitor products, and developed Modern Standby power management mode. Acer also launched the environmentally friendly Vero product line. It all begins with raw materials as we continue to increase the use of sustainable materials such as post-consumer recycled plastics (PCR) and ocean-bound plastic (OBP) to reduce the material carbon footprint. Acer promotes the reuse of resources and establishes a circular economy.

In the value chain, since "Project Humanity" in 2017, Acer has been implementing environmentally friendly actions and laying the foundation for a net zero carbon emission strategy with global employees for a low-carbon supply chain. In 2021, we launched the "Earthion" project to promote carbon reduction action to suppliers and work closely with suppliers and partners in projects such as energy, product design, packaging design, manufacturing, logistics and recycling. We join hands with the suppliers to execute low-carbon transformation where collaboration can bring a positive impact on the environment and create a cleaner and more sustainable future life.

Figure 1: Acer's Net Zero Emissions Strategy



Figure 2: 2050 Net Zero Emissions Pathway, illustrative only

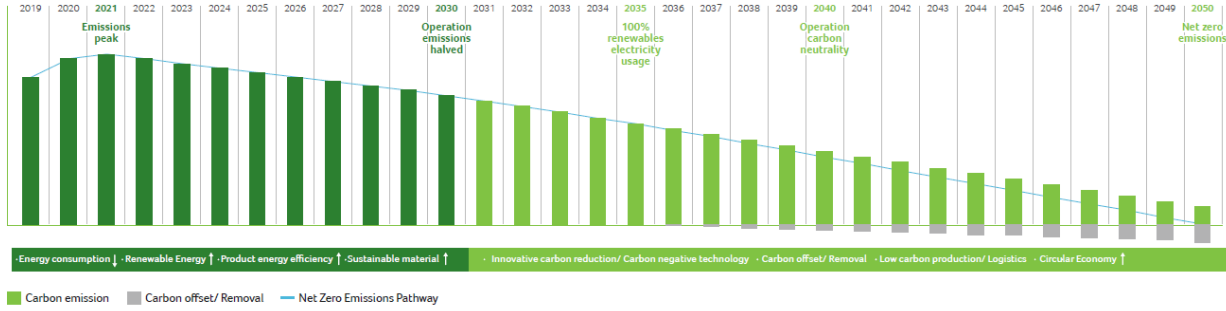


Table 1: Acer's Milestone in Response to Climate Change

Year	Milestone
2008	<ul style="list-style-type: none"> Initiated greenhouse gas inventory in global operating bases Joined CDP Supply Chain Project
2011	<ul style="list-style-type: none"> Started purchasing green electricity
2012	<ul style="list-style-type: none"> Established a Risk Management Working Group to conduct ESG risk identification and assessment Implemented third-party verification of global carbon emissions
2013	<ul style="list-style-type: none"> Incorporated supplier climate and energy management into supply chain management through supplier ESG scorecards
2015	<ul style="list-style-type: none"> Achieved a 40% of electricity consumed from renewable sources
2018	<ul style="list-style-type: none"> The Risk Management Working Group became a unit under the Corporate Sustainability Committee
2020	<ul style="list-style-type: none"> Introduced the Task Force on Climate-Related Financial Disclosures (TCFD) framework into management procedures
2021	<ul style="list-style-type: none"> Launched the Earthion Initiative Joined the RE100 Initiative
2022	<ul style="list-style-type: none"> Established a Risk Management Committee to manage climate-related risks (Renamed to Risk Management Executive Committee in 2023) Commit to set Science Based Targets (SBTs) Introduced internal carbon pricing mechanism Launched Earthion Mission: 21-Day Challenge
2023	<ul style="list-style-type: none"> Risk Management Committee was approved and became the functional committee under the Board Commitment of the value chain net zero emissions by 2050 Taiwanese operation signed a long-term renewable energy corporate power purchase agreement Developed a low-carbon exhibition in, COMPUTEX Released the first TCFD Report Commit to achieving carbon neutrality for the Aspire Vero laptop line Rated a leadership level A- from the CDP climate change for 3 consecutive years Launched the Climate Lab initiative to foster research and innovation in the field of Conscious Technology
2024	<ul style="list-style-type: none"> Carbon reduction target validated by the Science Based Target initiative (SBT) Debuted carbon-neutral laptop with the Aspire Vero 16
2025	<ul style="list-style-type: none"> 45% reduction in average computer energy consumption in 2025, compared to 2016 80% of critical suppliers committed to RE100 or set carbon reduction SBTs
2030	<ul style="list-style-type: none"> Operation carbon emissions (Scope 1, 2) will be reduced by 50% compared to the base year of 2019 Value chain carbon emissions (Scope 3) will be reduced by 35% compared to the base year of 2020

2035	<ul style="list-style-type: none"> 100% renewables electricity usage
2040	<ul style="list-style-type: none"> Operation carbon neutrality
2050	<ul style="list-style-type: none"> Net zero missions

1 Governance

Acer's corporate philosophy is based on the ultimate goal of "sustainable development." We believe that rigorous and pragmatic risk management not only reflects Acer's persistent commitment to our customers, employees, supply chain partners and investors, but also to our long-term commitment to ensuring sound business performance and compliance of corporate social responsibility.

In 2020, we officially implemented the Recommendations of the Task Force on Climate-related Financial Disclosures issued by the Financial Stability Board of the United Nations to analyze the current status of climate-related financial disclosures, identify and quantify climate risks, and publicly disclose the potential financial impact of climate change on Acer and its future response strategies.

1-1 Climate-related Governance Structure

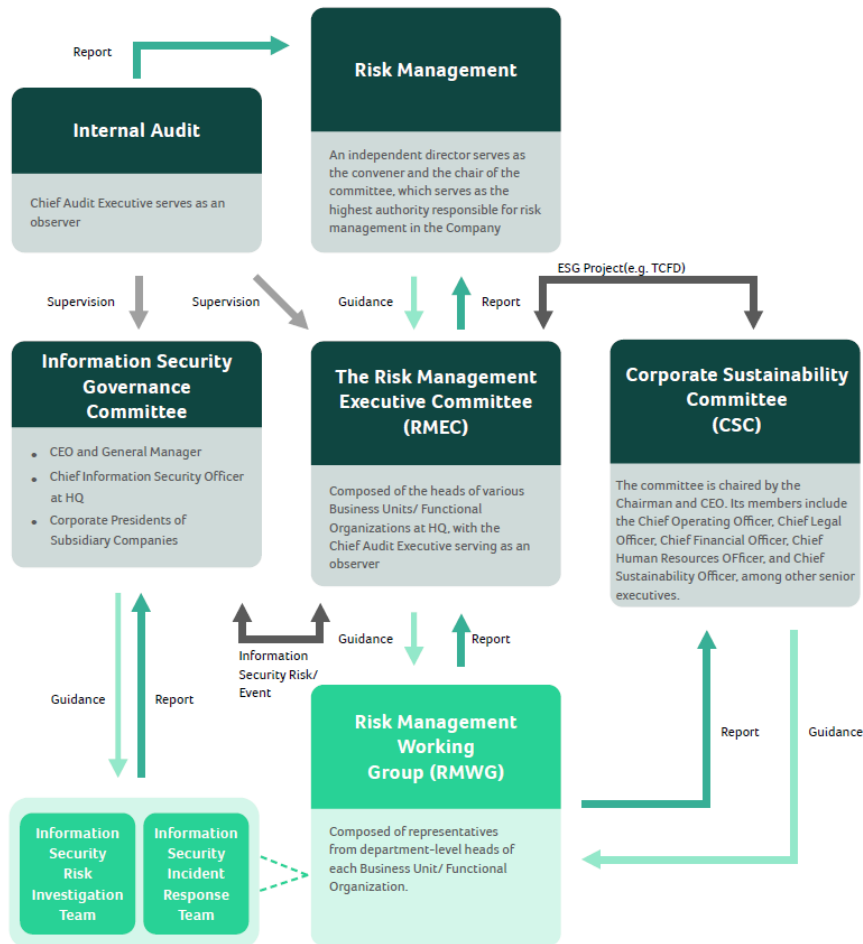
To proactively identify and manage internal and external operational risks, and effectively control these risks through appropriate assessment and handling procedures, Acer has established the Risk Management Committee (RMC) to assist the Board of Directors in risk governance.

The Risk Management Committee is a functional committee established by the Board of Directors in accordance with Article 13 of the Company's Articles of Incorporation and reports directly to the Board of Directors. The Risk Management Committee is responsible for overseeing the overall risk management of Acer Group. It executes the risk management decisions of the Board of Directors, coordinates and promotes cross-organizational risk control programs, supervises and manages the improvement mechanisms for overall risk control within Acer Group, and reviews and integrates various risk control reports. The committee submits reports to the Board of Directors annually, at least once a year, and provides timely updates on the implementation of risk management and necessary recommendations. The Board of Directors serves as the highest decision-making body for risk management, approving major decisions related to risk management based on business strategies and environmental changes.

The Board of Directors/Risk Management Committee are the highest authorities responsible for the Company's risk management which promotes and implements the Company's overall risk management policy in accordance with the overall operating strategy and business environment to ensure effective risk management. Under the committee, there is the Risk Management Executive Committee (RMEC) and the Risk Management Working Group (RMWG),

which are responsible for organizing committee meetings and handling the planning, preparation, and execution of matters related to the organization rules.

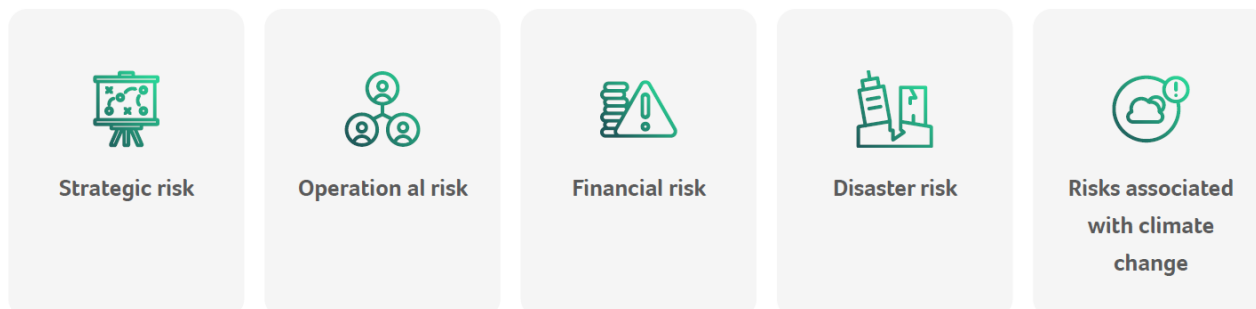
Figure 3: Risk Management Organization



Risk management scope and the management on the climate-related risks

The Company's scope of risk management encompasses major risk aspects of strategic risks, operational risks, financial risks, disaster risks, information risks, climate change-related risks, and other emerging risks. We strictly adhere to the provisions of relevant laws and regulations and follow a cyclical process of identifying, analyzing, evaluating, responding to, monitoring, and reviewing risks in order to effectively manage them. We are committed to continuously enhancing our risk management practices through ongoing learning and experience.

Figure 4: Scope of Risk Management



Management position responsibility for climate-related issues

As for the climate-related issue, we integrate our climate-related risk management into our risk management policies and operating procedures. Acer Risk Management Executive Committee is responsible for approving/declaring the environmental risk, risk management priorities, assessment results and related response measures, and supervises the continuous improvement of risk management and performance. The executive committee is composed of the top executives of each business unit/functional organization at the headquarters with the top of the auditing department as an observer to supervisor, managing risks including strategic risk, operational risk, financial risk, disaster risk, and climate change, and reporting to the Risk Management Committee and Board of Directors at least once a year. Under the Risk Management Executive Committee, the Risk Management Working Group is the unit responsible for introducing the TCFD climate risk assessment framework and conducting climate risk identification, climate scenario and operational impact assessment, formulating climate risk prevention and mitigation measures based on the assessment and report to the Risk Management Executive Committee.

This climate-related issue is led by the Chief Sustainability Officer, to reports regularly to the Risk Executive Committee on trends, impacts, and performance on sustainability-related issues, and plays the role of communicating and coordinating important sustainability issues across departments to enhance the execution of various climate-related risks. In addition, the Chief Sustainability Officer also takes the role of connecting the Risk Management Executive Committee and the Corporate Sustainability Committee. Through the working groups on Corporate Governance, Innovation and Product Life Cycle, Environmental Management, and Supply Chain Management under the Corporate Sustainability Committee, the corporate sustainable development and risk management issues were integrated to strengthen the implementation effectiveness of various ESG-related risks.

1-2 Building Climate Capabilities

Board of Directors Training

In order to implement its sustainable development policy, the company also reviews the involvement of directors in economic, social, and environmental issues through performance evaluations, as well as regularly communicating with dedicated units on economic, social, and environmental issues, receiving reports, reviewing implementation status, and evaluating risks.

To maintain the professional strengths and competencies of the directors, all seven directors have participated in various continuing education courses, such as "Introduction to TCFD and Analysis of Benchmark Cases", Governance and Strategic Practices for Climate, and Carbon Reduction Trends in the Financial Industry", "Climate Scenario Analysis and Stress Testing" and "Practices of Corporate ESG Sustainability Trends and Recent Regulatory Developments" in 2023.

Employee internal training

Acer places great emphasis on the impact of the company in regard to climate issues. Through internal training and initiatives such as Project Humanity, we focus on ESG-related issues and continue to cultivate the climate awareness of our staff. Company goals such as net zero emissions and RE100 are deeply rooted in our corporate culture and practice, strengthening our sustainable competitiveness. In order to enhance colleagues' understanding of the concept and associated actions of ESG, the ESG Office developed eLearning materials in 2023. These materials include chapters on ESG overview, supply chain management, environmental sustainability, and social engagement, and were made available on the My eLearning online platform for colleagues across regions such as Taiwan, Pan America, PanAsia Pacific, and EMEA to participate in online learning. As of December 2023, the completion rate reached 91%. In addition, In January 2023, we partnered with external teams to conduct ISO 14064 internal audit training for employees of both our company and our subsidiaries. About 70 employees attended sessions both in-person and online to learn about GHG management regulations and trends, and internal inventory information collection and calculation methods to improve the accuracy and reliability of the company's greenhouse gas emission data.

Improving Supplier Capabilities

Acer offers information and training on the latest trends and developments in social and environmental responsibility, helping suppliers better confront the challenge of sustainable development. We continue to invite suppliers to participate in annual supplier ESG communication meetings, CDP project briefings, and major training programs on social and environmental responsibility. This helps them get access to the latest information on global trends, while also presenting opportunities for suppliers to engage in multilateral communication with Acer senior management or relevant industry experts. We invite major suppliers to take part in annual ESG Communication Meetings, where we

share the latest global trends in corporate sustainability, human rights issues, and climate mitigation and adaptation measures, along with Acer's requirements of and goals for supply chain ESG management performance.

In 2022, we focused our communication on the digitization of carbon management, and through the new e-ARSM Acer Responsible Supply Chain Management System and 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 company's net-zero emissions promotion. In 2023, our communication efforts were focused on preparing data related to EPEAT Climate+ and the 10th generation of TCO Certified standards, as well as product carbon footprint. This emphasis aimed to minimize carbon footprints at every stage, from manufacturing and packaging to disposal and recycling. It was in line with our commitment to achieve carbon neutrality for the Aspire Vero series notebooks and echoed Acer's product design vision of "Tech Awakening," which prioritizes sustainability for the future.

2 Strategy

While climate issues have driven the transformation of the global low-carbon economy and business models, Acer shoulders the mission of being a leader and promises to achieve net zero emissions by 2050 and increase the share of renewables in energy consumption to 100% by 2035. It also looks to integrate existing and new business groups to formulate low-carbon sustainable business strategies, create ESG value and ultimately improve corporate competitiveness.

Acer's risk management team referred to relevant international carbon management trends, TCFD recommendations, reports, and information released by other relevant domestic and global institutions and introduced physical and transition risk scenarios such as RCP 2.6, RCP 8.5, IEA NZE 2050, and NDCs (Taiwan). We take the potential impact of climate change into overall operational considerations, evaluate the probability of risk occurrence and impact, and formulate climate risk prevention and mitigation measures.

2-1 Climate Risk and Opportunity

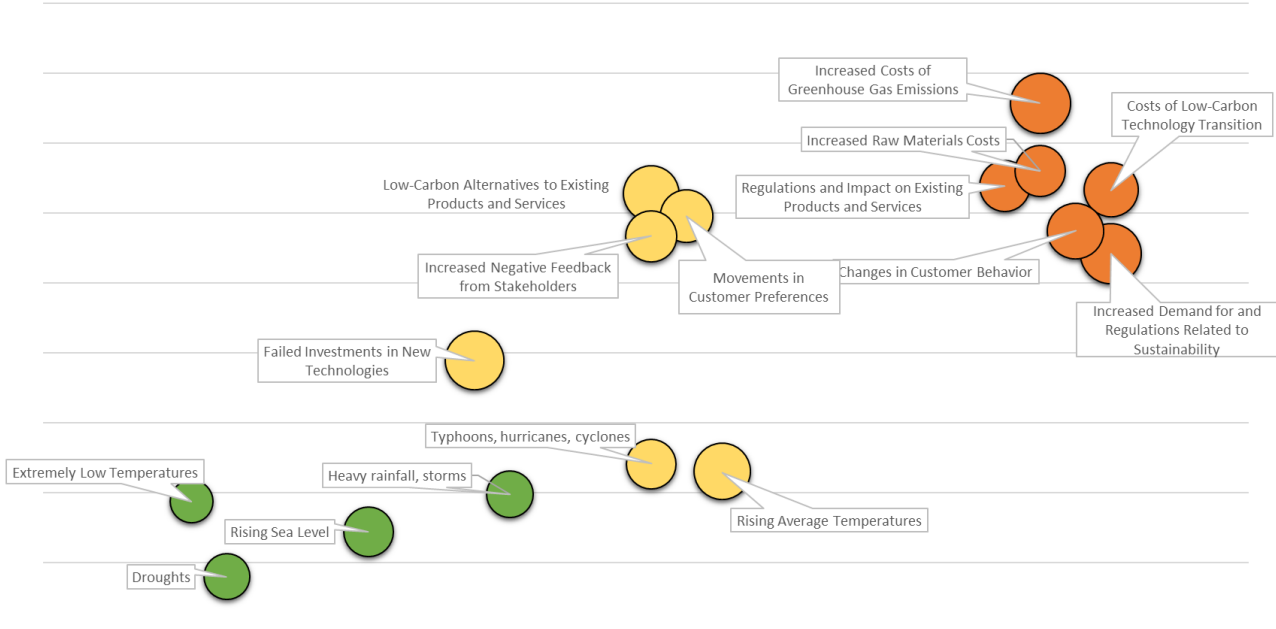
Material Climate Risks and Opportunities

Acer refers to relevant climate change information, TCFD disclosure recommendations, and reports and information released by other domestic and international organizations, as well as considering the characteristics of our own business to list out relevant climate risk factors and make a climate risk checklist (Annex I). We conduct comprehensive considerations based on the "risk impact level", "potential risk vulnerability," and "risk probability" of each risk on the checklist. Climate risk classification is then conducted after these factors are multiplied, with the highest 20% classified as high risk and the lowest 20% as low risk to identify short-, medium-, and long-term climate change risks and Opportunities. The latest findings show that government regulatory and policy actions have become Acer's biggest potential risks in response to the impact of climate change, with increased demand for and regulations related to sustainability, increased costs of greenhouse gas emissions, and regulations and impact on existing

products and services. In addition, affected by the global net-zero emissions trend, governments around the world are promoting green economy and other related policies, which may intensify existing inflationary pressures, lead to rising prices, reduce people's purchasing power, and lead to "green inflation." For example, the implementation of carbon pricing will raise production costs for businesses, resulting in higher product prices. Similarly, the development of green energy requires significant investment, which can also drive up energy prices. The risk of green inflation is also reflected in the latest identification results, including the costs of low-carbon technology transition and the cost of increased raw materials, which have all risen to the high risk.

On the other hand, in terms of physical risks, with a global emphasis on climate issues actively invested in mitigating actions around energy savings and renewable energy, and Acer's adoption of strategies including insurance planning, decentralized procurement, and energy use optimization at operating locations, extreme weather—storms and the impact of the rising average temperatures have been reduced from high risk in 2020 to low- and medium-risk, respectively. Among them, the rising average temperatures is considered to have a high possibility of occurrence, and the correlation between the electricity consumption of Acer's operations and temperature is directly proportional, which may lead to an increase in Acer's electricity consumption, becoming our primary concern on the climate-related physical risk..

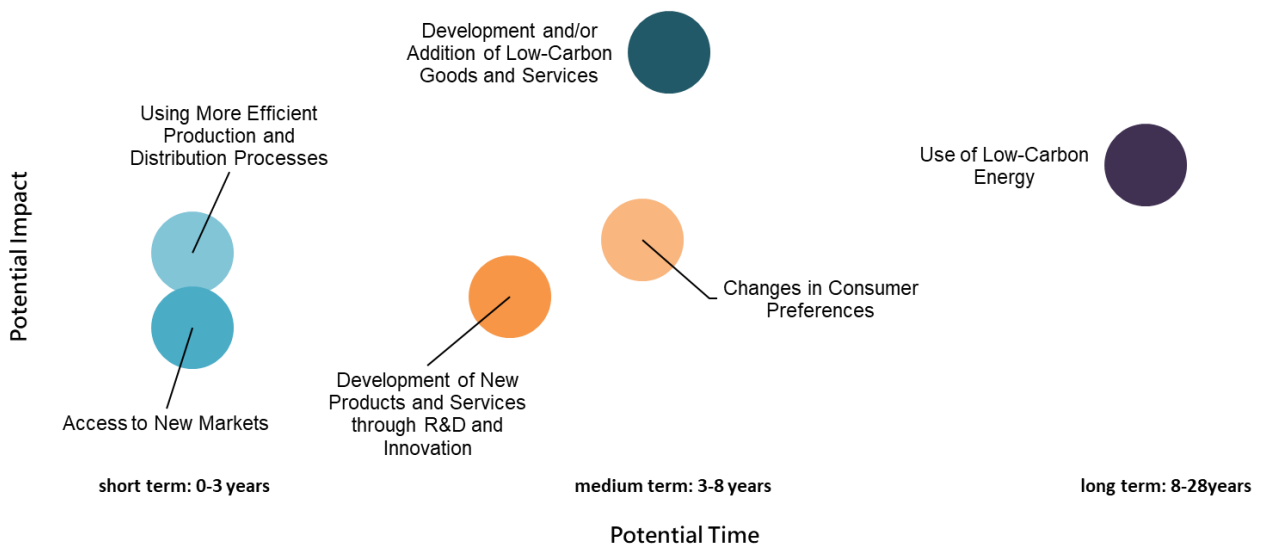
Figure 5: Major Climate Risk Matrix



With regard to the identification of climate opportunities, we also compiled a checklist of Acer climate opportunities (Annex II) and used the similar approach to identify the possible climate opportunities for Acer are the development and/or increase of low-carbon products and services and the use of low-carbon energy. In 2023, the results show no significant changes with the identification in 2022. Low-carbon products and services can not only meet the recent

environmental and carbon footprint requirements of various national policies and regulations, but may also mitigate future carbon tax increases under carbon tariffs or other ESG related taxes. The willingness to buy environmentally friendly products may also help us acquire orders and increase business revenue while increasing brand value, bringing multiple benefits. The use of low-carbon energy not only meets the expectations of institutional investors and stakeholders on carbon reduction trends and strengthens Acer's resilience to climate change and related regulations, it is also in line with the company's goal of using 100% renewable electricity (RE100) and net zero emissions, enhancing corporate ESG image and creating a further point of opportunity.

Figure 6: Major Climate Opportunities Matrix



2-2 Climate-related Management and the Response Measures

To effectively manage climate risks and achieve our 2050 net-zero carbon emissions target, we have identified and prioritized high-risk areas, moderate-risk areas, and opportunities based on climate risk assessments. We have also released key strategies for achieving net-zero, consisting of three main areas and nine specific strategies. Our focus is on reducing carbon footprints comprehensively through three strategic approaches: business operations, product services, and low-carbon supply chains. We have developed concrete action plans to address the identified climate-related issues.

Table 2: Major Climate Opportunities Matrix

Type	Type	Risk/Opportunity Item and Impact Description	Impact Period*	Response Measures and Action Plans
Transition Risk	Regulation and Policy	<p>Increased Demand for and Regulations Related to Sustainability</p> <p>Emerging sustainable product design specifications such as the Ecodesign for Sustainable Products Regulation, climate disclosure requirements (e.g. Taiwan listed company sustainability roadmap, EU Corporate Sustainability Reporting Directive), and renewable energy or environment-related regulations and policies may lead to increased operating costs for companies due to compliance with relevant regulations.</p>	Medium	<p>Acer Corporate Sustainability Committee (CSC), chaired by the Chairman and CEO, with the ESG Office serving as the Executive Secretary. The Corporate Sustainability Committee establishes working groups on corporate governance, risk management, innovation and product lifecycle, environmental management, and supply chain management. These groups address significant sustainability issues across departments, facilitating communication, coordination, and planning for important issues. They also execute and monitor action projects to track progress and effectiveness.</p> <p>The ESG Office is led by the Chief Sustainability Officer, who serves as the Executive Secretary of the Corporate Sustainability Committee. In addition to reporting regularly to the Corporate Sustainability Committee on trends, impacts and performance on sustainability-related issues, the ESG Office also plays a communication and integration role between the working groups and the Corporate Sustainability Committee. In addition, to communicate effectively with our global locations, we have also established ESG Executive Secretary at Regional Headquarters, who is responsible for formulating ESG action plans and programs at regional headquarters to implement various sustainability issues management.</p>
		<p>Increased Costs of Greenhouse Gas Emissions</p> <p>Trends in carbon valuation are gradually becoming clear (such as carbon taxes and carbon fees). The European Union Carbon Border Adjustment Mechanism (CBAM) is set to be enter a test period from October 2023 and be officially implemented in 2026. Taiwan's Climate Change Response Act is expected to impose carbon fees in 2024. Greenhouse gas emissions exceeding the core quota</p>	Medium	<p>Acer shoulders the mission of being a leading brand and promises to achieve net zero emissions by 2050, increase the share of renewables in energy consumption to 100% by 2035 and set Science Based Targets (SBT) aligned with the 1.5°C carbon reduction pathway. By 2030, Acer aims to reduce carbon emissions by 50% in organizational operations compared to 2019, and reduce the value chain emissions by 35% compared to 2020. In addition, by 2025, the Acer personal computer product average energy consumption will be reduced by 45%</p>

		will incur greenhouse gas emissions costs, and may cause suppliers to pass on these costs and adjust pricing, affecting product competitiveness.		<p>compared to 2016 and the computer and displays product will reach to 20-30% post-consumer recycled plastic material content.</p> <p>We announced our net-zero strategy outlining nine directions under three major pillars of operations, products and services, and value chain. The nine strategies are: minimize energy consumption; use renewable energy; carbon removal and offsets; low-carbon products and services; choose sustainable materials; smart, circular and renewable applications; commit to carbon reduction targets, green manufacturing and logistics; and realize low carbon and circular economies to reduce the overall carbon footprint.</p>
		<p>Regulations and Impact on Existing Products and Services</p> <p>Additional requirements from environmental laws, energy labels (e.g. Energy Star, EPEAT, TCO, etc.), life cycle assessments, and product carbon footprint reports worldwide may increase Acer's operating costs and may cause suppliers to adjust quotations due to the addition of regulations, passing along increases in R&B and procurement costs.</p>	Short	<p>As environmental labeling standards are revised, Acer continues to track and collaborate with ODMs, evaluating and responding to new standards early to ensure that we have sufficient time to smoothly introduce changes to our products. For example, the revision of EPEAT program includes four modules: Climate Change Mitigation, Sustainable Use of Resources (or Circularity), Reduction of Chemicals of Concern, and Corporate ESG Performance, which will be applied to all EPEAT product categories and starting with Computers and Displays, Imaging Equipment, Mobile Phones, Servers and Televisions.</p> <p>Furthermore, since 2019, Acer has prepared product life cycle assessment reports and carbon footprint reports for representative products and has gradually introduced product carbon footprint calculation and assessment. In 2023, Acer completed product life cycle assessments or product carbon footprint reports for all commercial notebook computers (including Chromebooks), commercial desktop computers, and representative display products.</p>
	Market	<p>Increased Raw Materials Costs</p> <p>Increased demand for renewable energy facilities/equipment, low-carbon circular materials (such as</p>	Medium	<p>Acer supports the concept of resource recycling, but also actively uses post-consumer recycled (PCR) Plastics in its products. By 2023, 18.8% of post-consumer recycled plastic were used in our computer and display products.</p>

		PCRs) due to climate change may result in increased productions costs, affecting the price of profitable products and potentially impacting revenues.		Over the period of 2020 to 2023, we have incorporated post-consumer recycled plastics into more than 40 million units of our computer and display products.
	Technological	<p>Costs of Low-Carbon Technology Transition</p> <p>The electronics industry chain faces technical challenges in low-carbon transition, from the development and use of low-carbon materials and optimization of system energy efficiency, to the development of electric and hydrogen energy, carbon-negative technologies, and so on. International brands will also require their suppliers to invest more in addition to the cost of their own low-carbon transition, resulting in increased capital capital due through low-carbon technology R&D.</p>	Short	<p>We place significant emphasis on addressing the problem of marine plastic debris. We make use of recycled ocean-bound plastic (OBP) and convert it into recyclable materials. The OBP is used in Ocean Glass touch panels for notebook computers.</p> <p>In addition, we launched the Earthion initiative to harness the strength of our staff and supply chain partners to strengthen cooperation in green innovation design, management of chemical substances used in production process, green energy use, low-carbon logistics, packaging materials and design, and product recycling, and resource reuse.</p>
		<p>Failed Investments in New Technologies</p> <p>If Acer invests in new technologies (such as IoT and AI) that have high carbon emissions and are replaced by other low-carbon technologies, or if partners switch to low-carbon technologies, this could result in the failure of the original investment in new technologies and in Acer suffering financial losses.</p>	Long	<p>Continuous innovation is a core value for Acer, as through it, we can gain a competitive edge. Our patent strategy is to invest resources in continuous innovative R&D, building a patent network and demonstrate the benefits of our patents while also establishing a set of strict patent measures to protect our R&D achievements. As of December 2023, Acer has secured a total of 7,625 valid issued patents in various countries around the world, with at least 3,400 patents issued in Taiwan and more than 1,400 patents issued in the United States.</p>
Physical Risk	Long-term Risks	<p>Rising Average Temperatures</p> <p>According to the IPCC's AR6 report, global warming has led to an inevitable rise in temperature by 1.5°C between 2021 and 2040. The average temperature rise will lead to a significant increase in air conditioning system power consumption at Acer's cloud server rooms, offices, and supply chain product assembly sites, not only consuming more power, but also leading to increased carbon emissions. In addition, Acer's product assembly plants may be affected by higher demand, unstable electricity</p>	Long	<p>We continue to implement the energy efficiency program including (1) implementing energy-saving projects, (2) Setting the RE100 goal by 2035, (3) Establishing our solar PV power generators, and (4) Investing in renewable energy development, and exploring the feasibility of new power-saving measures.</p> <p>For the risk adaptation of our existing offices, we focus on indoor temperature management. We take measures, such as the use of thermal insulation materials, the use of natural ventilation, and sunshade facilities. In</p>

		<p>infrastructure, insufficient backup capacity, local government power limiting measures, or large-scale power outages, resulting in adverse impacts on product shipment and finances.</p>		<p>addition, we make internal temperature-setting guidelines for our offices to follow and take climate adaptation measures, such as evaluating the thermal comfort, humidity, temperature, and ventilation of the office, and encouraging employees to wear clothing made of breathable and comfortable materials, etc. As for the new operations, we will take our due diligence and start a process to examine the related risk. After that, we will consider an overall plan to adapt to potential physical and transition climate risks.</p> <p>We brought together our employees and supply chain partners to expand the reach of sustainability efforts by launching the Earthion initiative, with the goal bringing everyone together to create a better future and achieve our ambitious goal of a clean planet.</p>
<p>Climate-Related Opportunities</p>	<p>Products and Services</p>	<p>Development and/or Addition of Low-Carbon Goods and Services</p> <p>Facing global low-carbon transitions and trends, developing or enhancing the application value of low-carbon products or related low-carbon services, can help boost business revenue</p>	<p>Medium-Long</p>	<p>As a human-centric company, our mission is clear – driving the development and innovation of "Conscious Technology" with humans at heart and the planet in mind. Acer employs the concept of circular economies and strives to reduce the impact of our products on the environment throughout their life cycles. In the design phase, we plan and decide on models and proportions of post-consumer recycled plastics, carefully selecting suppliers. For packaging materials, we use environmentally friendly materials and reduce packaging volume and weight by simplifying packaging and using uniform packaging dimensions and printed products. During the shipping phase, we continue to implement an optimized ground operation model at production sites through close cooperation with logistics providers. In usage, we have introduced "Modern Standby," based on the US Energy Star standard, as the basis for product design, providing a power management model that continues to deliver more products with low energy consumption to consumers. In product recall, we continue to implement recycling programs around the world and support Individual Producer Responsibility (IPR). We are</p>

				<p>committed to working with stakeholders such as governments, consumers, channels, and retailers to share responsibility for e-waste management and recycling.</p> <p>In 2023, in addition to our Vero series being made with post-consumer recycled plastics (PCRs), we also introduced the eKinect BD 3 Bike Desk, which converts kinetic energy into electricity; electric scooters and AI electric assist bikes for easy mobility; and the power station for addressing the need for energy storage and green energy conversion.</p>
	Energy source	<p>Use of Low-Carbon Energy</p> <p>By switching to low-carbon emission energy to replace coal-fired electricity and reducing energy consumption in production and delivery, we can reduce carbon emissions and bolster our resilience to climate change and related regulations</p>	Medium-Long	<p>The use of low-carbon energy not only meets the expectations of institutional investors and stakeholders regarding carbon reduction trends, but also strengthens our resilience against climate change and regulations and enhances corporate ESG image and brand value. In 2021, we announced that we had joined the RE100 initiative to achieve our goal of 100% renewable electricity use in our operations by 2035. We look forward to expanding our investment in green energy and energy storage systems through our supply chain partnerships and to launching related energy storage products.</p> <p>To further reduce carbon emissions in shipping, since 2022, we have been testing the use of Sustainable Marine Fuel (SMF). In 2023, we enhanced our partnership with logistics providers, KUEHNE+NAGEL and Expeditors, to significantly decrease carbon emissions from using SMF by 12 times compared to 2022, resulting in an almost 4% reduction in global maritime transportation emissions.</p> <p>Furthermore, starting in 2023, Acer began promoting the transportation of notebook computers using electric vehicles in Chongqing, with an initial focus on commercial models. By 2023, 52% of commercial notebook computers were already being delivered locally in Chongqing using electric vehicles.</p>

	Products and services	<p>Changes in Consumer Preferences</p> <p>As low-carbon transition has risen as a trend, customer demand for energy efficient products and corporate climate resilience has increased. A prompt focus on high-efficiency product development and marketing can enable us to gain a competitive advantage, thus increasing revenues</p>	Short-Medium	<p>As net zero emissions have become a major issue driving international policy and industrial development, corporate customers tend to look for products and services with less environmental impact, as well as suppliers with the same awareness, and continue to incorporate green procurement practices into their assessment criteria for orders. Preference for green products is also gradually increasing, and this is reflected in product purchases.</p> <p>As such, we continue to strengthen communication and disclosure around the environmental performance of our products. At the product design end, in addition to complying with legal and regulatory requirements for product sales in all regions, Acer continues to improve product energy efficiency, reduce the use of hazardous chemicals, facilitate recycling, and extend product life, all of which demonstrate our commitment to optimization of product design. Ultimately, we communicate and disclose the environmental performance of our products to consumers through various environmental labels.</p> <p>On product energy efficiency, we use the U.S. Energy Star standard as the basis for product design and continue to provide more low-energy consumption products to consumers. In 2023, 60.77% of our computers and displays are U.S. ENERGY STAR certified. 11.22% of our products are EPEAT registered, and 15.02% of our products are TCO Certified. Meanwhile, the average energy consumption of notebook computers decreased by 42% compared to 2016, and the average energy consumption of desktop computers decreased by 38% compared to 2016. This progress brings us closer to our goal of reducing the average energy consumption of personal computers by 45% by 2025.</p>
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※Risk impact period definition: short term: 0-3 years, medium term: 3-8 years, long term: 8-28 years

2-3 Climate-related Scenario

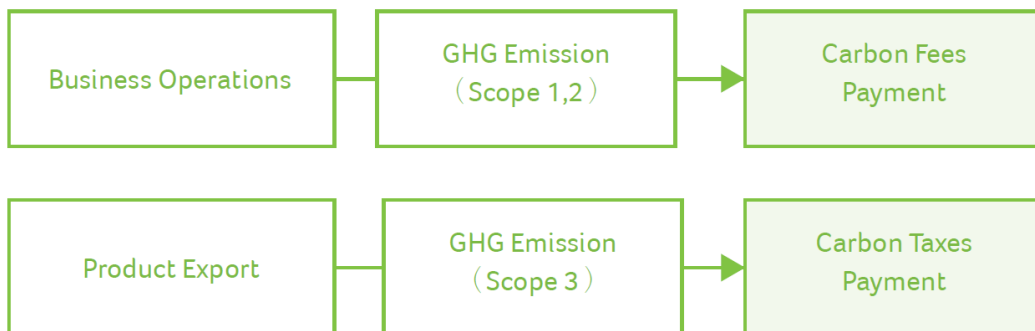
In order to assess the financial impact of climate impact, Acer sought external cooperation to develop financial quantitative and situational analysis, to carry out an assessment of the potential financial impact of Acer's climate-related transformation risks, physical risks, and climate opportunities to accurately measure the amount and distribution of resources to be invested.

Acer's climate scenarios make reference to climate scenarios published by international organizations, including RCP 2.6 from the Intergovernmental Panel on Climate Change (IPCC), RCP 8.5, NZE 2050 by International Energy Agency (IEA), and Taiwan's Nationally Determined Contributions (NDCs Taiwan).

Increased cost of greenhouse gas emissions

We identified the risk caused by changes in transition climate parameters and focus on the two risks of increased sustainability-related demand and regulations and increased costs of greenhouse gas emissions. As for renewable energy, under the International Energy Agency (IEA) NZE 2050 scenario, renewable energy will become the main energy source. By 2050, nearly 90% of power generation will come from renewable energy. These governments may drive companies to use renewable energy through regulations, such as the Renewable Energy Development Regulations in Taiwan, or increase the non-renewable energy fee. In addition, global carbon tax, such as Carbon Border Adjustment Mechanism (CBAM), will be the requirement for product export to the EU. Countries such as the USA, Japan, and Taiwan will introduce their internal carbon trading scheme to control the total emission under the national target.

Quantification of Acer's financial impact in different scenarios under the climate risk of rising greenhouse gas emissions costs by 2030, including carbon fees and other related regulations in regard to Taiwan's carbon fees and other relevant requirements at each business location, along with expenses incurred by low-carbon transition and the passing along of costs incurred with relation to greenhouse gas emissions by upstream suppliers. This, along with the export of products to the US, China, and countries in the EU which levy carbon tariffs, may result in increased financial costs.



Scenario Assumptions and Results

Scenario 1 is Taiwan's nationally determined contribution scenario (NDCs Taiwan), committed to reducing the greenhouse gas emissions of BAU (business as usual) by 50% by 2030. With reference to the International Energy Agency's Announced Pledges Scenario (APS), this scenario assumes that all climate commitments made by governments around the world, including NDC and long-term net-zero targets, will be fulfilled on time.

According to Taiwan's nationally determined contribution scenarios (NDCs Taiwan), the US and EU carbon prices refer to the IEA's Announced Pledges Scenario (APS). The developed economies with net zero commitments are expected to be US\$135 per ton in 2030. The emerging markets with net-zero commitments such as China, and the carbon price is expected to be US\$40 per ton in 2030.

Scenario 2 is the IEA's Net-Zero Emissions (NZE) scenario, assuming the global energy sector will achieve net-zero CO2 emissions by 2050.

According to the IEA NZE scenario, the prices of the developed economies with net-zero commitments such as the EU and the US, and the carbon price is expected to be US\$140 per ton in 2030. The emerging markets with net-zero commitments such as China, and the carbon price is expected to be US\$90 per ton in 2030.

Response Measures and Action Plans

Acer shoulders the mission of being a leading brand and promises to achieve net zero emissions by 2050, increase the share of renewables in energy consumption to 100% by 2035 and set Science Based Targets (SBT) aligned with the 1.5°C carbon reduction pathway. By 2030, Acer aims to reduce carbon emissions by 50% in organizational operations compared to 2019, and reduce the value chain emissions by 35% compared to 2020. In addition, by 2025, the Acer personal computer product average energy consumption will be reduced by 45% compared to 2016 and the computer and displays product will reach to 20-30% post-consumer recycled plastic material content.

We announced our net-zero strategy outlining nine directions under three major pillars of operations, products and services, and value chain. The nine strategies are: minimize energy consumption; use renewable energy; carbon removal and offsets; low-carbon products and services; choose sustainable materials; smart, circular and renewable applications; commit to carbon reduction targets, green manufacturing and logistics; and realize low carbon and circular economies to reduce the overall carbon footprint.

(1) Joins RE100 Initiative

In 2021, we announced that we had joined the global RE100 initiative and pledged to use 100% renewable energy by 2035. Acer strongly believes that by working together with its stakeholders, it can create a larger, more powerful impact. As a member of the RE100 initiative, Acer has set a commitment to source 100% renewable energy among all worldwide operations and subsidiaries by year 2035.

In addition, we have set a short-term target of 80% of our key suppliers committing to RE100 or science-based carbon reduction targets (SBTs) by 2025. By 2023, 76% of our key suppliers had responded to our expectations and set long-term commitments on green energy use.

(2) Jointly Launched Taiwan Climate Partnership

Together with seven other major companies in the ICT industry, Acer took part in launching the Taiwan Climate Partnership. The members of the TCP have taken the initiative to commit to carbon reduction targets and bring together more than 4,000 supply chain manufacturers to meet international sourcing requirements and commence a transition to low-carbon operations. The mission of the Taiwan Climate Partnership is to assist Taiwan's supply chain in green energy and carbon reduction to connect with the international community, and to combine the strengths of its partners to communicate extensively with international organizations to connect with the global climate trends. In the future, the Partnership will focus on four core tasks, including the layout of emerging climate technologies, green power and energy technologies, carbon market mechanism, and public participation.

(3) Earthion Initiative

We are committed to reducing value chain carbon emissions by 35% by 2030 compared to the 2020 base year through supplier climate initiatives, supplier climate capacity building, and supply chain greenhouse gas management strategies. In 2021, we brought together our employees and supply chain partners to expand the reach of sustainability efforts by launching the Earthion initiative, with the goal bringing everyone together to create a better future and achieve our ambitious goal of a clean planet. Through the Earthion Sustainability Platform, we share the spirit of sustainability with our partners and suppliers, helping to address the environmental challenges of our generation through innovative and integrated solutions. To this end, we are focused on innovative green product design, chemical substance management in production processes, renewable energy use, low-carbon emission logistics, packaging materials and design, and product recycling & reuse, combining the efforts of our suppliers and partners to accelerate the development of green designs and processes and completely minimize our environmental impact.

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Regulations and Impact on Existing Products and Services

Where products may not comply with regional low-carbon product specifications or standards or ones that may be promoted on the customer end in the future (e.g., product energy consumption standards, product carbon footprint information, etc.), this may result in an inability to sell in a particular region, meet public sector procurement specifications, or remain competitive in terms of products. Considering current product sales and profitability, we are focused on commercial/Chrome notebook, desktop, and display products and quantifying financial impacts based on major sales markets in various regions of the world. With reference to the requirements of EU Green Public Procurement and the US' Federal Acquisition Regulation, we have formulated the following scenarios to quantify financial impact.

Scenario Assumptions and Results

Assuming that countries and regions give priority to purchasing products with circular economical design or low environmental impact, Acer products without EPEAT registration or other related certification will be unable to participate in bidding or sell in various places, which may affect annual revenue; Additional design verifications, product certifications, and parts replacement to meet specifications or standards will also incur costs associated with R&D and production.

Response Measures and Action Plans

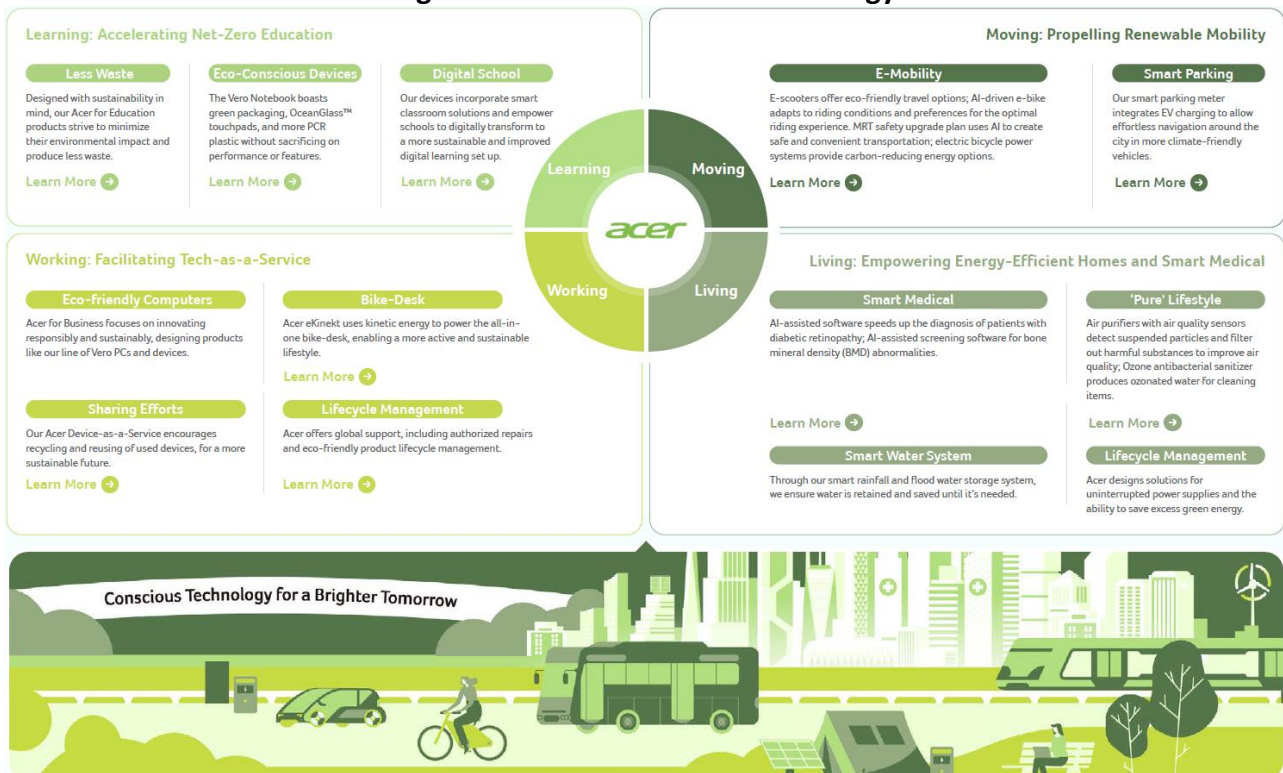
Acer has formulated a comprehensive green products strategy, carefully considering environmental impact in every stage of our products' life cycles. This includes everything from selecting materials during design, through packaging and shipping, to usage and recycling. Our hope is that in this way we will be able to work with consumers to reduce our collective environmental load. In response to the needs of our customers for products or tenders with circular economical design or low environmental impact, we consider product planning and sales in various regions and provide more product choices, including products that meet TCO verification and product carbon footprint reports.

In 2023, 60.77% of our computers and displays are U.S. ENERGY STAR certified. 11.22% of our products are EPEAT registered, and 15.02% of our products are TCO Certified. Meanwhile, the average energy consumption of notebook computers decreased by 42% compared to 2016, and the average energy consumption of desktop computers decreased by 38% compared to 2016. This progress brings us closer to our goal of reducing the average energy consumption of personal computers by 45% by 2025. Furthermore, since 2019, Acer has prepared product life cycle assessment reports and carbon footprint reports for representative products and has gradually introduced product carbon footprint calculation and assessment. In 2023, Acer completed product life cycle assessments or product carbon footprint reports for all commercial notebook computers (including Chromebooks), commercial desktop computers, and representative display products.

(1) Innovations for the Environment and Society: Conscious Technology

Acer's mission is clear: driving development and innovation with humans at the heart and the planet in mind. We believe that a sustainable future for all is imperative. In 2023, Acer collaborated with the creative agency, IDEO, to co-design an innovative ecosystem of sustainable products and services. Centered around four modes of life—Working, Living, Moving, and Learning—we introduced concepts for products, services, and initiatives designed with consideration for the future. In December 2023, in alignment with COP28 in Dubai, Acer unveiled its "Conscious Technology" vision, highlighting proactive measures in sustainable development during its Global Press Conference. Under the theme "Conscious Technology for a Brighter Tomorrow", Acer exhibited innovative concepts for products and services that span the four major modes of life, including the Vero product line made with a high percentage of recycled materials. Acer eKinect uses kinetic energy to power the all-in-one bike-desk, E-scooters and AI-driven e-bike offer eco-friendly travel options, and introduced energy storage products, providing comprehensive solutions that help minimize the negative impacts on the environment.

Figure 7: Acer's Conscious Technology



Increased Average Temperature

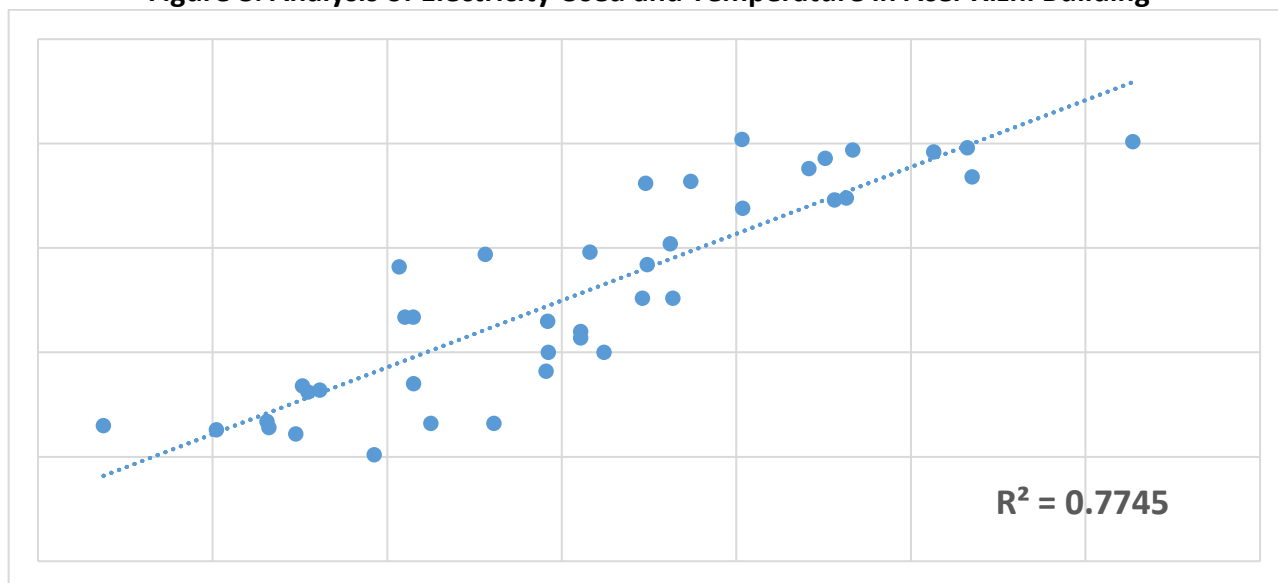
According to the IPCC's AR6 report, global warming has led to an inevitable rise in temperature by 1.5°C between 2021 and 2040. The average temperature rise will lead to a significant increase in air conditioning system power consumption at Acer's cloud server rooms, offices, and supply chain product assembly sites, not only consuming more power, but also leading to increased carbon emissions. In addition, Acer's product assembly and key component plants may be affected by higher demand, unstable electricity infrastructure, insufficient backup capacity, local

government power limiting measures, or large-scale power outages, resulting in adverse impacts on product shipment and finances.

Scenario Assumptions and Results

Acer used the Taiwan Climate Change Protection Information (TCCIP) and Adaptation Knowledge Platform developed by the Ministry of Science and Technology (MOST) and the National Science and Technology Center for Disaster Reduction (NCDR) to assess the financial impact of rising average temperatures and the resultant increase in power consumption and subsequent higher direct operating costs, looking particularly at Acer’s headquarters and cloud server room, both of which consume more electricity. As for the risk of an increase in average temperature, based on the data from TCCIP, under the RCP2.6 scenario, the annual average daily temperature in Taiwan may increase by 0.64~1.64°C from 2021 to 2040; under the RCP8.5 scenario, in 2036~2065, the annual average daily temperature in Taiwan (headquarters) may increase by 0.64~1.64°C and 1.5~2°C. Based on the Taiwan Energy Bureau's data, it is estimated that every 1-degree decrease in air-conditioning temperature will increase electricity consumption by 6%, resulting in an annual 12% increase in electricity consumption.

Figure 8: Analysis of Electricity Used and Temperature in Acer Xizhi Building



※Period: January 2021 to April 2024

Response Measures and Action Plans

We continue to implement the energy efficiency program including (1) implementing energy-saving projects, (2) Setting the RE100 goal by 2035, (3) Establishing our solar PV power generators, and (4) Investing in renewable energy development, and exploring the feasibility of new power-saving measures.

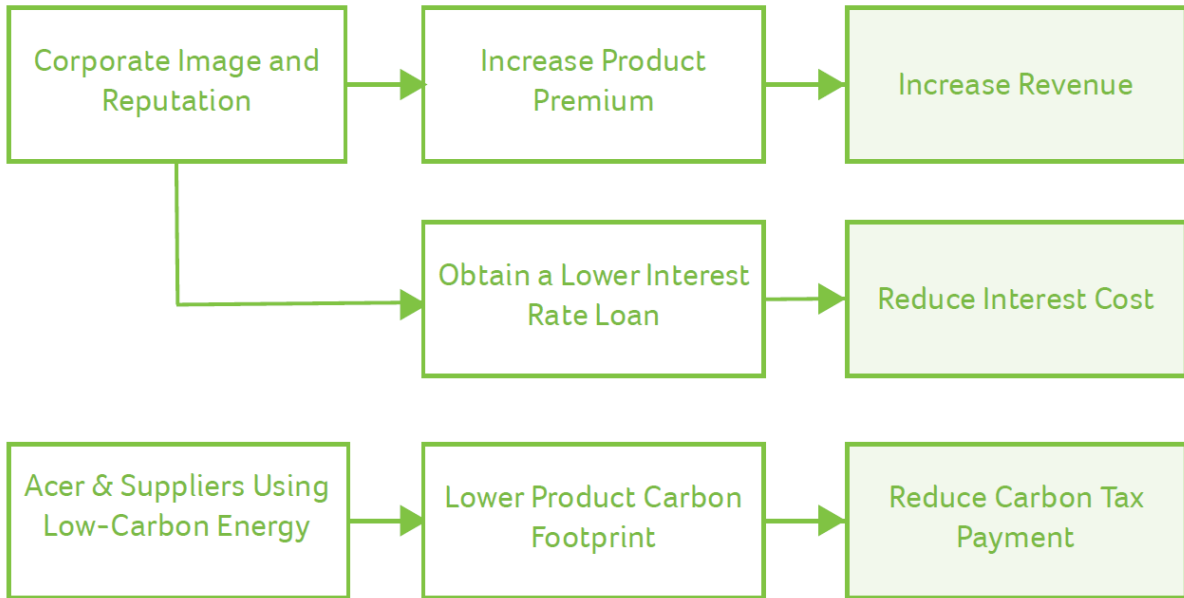
For the risk adaptation of our existing offices, we focus on indoor temperature management. We take measures, such as the use of thermal insulation materials, the use of natural ventilation, and sunshade facilities. In addition, we make internal temperature-setting guidelines for our offices to follow and take climate adaptation measures,

such as evaluating the thermal comfort, humidity, temperature, and ventilation of the office, and encouraging employees to wear clothing made of breathable and comfortable materials, etc. As for the new operations, we will take our due diligence and start a process to examine the related risk. After that, we will consider an overall plan to adapt to potential physical and transition climate risks. For example, our new office in Taipei's Nangang District uses ecology, energy saving, waste reduction and health as indicators to design. It uses a VRV air conditioning system and LED lighting equipment to create a comfortable and environmentally friendly office environment. Solar power panels are installed on the top floor to support the electricity consumption of public facilities and are aligned with our RE100 target. In addition, we adopt an energy-saving system to automatically monitor and manage lighting, water and electricity in the office. The exterior walls were made of composite insulating glass, which can effectively lower the noise impact and heat dissipation to reduce the energy consumption on air-conditioning, reducing carbon footprint, and the environmental impact on the building. This building recognized a Gold Level of Taiwan Green Building Label, and it is a step for us to move towards sustainability.

As for the suppliers, we engage with our suppliers by sharing the risks that supply chains may encounter regarding climate issues, inviting Tier-1 to Tier-3 suppliers to participate in the CDP, auditing their overall carbon management performance by ESG scorecards, and launching the Earthion initiative, with the goal of bringing everyone together to create a better future and achieve our ambitious goal of a clean planet. In 2023, in the supply chain response, 76% of our critical suppliers have committed to RE100 or science-based carbon reduction targets (SBTs), which are on track to meet our targets. 95% of our first-tier suppliers have incorporated climate issues at board level, and 62% have a transformation plan aligned with the 1.5°C Carbon Reduction Path scenario. 85% who have reported on their carbon reduction actions, and 80% who have reported on their use of renewable electricity.

Use of Low-Carbon Energy

Using low-carbon energy can reduce carbon emissions in production and transportation, strengthen resilience in response to climate-related regulations, and meet the expectations of stakeholders and institutional investors on the carbon reduction issue. It can directly or indirectly increase our company's image/reputation, thereby enhancing the overall product sales and revenue. Furthermore, we may further obtain low-interest loans from banks (such as green bonds, green loans, sustainability-linked loans, etc.) to reduce interest expenses.



Scenario Assumptions and Results

We use a variety of scenarios to calculate our benefits in using low-carbon energy, including (1) According to a research report by the University of Pennsylvania, in 2021, 76%~88% of respondents are willing to pay 10% more for green products, that is 30% growth than the year 2019. Therefore, we take 10% as the price increase rate of the green products acceptable to consumers. (2) As for low-interest loans, since 2019, a number of banks have launched Sustainability-linked Loans based on various conditions such as their own regulations, corporate industry characteristics, ESG operating activities, and customer credit risks. We assumed these loans were one yard less than the general interest rate. (3) In terms of reducing product carbon footprint, we assume that our product carbon footprint will be reduced by using low-carbon energy in the production and transportation process leading to a reduction payment in carbon tariff regulations.

Scenario 1 is Taiwan's nationally determined contribution scenario (NDCs Taiwan), committed to reducing the greenhouse gas emissions of BAU (business as usual) by 50% by 2030. With reference to the International Energy Agency's Announced Pledges Scenario (APS), this scenario assumes that all climate commitments made by governments around the world, including NDC and long-term net-zero targets, will be fulfilled on time.

According to Taiwan's nationally determined contribution scenarios (NDCs Taiwan), the US and EU carbon prices refer to the IEA's Announced Pledges Scenario (APS). The developed economies with net zero commitments are expected to be US\$135 per ton in 2030. The emerging markets with net-zero commitments such as China, and the carbon price is expected to be US\$40 per ton in 2030.

Scenario 2 is the IEA's Net-Zero Emissions (NZE) scenario, assuming the global energy sector will achieve net-zero CO2 emissions by 2050.

According to the IEA NZE scenario, the prices of the developed economies with net-zero commitments such as the EU and the US, and the carbon price is expected to be US\$140 per ton in 2030. The emerging markets with net-zero commitments such as China, and the carbon price is expected to be US\$90 per ton in 2030.

Response Measures and Action Plans

The use of low-carbon energy not only meets the expectations of institutional investors and stakeholders regarding carbon reduction trends, but also strengthens our resilience against climate change and regulations and enhances corporate ESG image and brand value. In 2021, we announced that we had joined the RE100 initiative to achieve our goal of 100% renewable electricity use in our operations by 2035. We look forward to expanding our investment in green energy and energy storage systems through our supply chain partnerships and to launching related energy storage products.

To further reduce carbon emissions in shipping, since 2022, we have been testing the use of Sustainable Marine Fuel (SMF). In 2023, we enhanced our partnership with logistics providers, KUEHNE+NAGEL and Expeditors, to significantly decrease carbon emissions from using SMF by 12 times compared to 2022, resulting in an almost 4% reduction in global maritime transportation emissions. Furthermore, starting in 2023, Acer began promoting the transportation of notebook computers using electric vehicles in Chongqing, with an initial focus on commercial models. By 2023, 52% of commercial notebook computers were already being delivered locally in Chongqing using electric vehicles.

(1) Increase in investments in sustainable energy

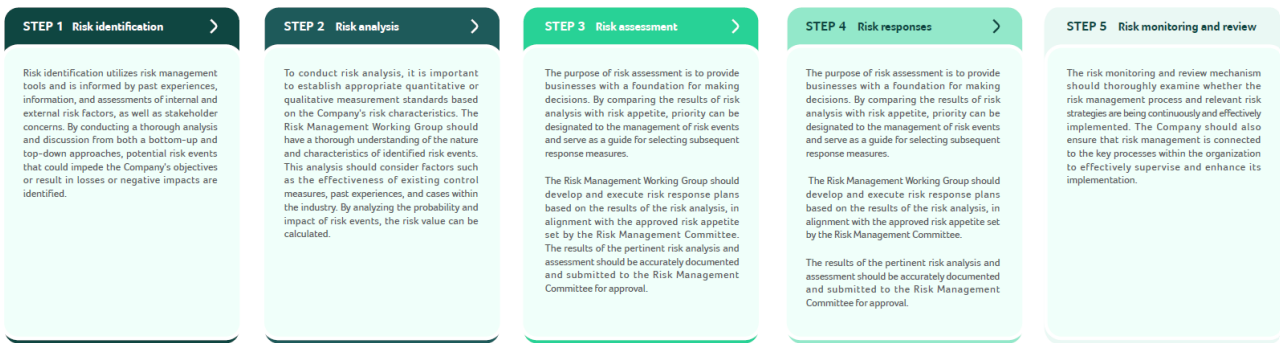
Acer actively promotes low-carbon transition as part of its sustainable development strategy. In addition to self-built solar power generation systems, Acer invests in long-term strategic investments and energy-saving equipment to develop business in the renewable energy industry, smart energy management systems, and energy storage facilities. This includes a partnership with GreenHarvest, a solar and energy management company, in 2022 to acquire a smart energy management system BOT project of the Shalun Smart Green Energy Science City. Together, we established a chartered company called Chih He Chin Tan Co., Ltd. with a capital of NT\$120 million to develop solar power generation equipment, energy storage equipment, smart grids, and energy management centers. This initiative will promote energy generation, storage, conservation, and the integration of smart systems for energy transition. In 2023, Acer invested no more than NT\$1.85 billion in Haoru Electric, an energy storage system development company, and subscribed for approximately 11% of the equity in C-LiFe Technologies, Inc., a lithium-iron-phosphate battery manufacturer, with NT\$330 million. This has further strengthened Acer's presence in the upstream and downstream sectors of the energy storage industry, enabling us to offer total solutions from manufacturing to application and from the frontend to the back-end. These efforts will contribute to our energy transition and fulfill our commitment to achieve the net-zero goal.

3 Risk Management

3-1 Risk Management Procedures

Acer incorporates climate risk identification and assessment into the enterprise risk management (ERM) process, through the three lines of defense of the risk management organization, self-assessment and process improvement of each business unit, procedural guidance and legal compliance of each support department, and the audit management procedures of internal audit unit. We integrate the ERM implementation with the daily operating procedures of each department/unit and the Company's business targets, and integrate the ESG and climate factors into the decision-making process. Through the PDCA cycle, we conduct regular reviews on the effectiveness of the risk management plan and the improvement possibility during the working group meeting for continuous adjustment/improvement.

Figure 9: Risk Management Procedures



Acer actively manages risks as the scope of risk management covers the aspects of strategies, operations, finance, disaster and climate change. Regular general assessments are conducted for both internal and external business environments. The external business environment assessments also incorporate external international risk reports and reports and research results from the insurance sector and risk management consultants so as to ensure the completeness of risk perception. These assessments form the basis for establishing a risk radar. Following the preceding procedure, Acer's risk radar identified a total of 45 risks, comprising 18 internal risks and 27 external risks in 2023. Subsequently, risk prioritization and the definition of risk appetite were carried out to strike a balance between corporate growth and efficient resource allocation. The results of risk prioritization led to the creation of a risk map and the risk appetite summary, which were submitted to and approved by the Board of Directors/Risk Management Committee on March 14, 2024.

To realize practical and close integration of the implementation of Enterprise Risk Management (ERM) mechanisms with the daily operational procedures of each department/unit as well as the Company's business objectives, each department/unit first consolidates 41 key performance indicators (KPIs) and then identifies 88 risk scenarios that may impact the aforementioned KPIs. For the identified and analyzed/assessed risk items, relevant department personnel are assigned to formulate subsequent risk management strategies and related risk mitigation plans, including

common risk management responses such as loss prevention, avoidance, separation and duplication, transfer, and retention. Adequate resource allocation, prioritization of implementation, and subsequent progress tracking methods are assessed in advance. Meanwhile, incident response plans and crisis management mechanisms are developed to minimize the potential negative impact of various risks on business objectives and enhance the overall risk resilience of the Company.

The aforementioned risk management strategies and related risk control plans are periodically reviewed for effectiveness and improvement opportunities during the Working Group meetings, as they following the PDCA cycle: Plan, Do, Check, Action. Finally, material risk information and the operational status of enterprise risk management are regularly (i.e., quarterly) reported to the Risk Management Executive Committee and the Risk Management Committee.

Climate Change Risk Identification Procedure

Acer has established climate-related risk management procedures in accordance with the TCFD guidelines. The management process consists of four steps: (1) completing a climate risk inventory, (2) ordering by risk materiality, (3) results and reporting, and (4) response strategies and external disclosure.

For climate-change-related scenarios, Acer has identified short-, medium-, and long-term climate change risks by referring to relevant climate change information, TCFD disclosure recommendations, and reports and information released by other domestic and international organizations, as well as considering the characteristics of our own business, in order to list out relevant climate risk factors. The Working Group on Risk Management then invites each business unit to use a matrix to assess the potential impact and influence of climate-related transition and physical risks on the business unit’s operations based on the principle of materiality. We use a 10-year time scale to evaluate and rank the risk matrix in terms of risk impact level, potential risk vulnerability, and risk likelihood, providing regular review and feedback on the results to develop corresponding measures.

Figure 10: Climate Risk Identification Procedure



Climate Opportunity Identification Procedure

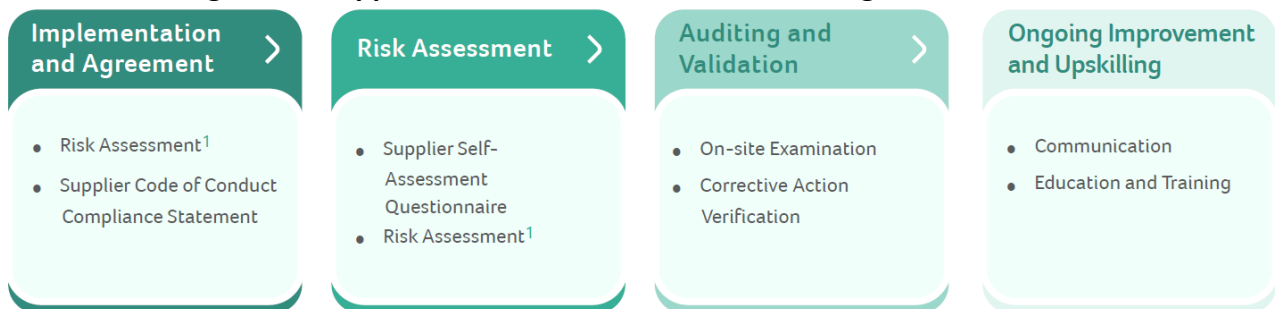
In terms of climate-related opportunities, we conduct a workshop, through the integration of upstream and downstream value chains, including ESG demand customers/distributors, OEM, and components suppliers, and consider 5 dimensions including products and services, market conditions, resource efficiency, energy sources, and resilience, and a total of 14 categories of climate opportunities recommended by TCFD, to identify the significance of each category. Senior executives and subsidiaries' executives are responsible for assessing their business perspective considering factors such as the impact level, potential business opportunity, potential financial impact, and opportunity occurrence period, and ranking the significance score to obtain, the opportunity occurrence period (X-axis) and the potential impact degree (Y-axis). As a result, the company can further analyze its climate strategy and action plan. This will help formulate future development directions, engage climate operators, expand the group's business, and effectively manage climate issues on a daily basis.

3-2 Climate-related Risk Management on Supply Chain

Supply Chain Social and Environmental Management Process

On the supplier social and environmental management processes, we have adopted the RBA Code of Conduct and, with reference to the RBA Supplier Engagement Process, make use of a range of supplier social and environmental management approaches, engaging with suppliers through multiple channels and working with them to improve their capabilities. The implementation of such management approaches also entails assessment, validation, and ongoing improvement thereof. Through management measures at every stage, Acer and our suppliers are able to work together effectively to establish a sustainable supply chain with a focus on environmental and social issues. New suppliers pass a social and environmental responsibility risk assessment and sign an RBA Code of Conduct compliance statement before they become official suppliers.

Figure 11: Supplier Social and Environmental Management Processes



Note¹ :

- Risk management 1: Initially Screen supplier risks based on country risk, industry risk, and product risk.
- Risk management 2: Consider based on the supplier's self-assessment, results of previous audits, the risk level of the factory location, and the supplier's business relationship with Acer, and the concerns of stakeholders.

On the supply chain GHG management, Acer has joined the CDP supply chain system since 2008, and has further used the ESG scorecard to review suppliers' performance in overall carbon management, carbon reduction results and

renewable energy usage, and to manage the environmental impact caused by the supply chain, and to include supplier scores in procurement evaluations to promote the overall supply chain to improve its ability to respond to climate change.

In addition, we implement Supplier ESG scorecards to review Supplier ESG practices and performance. This score of the environmental category includes the greenhouse gas reduction targets, carbon management performance, greenhouse gas emissions and allocation, energy and renewable energy use, carbon footprint, hazardous substance control, environmental regulatory compliance, waste management, and biodiversity. The result is included in quarterly business review (QBR) for key product lines and critical components and is presented to Acer and Supplier senior executives to create a driving force in the business relationship.

In order to expedite and improve suppliers' sustainability management performance, Acer has established a supplier incentive and elimination mechanism based on quarterly evaluation results. Six dimensions are considered through quarterly evaluation, including supplier core competencies and sustainable development. Suppliers are rated on a five-level scale to identify those demonstrating sustainable and outstanding performance. Their procurement share will be increased, and they will be given opportunities for new product collaborations. Poor-performing suppliers will be eliminated to enhance and improve the company's supply chain.

4 Metrics and Targets

Acer shoulders the mission of being a leading brand and promises to achieve net zero emissions by 2050, increase the share of renewables in energy consumption to 100% by 2035 and set Science Based Targets (SBT) aligned with the 1.5°C carbon reduction pathway. By 2030, Acer aims to reduce carbon emissions by 50% in organizational operations compared to 2019, and reduce the value chain emissions by 35% compared to 2020. In addition, by 2025, the Acer personal computer product average energy consumption will be reduced by 45% compared to 2016 and the computer and displays product will reach to 20-30% post-consumer recycled plastic material content.

4-1 Climate-related Targets and the Performance

	Climate-related Targets		2023 performance
	Near term	NET-ZERO	
Greenhouse Gas Emissions	Acer Inc. commits to reduce absolute scope 1 and 2 GHG emissions 50% by 2030 from a 2019 base year. (SBTi-approved)	Acer Inc. commits to reduce absolute scope 1 and 2 GHG emissions 90% by 2050 from a 2019 base year.	23.3%
	Acer Inc. also commits to reduce absolute scope 3 GHG emissions 35% by 2030 from a 2020 base year. (SBTi-approved)	Acer Inc. also commits to reduce absolute scope 3 GHG emissions 90% by 2050 from a 2020 base year.	28.8%

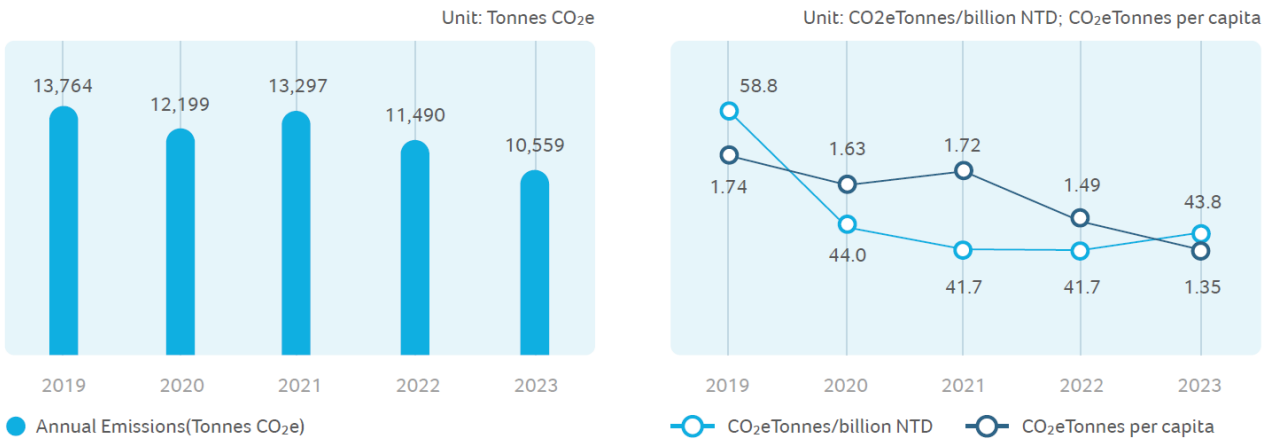
Renewable Electricity	100% renewable electricity usage by 2035	48%
Low Carbon Product	45% reduction in average computer energy consumption in 2025, compared to 2016	Computer:42% Desktop Computer: 38%
	20-30% of PCR plastics content in computers and displays by 2025	18.8%

Greenhouse Gas Emissions

Since 2011, we have conducted annual GHG inventories in accordance with the GHG Protocol and in line with the Group’s consolidated financial reporting boundaries. We also commissioned a third-party verification agency certified by Taiwan’s Environmental Protection Administration to undertake greenhouse gas emission verification for both direct and indirect categories, i.e., Scope 1, Scope 2, and Scope 3, and acquired the ISO 14064-1: 2018 Greenhouse Gas Verification Statement.

In 2023, the verified carbon emissions from operation (Scope 1, 2) were 10,559 tonnes, a reduction of 8.1% compared to the previous year and a decrease of 23.3% compared to the baseline year of 2019. Among them, Scope 1 emissions were 2,339 tonnes, a decrease of 33.9% compared with the baseline year of 2019, resulting from the carbon reduction actions such as the significant reduction in the use of natural gas for heating in our European and American operations sites and the electrification of gasoline and diesel vehicles. Scope 2 emissions were 8,220 tonnes (market-based), a reduction of 6.4% compared to the previous year and a decrease of 19.6% compared to the baseline year of 2019. The decrease can be attributed to a dual effect of reduced electricity consumption and increased use of renewable energy. The operational carbon intensity, which measures carbon emissions per unit of revenue, was 43.8, a decrease of 25.5% from 2019. Additionally, the per capita emissions were about 1.35 metric tons, a decrease of about 22.2% compared to 2019.

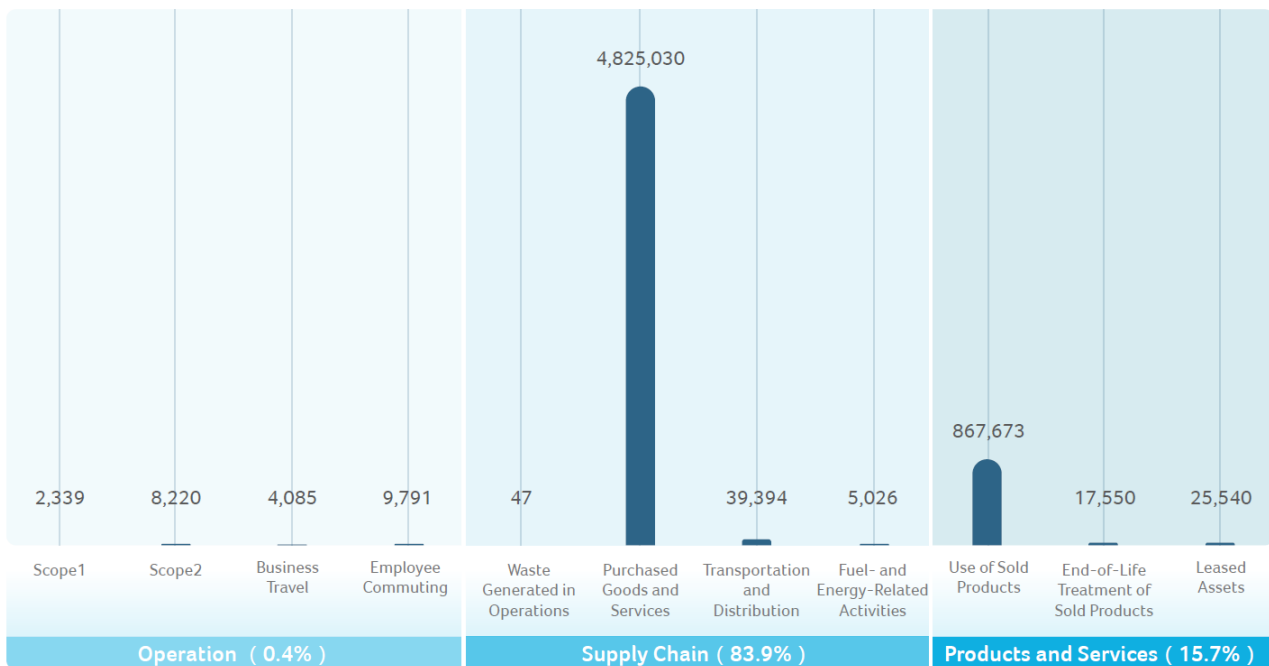
Figure 12: Acer Group Annual Greenhouse Gas Emissions



For Scope 3 emissions, we have identified significant indirect sources in accordance with the principles of the GHG Protocol Scope 3 and, based on quantitative significance, impact, data availability, and accuracy, included other significant indirect sources in the scope of the inventory. In addition, we have considered that new work patterns such as telecommuting or hybrid office work may have a substantial impact on the emissions from employee commuting, so we have included employee commuting in the calculation from 2023 onwards, in order to further improve the scope of the inventory of carbon emissions in the value chain.

In total, Acer's verified value chain carbon emissions (Scope3) in 2023 will be 5,794,135 metric tons, a reduction of 13.4% from the previous year and 28.8% from the 2020 baseline year, mainly due to the low-carbon and reduced-carbon design of our products as well as a reduction in the number of PC products shipped. For the year 2023, our primary sources of emissions are in the supply chain, including Scope 3, Category 1, Raw Materials Purchases, Category 3, Fuel and Energy Related Activities, and Category 4, Transportation Stage, which account for 83.9% of our total emissions. The products and services sector accounted for 15.7% of total emissions, with the use of products in Scope 3 Category 11 being the largest, and leased assets being the second largest source of emissions in the products and services sector, ahead of product waste treatment.

Figure 13: 2023 Acer Carbon Emission



※Unit:: MT CO2e

Figure 14: Acer Carbon Emissions 2020-2023

	2020	2021	2022	2023
Emissions from Operating Activity (Tonnes CO ₂ e)	13,077	14,395	13,783	24,483
Emissions from Supply Chain (Tonnes CO ₂ e)	6,550,901	7,108,184	5,550,554	4,869,449
Emissions From Products & Services (Tonnes CO ₂ e)	1,586,765	1,663,821	1,141,345	910,762
Annual Total Emissions (Tonnes CO ₂ e)	8,150,743	8,786,400	6,705,684	5,804,694
Scope 3 Emissions (Tonnes CO ₂ e)	8,138,544	8,773,103	6,694,195	5,794,135
Emissions compared to the base year of 2020 (%)	-	+7.8%	-17.7%	-28.8%

Renewables Electricity Usage

Acer is committed to achieving 100% global operations using renewable energy by 2035. We are increasing the proportion of renewable energy used by the group through a strategy of self-built solar power systems and the purchase of renewable energy. In 2023, the renewable energy used for self-consumption at our global locations reached 327,000 kWh, an increase of 24% compared with the previous year and accounting for 1.1% of the total annual electricity consumption of the entire group. The long-term CPPA between our locations in Taiwan and renewable energy suppliers officially took effect in the second quarter, with 3,250,000 kWh of wind power supplied, accounting for 18% of the electricity consumption at Acer's Taiwan locations. Additionally, we have purchased renewable energy certificates, including International Renewable Energy Certificates (I-RECs) and Guarantees of Origin (GOs), from the local locations where Acer operates worldwide in accordance with the RE100 technical criteria. Acer's self-built power plants generated 3,610,000 kWh of renewable electricity, which was sold back to the local grid. The renewable energy used for operations, including RECs, reached 14,740,000 kWh, accounting for 70% of the operations related to the ICT product operations and 48% of the total group-wide electricity consumption. This achievement fulfills our goal of achieving 45% renewable energy usage this year.

Low Carbon Product

Product energy efficiency has been a key design indicator for us. We base our product design on the U.S. ENERGY STAR standard and will continue to offer consumers more products with low energy consumption. In addition to expanding the coverage of the Modern Standby power management mode, we are also incorporating additional display power saving technology to further reduce the energy consumption of our products. In 2023, 60.77% of our computers and displays are U.S. ENERGY STAR certified. The average energy consumption of notebook computers decreased by 42% compared to 2016, and the average energy consumption of desktop computers decreased by 38% compared to 2016. This progress brings us closer to our goal of reducing the average energy consumption of personal computers by 45% by 2025.

With regard to the use of post-consumer recycled plastics, We determine the types and ratios to be used during product planning and carefully select vendors; For products using post-consumer recycled plastics, we ensure that the raw material formulation is as close as possible to the physical properties of the virgin plastic. When necessary, we add strength and reliability design to the product design process to ensure product quality. Users can not only enjoy the same quality of products as virgin plastic, but also support the reuse of resources together with Acer to strengthen the concept of circular economy. By 2023, 18.8% of post-consumer recycled plastic were used in our computer and display products. Over the period of 2020 to 2023, we have incorporated post-consumer recycled plastics into more than 40 million units of our computer and display products.

Appendix I Acer Climate Risk Checklist

Risk Category	Risk Profile	Risk Items	Risk Definition
Transition Risk	Regulation and Policy	Increased Demand for and Regulations Related to Sustainability	Emerging sustainable product design codes, climate disclosure requirements (such as emissions disclosure), and renewable energy or environmental regulations and policies increase business operating costs for compliance.
		Increased Costs of Greenhouse Gas Emissions	As trends in carbon valuation become clearer (e.g. carbon taxes, carbon fees), greenhouse gas emissions or the passing on of supplier costs will increase operating costs.
		Regulations and Impact on Existing Products and Services	Environmental sustainability requirements for existing products or services due to new regulations or eco-label guidelines will lead to increased business operating costs.
	Market	Changes in Customer Behavior	Customer expectations for product sustainability are growing, and they are looking for low-carbon characteristics that exceed regulatory requirements or have high standards regarding low-carbon and energy-efficiency certifications.
		Increased Raw Materials Costs	Increased production cost risks arising from changes in the cost of raw materials required in the product manufacturing process due to climate change
	Technological	Costs of Low-Carbon Technology Transition	Low-carbon technological competition or low-carbon transition to improve energy efficiency, low-carbon technology R&D
		Low-Carbon Alternatives to Existing Products and Services	When the low-carbon product or service technologies appear among the competition, the product or service technologies our company employs will be replaced
		Failed Investments in New Technologies	Risk of investment in digital technology, new technology failure
	Reputation	Increased Negative Feedback from Stakeholders	Stakeholders' response to corporate energy saving and sustainable performance, such as investors listing climate change strategy as one of their evaluation criteria
		Movements in Customer Preferences	Risk of declining customer satisfaction or shifting preferences when climate-related risks create brand concerns among customers
Physical Risk	Extreme Risk	Typhoons, hurricanes, cyclones	Damage to operations or production plant or equipment, supply chain disruption, or inability of employees to get to work due to typhoons
		Droughts	Water supply shortages due to droughts, decreased production efficiency due to water restrictions, increased water acquisition cost, additional costs incurred due to development of system maintenance, etc.
		Heavy rainfall, storms	Events such as extremely heavy rainfall, storms, or flooding caused by changes in rainfall types may cause plant or equipment damage, disrupt the supply chain, or render employees unable to get to work.
		Extremely Low Temperatures	Sudden drops in temperature caused by low-pressure belts of cold air driven down from the Arctic to the central latitudes may cause weather phenomena like blizzards, rendering staff unable to travel to work and thus leading to operational interruptions and even damage to products and equipment.
	Long-term Risks	Rising Average Temperatures	Increased costs due to rising average temperatures resulting in gradual energy shortages, supply chain disruptions, and a reduced labor force.
		Rising Sea Level	Sea level rise may lead to the flooding of Acer's operating sites or those of our suppliers, leading to financial losses.

Appendix II Acer Climate Opportunity Checklist

Opportunity Profile	Opportunity Items	Opportunity Definition
Products & Services	Development and/or Addition of Low-Carbon Goods and Services	Facing global low-carbon transitions and trends, developing or enhancing the application value of low-carbon products or related low-carbon services, can help boost business revenue
	Development of New Products and Services through R&D and Innovation	Development of new products or services through R&D and innovation can help customers respond to or mitigate climate change, helping increase competitiveness and business revenue
	Diversification of Business Activities	Innovative technology, system integration, and software optimization can open up a diverse array of revenue sources
Market	Changes in Consumer Preferences	As low-carbon transition has risen as a trend, customer demand for energy efficient products and corporate climate resilience has increased. A prompt focus on high-efficiency product development and marketing can enable us to gain a competitive advantage, thus increasing revenues
	Access to New Markets	Early entry into emerging markets in a low-carbon transition can secure us a competitive advantage and expand the reach of our business, resulting in increased revenues
Resource Usage Efficiency	Use of Public Sector Incentives	Through participation in public sector programs, we can get relevant certifications or respond early to regulatory developments
	Using More Efficient Production and Distribution Processes	Increasing the efficiency of production and distribution processes, as well as machinery and equipment, can reduce operating costs and increase productivity
	Transition to More Efficient Buildings	Through energy smart buildings, electrifying new buildings, and the like, we can reduce both operating costs and carbon emissions
Energy Sources	Adopt More Efficient Modes of Transport	Through green logistics or transition to relatively low-carbon modes of transport, we can reduce carbon emissions
	Use of Low-Carbon Energy	By switching to low-carbon emission energy to replace coal-fired electricity and reducing energy consumption in production and delivery, we can reduce carbon emissions and bolster our resilience to climate change and related regulations
Resilience	Participation in the Carbon Market	Through participation in the carbon market or developing carbon credits, we can accumulate the carbon credits required to counterbalance future emissions
	Use of New Technologies	By applying, investing in, or developing new energy technologies, we can reduce carbon emissions while reducing energy costs
	Participating in Renewable Energy Projects	By investing in renewable energy grids, energy storage systems, and so forth, we can respond to renewable energy demand and drive energy transformation while reducing the impact of carbon pricing on operating costs
	Alternative/Diversified Energy Types	By strengthening the climate resilience of suppliers and customers, we can reduce duration disruptions and potential losses while boosting our ability to adapt to environmental challenges