/SUS

Sustaining an
incredible future

ASUS TCFD
REPORT

2023

Catalog

Message from the Chairman

In 2023, the 28th United Nations Climate Change Conference (COP28) emphasized the importance of transitioning away from fossil fuels, urging all countries to take immediate action to reduce emissions. The conference also pledged to triple global renewable energy capacity and double energy efficiency by 2030, underscoring the critical need to limit global warming to 1.5°C. As global consensus on this transition forms, achieving net-zero emissions has become a common goal for businesses worldwide, with companies actively setting targets and promoting carbon reduction plans.

ASUS has aligned with this global effort, achieving validation in 2023 from the Science Based Targets initiative (SBTi). This validation commits ASUS to the group's carbon reduction target for 2030, which is based on the Paris Agreement's goal of limiting the global average temperature increase to 1.5°C. Additionally, ASUS has pledged to meet the more ambitious SBTi Corporate Net-Zero Standard, leading our entire company and value chain to a 2050 net-zero target.

As global attention to climate change continues to deepen, new regulations and frameworks, such as the EU Carbon Border Adjustment Mechanism (CBAM), have emerged, signaling the advent of the carbon pricing era as an irreversible trend. In alignment with these developments, ASUS actively promotes Environmental, Social, and Governance (ESG) initiatives and digital twin transformation, pioneering a hybrid cloud architectural design to create the ASUS A+ ESG Carbon Data Management Platform. This platform utilizes blockchain technology to ensure the accuracy of carbon data through an immutable data trust mechanism. Furthermore, it integrates the World Business Council for Sustainable Development (WBCSD) Partnership for Carbon Transparency (PACT) guidelines and introduces a mechanism for exchanging carbon data with external platforms based on data trust.

To further enhance our carbon management efforts, ASUS's public cloud interfaces with the Greenhouse Gas (GHG) Protocol international carbon inventory methodology, automatically generating carbon inventory lists and improving the efficiency of external carbon verification. Our carbon management private cloud focuses on data analysis and active utilization, optimizing existing operational models, such as producing product carbon footprint reports and implementing CBAM carbon tax simulations. By integrating innovative digital technologies, including generative AI, we enhance data value, enabling data-driven decision-making and embodying the spirit of "Using Digitized Data and Scientific Management Practices to Support Sustainable Value Creation through Core Competencies."

Proceeding towards a net-zero vision for our value chain, ASUS follows a strategy that includes improving energy efficiency, expanding the use of renewable energy, and investing in innovative carbon-reduction technologies to eliminate remaining carbon emissions. In 2023, we prioritized the introduction of renewable energy certificates at overseas centers, achieving the RE30 (30% renewable energy) target for global operations. Additionally, ASUS continues to promote carbon-reduction projects in our supply chain, including low-carbon processes, energy efficiency improvements, and the use of renewable energy, resulting in a 24% carbon reduction compared to the 2020 baseline year.

Furthermore, actions such as our establishment of an internal carbon pricing system to promote the research and development of low-carbon products reflect the timeless value of Focus on Fundamentals and Results instilled in our ASUS DNA. From the product design stage, ASUS strives to reduce carbon emissions through low-carbon processes, improved energy efficiency, and the selection of environmentally friendly materials, thereby implementing high-standard carbon-reduction plans. Ultimately, achieving product carbon-neutrality using high-quality nature-based carbon credits marks a new milestone in ASUS's sustainability journey.

The International Sustainability Standards Board (ISSB) released its Sustainability Disclosure Standards (IFRS S1/S2) in 2023. These standards guide companies in disclosing sustainability and climate-related risks and opportunities that may impact financial performance. The standards focus on four key areas: governance, strategy, risk management, and metrics and targets. By following these standards, companies can develop management plans and address prominent issues that impact their financial performance. In line with the principle of stakeholder communication, ASUS has released a Task Force on Climate-Related Financial Disclosures (TCFD) report for this fiscal year. The report incorporates cross-industry metrics from IFRS S2 Climate-Related Disclosures to assess the impact of significant climate risks and opportunities on ASUS, and in response, proposes corresponding strategies and measures, including detailed financial impact assessments of these response strategies on ASUS.

Through the implementation of our "In Search of Incredible" brand spirit, ASUS continues to evolve tirelessly and gain recognition for sustainable management practices. ASUS was ranked among the top 25 companies on the Clean200 list published by Corporate Knights, demonstrating our determination to achieve a circular economy. This year, ASUS also received Leadership-level scores from CDP in its annual Climate Change Report and Supplier Engagement Rating. Additionally, we were selected as an Asia-Pacific Climate Leader by the Financial Times, signifying ASUS's unwavering commitment to implementing climate action throughout our entire value chain.

In recent years, generative AI has rapidly emerged as a key technology across various industries. ASUS is exploring the potential of applying new forms of AI to ESG transformation solutions, providing powerful technological capabilities for companies to achieve their ESG goals. By simulating different scenarios, optimizing resource use, reducing waste and emissions, and accelerating the development of sustainable products and processes, these ASUS solutions will help companies identify and predict potential risks, improving the accuracy and effectiveness of decision-making to ensure stable and long-term development. From a social responsibility perspective, generative AI can facilitate better understanding and responsiveness to community needs and the development of more impactful social programs. Looking ahead, ASUS aims to combine generative AI and ESG to drive inclusive growth, foster innovation, and achieve long-term success in a competitive global landscape.

ASUS Chairman
Jonney Shih
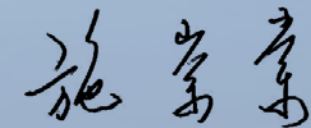
Milestones for Climate Action

According to the McKinsey's 2020 report, 83% of corporate executives and investors deemed that environmental, social and governance programs would create higher value for shareholders.

In 2002, ASUS established a dedicated sustainability unit, which regards sustainability as a part of operational decisions. By examining the management structure of governance, environment and society, ASUS adopts sustainability strategies to promote innovation and strives to a better corporation. To achieve the vision of "to become the world's most admired innovative leading technology enterprise", ASUS follows the business philosophy of" strive to be among the world-class green high-tech leaders and to provide valuable contributions to humanity". Additionally, ASUS believes that it has to transform traditional moral and emotional demands into objective strategic indicators and adopts the sustainable strategy of "using digitized data and scientic management practices to support sustainable value creation through core competencies" to incorporate environmental and social factors in every decision-making process and build sustainable competitive advantages, thus achieving sustainability.

2004
GreenASUS and SERASUS
Establishment of the GreenASUS & SERASUS Committee

2007
GHG Inventory
First Greenhouse Gas Inventory

2009
Product Carbon Footprint
• The world's first carbon footprint and carbon neutral laptop
• Proposed the first phase of Greenhouse gas reduction targets

2010
CDP
Joined the CDP Carbon Disclosure Program

2015
ISO 50001
The corporate headquarters obtained the ISO 50001 energy management system certification

2021
RE100
Joined the RE100 Initiative

2020
GHG
Proposed the second phase of greenhouse gas reduction targets

2019
LEED
LEED Platinum Certification of the ASUS New Headquarters Green Building

2018
TCFD
Followed the TCFD framework to reveal actions in response to climate change

2022
RE15
Achieve 50% overseas locations use renewable energy and achieve RE15 across global operational centers

SBTi
Commit Near-Term Target

Launch Carbon Neutral Products
World's first commercial laptops achieve carbon footprint and carbon neutral verification

2023
SBTi
Validated the Near-Term Target Commit Net Zero Target

RE30
全球營運據點達成RE30

2050
Net Zero
Lead the value chain to net zero

2030
RE100 TW
Achieve 100% usage of renewable energy in Taiwan-based operations centers

ASUS Group Goals
Reduce Scope 1 and Scope 2 carbon emissions by 50% ; Reduce Scope 3 emissions from "Purchased Goods and Services" and "Use of Sold Products" by 30%

2025
Carbon Reduction Targets for the Supply Chain
Ensure that key suppliers achieve a 30% reduction in carbon

2024
Carbon Data Management Platform
Establish carbon management platform for ASUS Group, subsidiaries and supply chain

01 Governance

The climate change governance and management framework of ASUS is directly overseen by the Board of Directors, with the Chairman appointing the CEO as the highest responsible executive for climate change and sustainability management.

ASUS established a unit dedicated to sustainable development in 2002 to monitor global sustainable development trends, analyze sustainability issues in governance, environment, and society. It integrated the core of operation with our innovation in product and service to form strategic sustainable direction to execute relevant programs. The unit is led by the Chief Sustainability Officer (CSO) who is responsible for analyzing the trend of global sustainability, managing sustainability policy, objectives, and actions. In order to effectively focus on the company's overall product, marketing, and design sustainability issues, and to implement climate strategies. ASUS established |ESG Committee with CSO as the Chairman in 2022. Sustainable Development is also included as Taskforce Units(TU) in the BCM committee. Climate change-related risk management indicators and implementation results are reported quarterly.
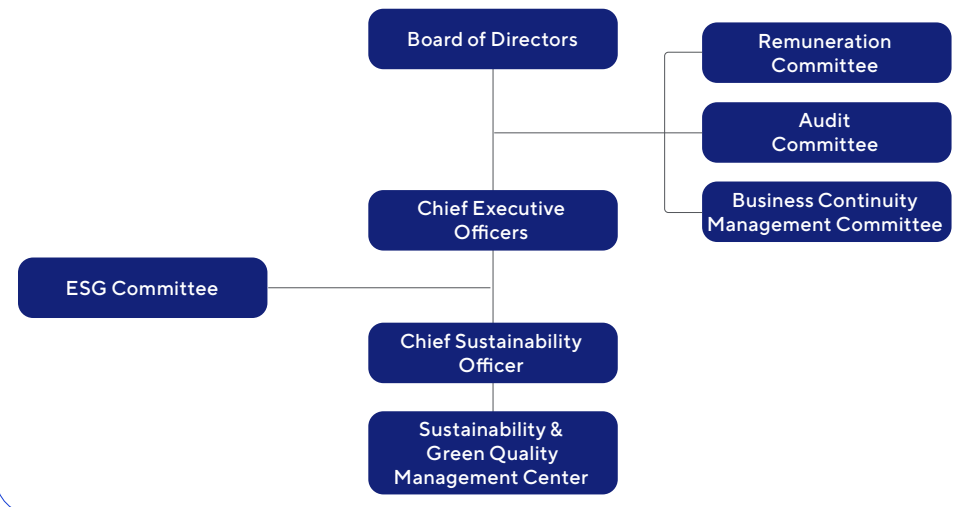
Board of Directors

The sustainable governance of ASUS is overseen directly by the Board of Directors, with the Chairman designating the CEO as the highest-ranking executive responsible for sustainability management. ASUS' sustainability policy and climate change response strategies have to be approved by the Chairman. Since 2022, the reporting frequency has increased to quarterly basis.

Starting from 2023, the variable remuneration of the Co-CEOs is linked to sustainability performance. The assessment indicators include the achievement rates of ASUS's global operations' RE100 target and the Group's SBT emission reduction target. These indicators can potentially adjust the weight of variable remuneration by up to 10%, either increasing or decreasing.

Business Continuity Management(BCM)

Business Continuity Management Committee (BCM) is designed to identify and manage the various risks that we may encounter and could lead to business interruption. BCM consists of the Board of Directors, the BCM Committee, the BCM Oce, and various Taskforce Units to ensure the establishment of protective mechanisms during daily operations.

Sustainable Development is included as Taskforce Units (TU) in the BCM committee. The Sustainable Development TU is responsible for assessing climate related risks which are focused on evaluating the impact of carbon management on operations and green products. Each task unit reports quarterly to the CEO and COO and annually to the BCM Committee (members are independent directors) on the progress of risk management execution, and at least once a year, the BCM Committee reports to the Board of Directors on the status of risk management review.
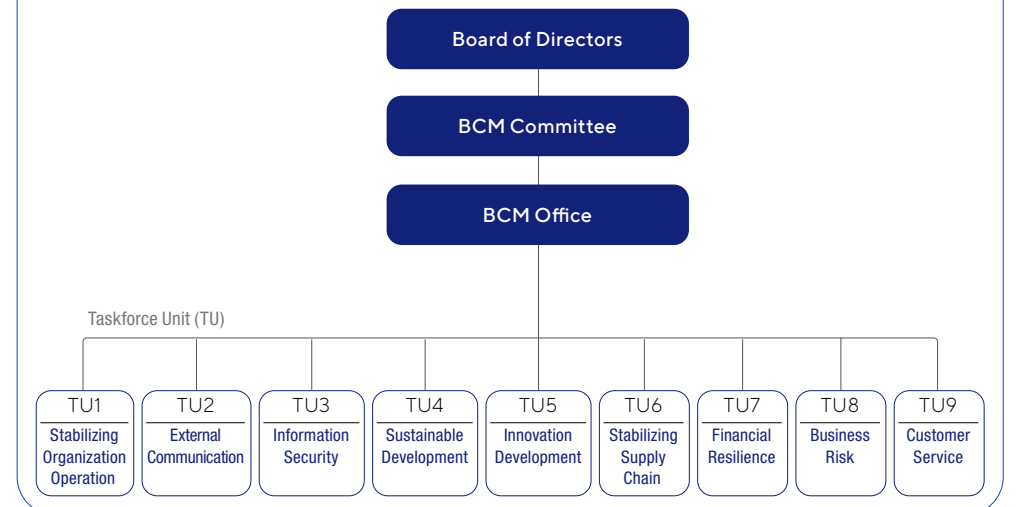
ESG Committee

To strengthen horizontal cross-unit communication within the company, ESG Committee was established with CSO as the Chairman of the Committee in 2022. Committee members were from each business unit as well as the design center, certification, marketing, sales and other support units. We consolidate the sustainability progress and requirements of each unit, facilitating the centralized integration of resources. This ensures the efficient allocation of resources, enabling all departments to progress in a unified sustainability direction

Sustainability and Green Quality Management Center (SGQM)

Using Digitized Data and Scientific Management Practices to Support Sustainable Value Creation through Core Competencies

Circular Economy | Climate Actions | Responsible Manufacturing | Value Creation

ASUS Sustainability and Green Quality Management Center(SGQM) functions as a dedicated division led by Chief Sustainability Officer and is responsible for analyzing global sustainability trends and executing sustainability projects.

The Sustainability and Green Quality Management Center is responsible for driving strategic sustainability through " Using Digitized Data and Scienti_c Management Practices." Leveraging ASUS's core capabilities, our sustainability action focus on: Climate Action, Circular Economy, Responsible Manufacturing, and Value Creation. We establish sustainable medium to long-term vision, strategy, and goals and integrates various action plans into the company's operations. Climate action focuses on planning group's carbon reduction pathway, aiming to enhance energy efficiency, expand the use of renewable energy, invest in innovative technologies, drive the entire value chain towards net-zero.

02 Greenhouse Gas Inventory

Since 2007, ASUS has begun to conduct annual greenhouse gas inventory for its global operation centers[1] and complete third-party verification in accordance with ISO 14064-1. In 2022, based on the GHG Protocol methodology, ASUS demonstrated its commitment to carbon reduction by expanding its scope of influence and value chain to include all Group companies[2] within the consolidated financial statements. The Company pledged to align with the SBTi (Science Based Targets Initiative), which sets reduction targets based on a global temperature rise of no more than 1.5°C. ASUS will review its total carbon emissions and develop a comprehensive carbon reduction roadmap and strategy.

2.1 Methodology

In practice, the methods for greenhouse gas inventory can be classified into two approaches: ISO 14064-1 and GHG Protocol. ISO 14064-1 emphasizes the disclosure of greenhouse gas inventory information, It is suggested that corporate should identify the emission sources which is material to operation and conduct GHG inventory focusing on these categories. ISO 14064-1 directly or indirectly[3] requires ASUS and our value chain to establish and concretely implement carbon reduction commitments, manage and track reduction performance, and enable stakeholders to review carbon reduction achievements through transparent disclosures. While GHG Protocol focuses on the comprehensiveness of the greenhouse gas inventory calculation scope. These two approaches are complementary in terms of calculating and disclosing greenhouse gas inventory for businesses. SBTi's GHG inventory methodology is based on the GHG Protocol.

While the purpose of adopting the SBTi methodology is to comprehensively assess ASUS Group and our value chain's total environmental impact related to carbon emissions. Following the SBTi guidelines, the company sets Group' phased carbon reduction targets, develop feasible carbon reduction actions and regularly disclose the reduction results publicly for SBTi verification. For ASUS, the GHG Protocol serves as the standard for calculating greenhouse gas emissions, while ISO 14064-1 and SBTi are greenhouse gas disclosure frameworks, each carrying different implications for environmental, social, and governance (ESG) management.

Purpose	ISO14064-1	SBTi	Meaning for ESG Management
Define the Organization Boundary for Reduction Targets	ASUS and supply chain	ASUS Group and supply chain	Based on the definition of the inventory scope, We establish reduction targets for the company and the Group.
Formulate Reduction Pathway and Actions	• ASUS: implement reduction actions for significant emissions • ASUS's value chain: take precedence reduction planning for the supply chain	ASUS Group and value chain: Set reduction targets and actions in accordance with SBT	Based on the company's main sources of emissions, we establish carbon reduction actions, such as supply chain carbon reduction or energy efficiency improvements. However, according to the results of the group-wide greenhouse gas inventory, we set phased carbon reduction targets and devise feasible carbon reduction actions.
Public Reporting	Voluntary	Mandatory	In addition to disclosing emission data in the Sustainability report and website, we regularly disclose the reduction results publicly for SBTi verificationi.
Ensure Data Quality	Require third-party verification	Require third-party verification	ASUS obtainsthird-party verification statements to ensure the accuracy and reliability of the greenhouse gas.

Different greenhouse gas inventory methodologies are used for the procurement of goods and services (supply chain), depending on the specific management objectives. ASUS categorizes hundreds of suppliers based on their ESG management capabilities and carbon emissions. The Company identifies key suppliers with material emissions using the ISO 14064-1 standard. ASUS investigates Scope 1 and Scope 2 carbon emissions generated by operations, prioritizes the development of reduction plans for the supply chain, and adopts the GHG Protocol framework to comprehensively calculate and assess total emissions across the Group's value chain. Based on this assessment, ASUS sets reduction targets and actions.

1 According to the consolidated financial statements of that year, ASUS's global operational centers are the parent company and subsidiaries responsible for the production and sales of ASUS products.
2 Group companies within ASUS' consolidated nancial statements in 2023 include: ASUS GROUP(ASUS global operations centers), ASUSCLOUD GROUP, AAEON GROUP, AAEON GROUP, ONYX GROUP, HMI GROUP, SWI GROUP, JETWAY GROUP.
3 The company's carbon management approach towards suppliers includes direct measures such as conducting ESG audits on suppliers, requesting them to ll out GHG data and reduction performance veried by third parties on management platforms. The suppliers' carbon reduction performance will be used as a basis for increasing or decreasing orders. Indirect measures involve inviting external partners to conduct online net-zero policy advocacy conferences, and so on.

2.2 Responding to the SBTi Greenhouse Gas Reduction Target and Establishing a Reduction Strategy

Following the approval of its Near-Term targets by the Science Based Targets Initiative (SBTi), ASUS has implemented the following actions, drawing on its previous experiences and strategies to reduce greenhouse gas emissions.

1. Though our vertical communication and emissions reduction efforts, we will continue to expand existing corporate carbon reduction projects. We will also integrate the goals of the Science Based Targets Initiative (SBTi) and a carbon reduction mindset throughout the organization. This will raise carbon reduction awareness among employees and encourage them to implement this awareness in their daily work, product development, and other relevant aspects.

2. Through collaboration with external entities such as government agencies, industry alliances, universities, and private companies, we will reference and evaluate carbon reduction plans. These plans will be incorporated into ASUS' internal organization, production, and sales activities, accelerating the Company's progress in reducing emissions.

ASUS' vertical communication and reduction efforts include at least the following initiatives:

- **Incorporate renewable energy and optimize energy efficiency**
  Incorporating renewable energy and optimizing energy efficiency are essential ways to reduce carbon emissions at ASUS' operational sites. ASUS is reducing energy consumption through measures such as improving energy efficiency and transitioning to renewable energy electricity sources. These measures include replacing equipment with low-carbon alternatives to reduce electricity consumption and signing power purchase agreements to facilitate the transition to renewable energy electricity sources.

- **Strengthening supply chain management**
  ASUS's primary carbon emissions come from its supply chain, particularly Scope 3 emissions. To effectively address carbon emissions, ASUS must actively work with suppliers to support their carbon reduction initiatives. This includes requiring suppliers to set science-based emission reduction targets, incorporate renewable energy electricity sources or build renewable energy facilities, optimize emission hotspots to improve energy efficiency, conduct environmental audits, and support external carbon reduction programs of suppliers.

- **Enhancing the quality of carbon data management**
  High quality carbon data is critical for ASUS to drive carbon reduction efforts. To optimize data quality and strengthen management, ASUS has established a carbon data platform.

- **Developing low-carbon products and energy efficient innovations**
  Low-carbon products and related technological innovations are key to ASUS achieving long-term emission reductions. In the short term, ASUS will achieve low-carbon standards for its products by sourcing recycled materials and improving product energy efficiency. In the long term, ASUS aims to achieve zero-carbon products by launching technical innovation projects focused on zero-carbon materials and high energy efficiency. These initiatives will help companies achieve their emission reduction targets.

- **Enhancing employee awareness of carbon reduction**
  ASUS recognizes that reducing corporate emissions requires the collective efforts of all employees. To this end, ASUS has strengthened internal employee awareness campaigns and promotions focused on carbon reduction, enabling each ASUS employee to understand and participate in carbon reduction initiatives. These initiatives include the regular distribution of e-newsletters and carbon reduction information, as well as the periodic distribution of energy conservation announcements.
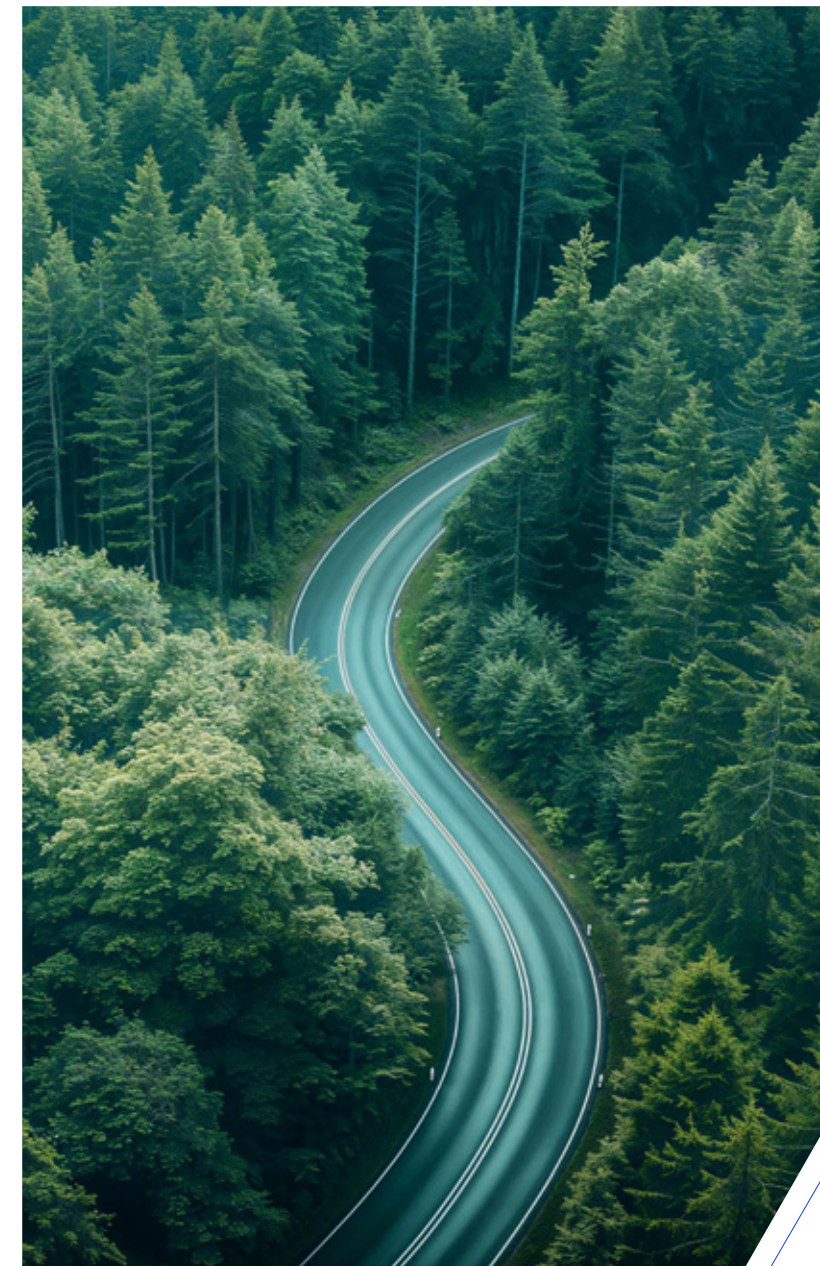
2.3 ISO14064-1 Organization-level GHG Inventory

Organizational Boundary-operational Control

ASUS adopts the operational control approach as outlined in ISO14064-1:2018 and considers its specific operational circumstances to meticulously establish the organizational boundaries for conducting a comprehensive greenhouse gas inventory. This year's ISO 14064-1 GHG inventory uses global operational centers as the organizational boundary.

Compared to 2022, new inventory items such as emissions from "Capital Goods" and "Waste Generated in Operations", are added this year. In 2023, the total carbon emissions at ASUS global operating locations were 1,920,792.81 tonnes CO_2e , with an emission intensity of 149.14 tonnes CO_2e/Million USD.

⟩ **Greenhouse Gas Emissions**
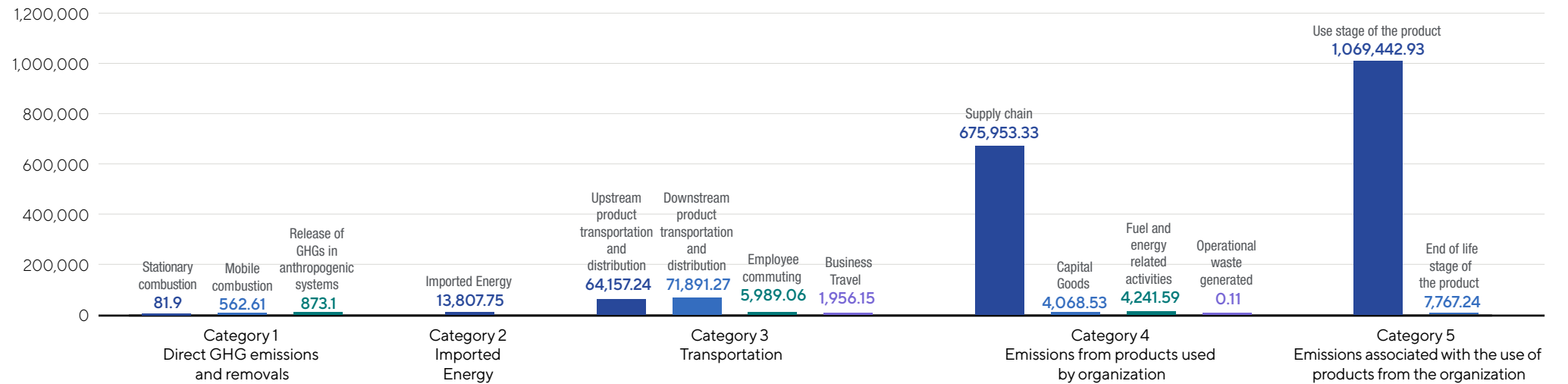
	Category 1: Direct GHG Emissions and Removals				
ASUS currently does not have any assembly factories; the main sources of direct emissions are from backup generators, the use of company vehicles, natural gas heating, and refrigeration equipment.					
Category		**Type of Energy**	**Activity Data**	**Carbon Emission (tonnes CO_2e)**	**Total Carbon Emission (tonnes CO_2e)**
Direct emissions from stationary combustion		(Emergency generator) Diesel	2,826.56 L	7.54	
		(Boiler) Natural gas	20,246 M^3	43.73	
		(Heating) Natural gas	14,581.29 M^3	30.62	
Direct emissions from mobile combustion		(Office vehicle) Diesel	87,130.08 L	230.54	1,517.60
		(Office vehicle) Gasoline	133,017.38 L	332.07	
Direct fugitive emissions arise from the release of GHGs in anthropogenic systems		Including refrigerant equipment	9,447.20 Kg	873.10	

Category 2: Indirect GHG Emissions from Imported Energy

ASUS purchases electricity as its main source of energy, so the information on electricity usage and carbon emissions at its Global Operating locations is as follows:

Category	Headquarters	Mainland China	Overseas	Total
Electricity Usage (MWH)	27,684	7,517	4,978	40,179
Location-based Carbon Emission (tonnes CO_2e)	13,676.03	4,466.38	2,193.08	20,335.49
Market-based Carbon Emission (tonnes CO_2e)	13,671.09	0	136.65	13,807.75

Category 3: Indirect GHG Emissions from Transportation

- **Emissions from upstream product transportation and distribution:**
  The carbon emissions from laptops, desktop computers, all-in-one computers, and monitors product lines from the parts factory to the HUB, and finally to the EMS factory, are 64,157.24 tonnes CO_2e.
- **Emissions from downstream product transportation and distribution** [4]:
  The carbon emissions from laptops, desktop computers, all-in-one computers, and monitors product lines from shipping products from EMS factories to global destinations, are 71,891.27 tonnes CO_2e
- **Emissions from employee commuting includes emissions:**
  In 2023, the carbon emissions generated by commuting of employees at ASUS Headquarters were 5,989.06 tonnes CO_2e
- **Business travels:** In 2023, the total carbon emissions from business travels [5] of employees at ASUS Headquarters were 1,956.15 tonnes CO_2e/Million

Category 4: Indirect GHG Emissions from Products Used by Organization

- **Supply chain:**
  The total carbon emissions from our key suppliers [6] amount to 675,953.33 tonnes CO_2e, with an emissions intensity of 86.26 tonnes CO_2e/Million USD, representing a reduction of approximately 26% in emissions intensity compared to the baseline year.
- **Capital goods:**
  In 2023, ASUS's procurement of capital goods resulted in carbon emissions of 4,068.53 tonnes CO_2e.
- **Fuel and energy related activities:**
  The total carbon emissions from upstream fuel and electricity procurement are 4,241.59 tonnes CO_2e
- **Operational waste generated:**
  In 2023, ASUS's operational waste resulted in carbon emissions of 0.11 tonnes CO_2e.

Category 5: Indirect GHG Emissions Associated with the use of Products from the Organization

- **Emissions from the use stage of the product:**
  Based on a 4-year product lifespan for sold products, the total carbon emissions during the product use phase are 1,069,442.93 tonnes CO_2e, with an emission intensity of 83.04 tonnes CO_2e per million USD. This represents a decrease of approximately 13.81% in emission intensity compared to last year.
- **Emissions from end-of-life stage of the product:**
  The final disposal of products sold globally includes the transportation stage from recycling stations to treatment plants, as well as the disposal stage. Total carbon emissions are 7,767.24 tonnes of CO_2e.

4　ASUS follows the methodology outlined in "EPEAT-CCM-2023_4.1.3 Optional-Product transport carbon footprint and goal". Using emission factors for various transportation modes based on a well-to-wheel approach, verified according to ISO 14064-1, ASUS evaluates the weight of transported products and shipping distances to calculate carbon emissions.
5　Business travels on land are not included in the calculation due to low significance on results.
6　Key suppliers are makers of IC base(CPU, GPU), hard drives(SSF, HDD), panels, power supplies, motherboards, memory as well as EMS.

Trend of Carbon Emission over the Years

Scope 1
Unit: tonnes CO_2e

- ASUS expands the investigation of release of GHGs in anthropogenic systems
- Increase the purchase of operational equipment

2020	2021	2022	2023
51	94	1,388	1,517.6

Scope 2
Unit: tonnes CO_2e

- Due to the COVID-19 pandemic and the implementation of staggered schedules, electricity consumption has significantly decreased.
- Use renewable energy and achieve RE15
- Use renewable energy and achieve RE30

2020	2021	2022	2023
20,379	17,161	17,346	13,808

Scope 3 Emissions from purchased goods and Servicess
Unit: tonnes CO_2e

- Purchasing volume increases (revenue growth)
- Supply chain decarbonization
- Suppliers contribute to the carbon reduction plan by conserving energy, using renewable energy, and employing environmentally friendly materials.

2020	2021	2022	2023
862,972	1,076,291	1,062,863	675,953

Scope 3 Emissions from use o f sold pr oducts
Unit: tonnes CO_2e

- Improvement in product energy efficiency

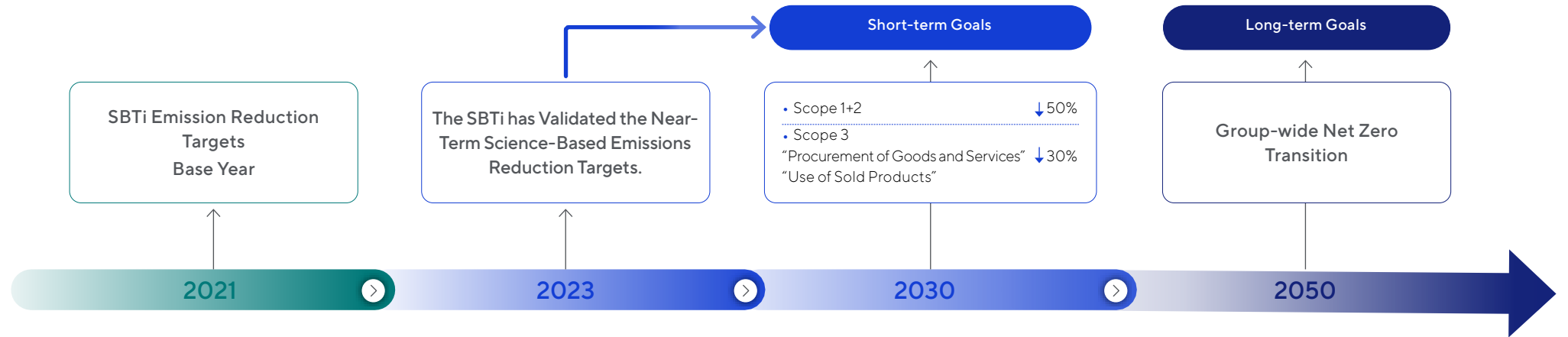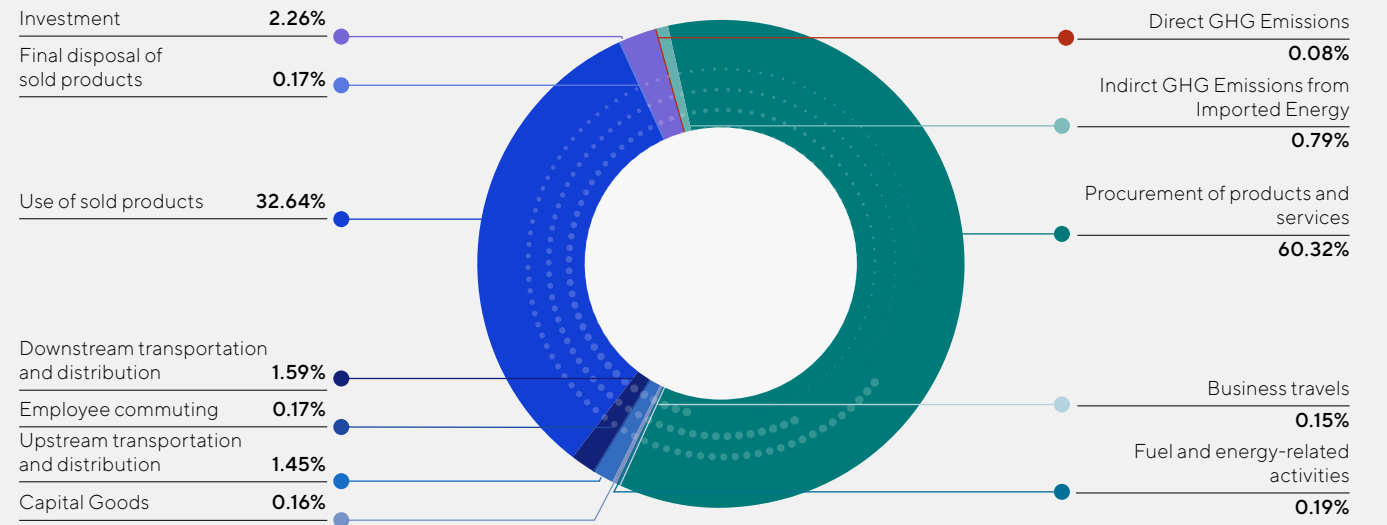| 2020	2021	2022	2023
1,279,408	1,472,792	1,296,302	1,069,443
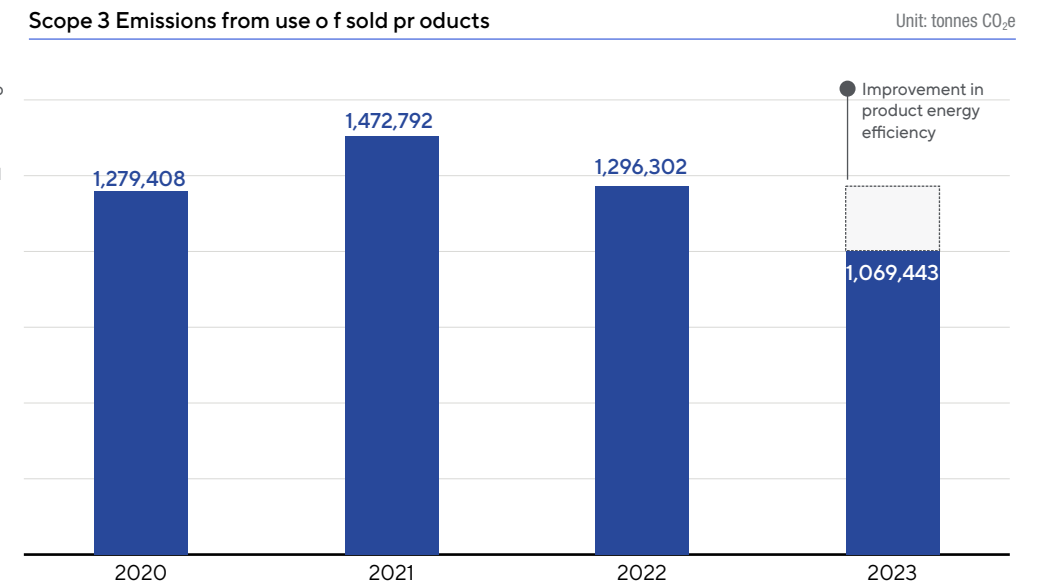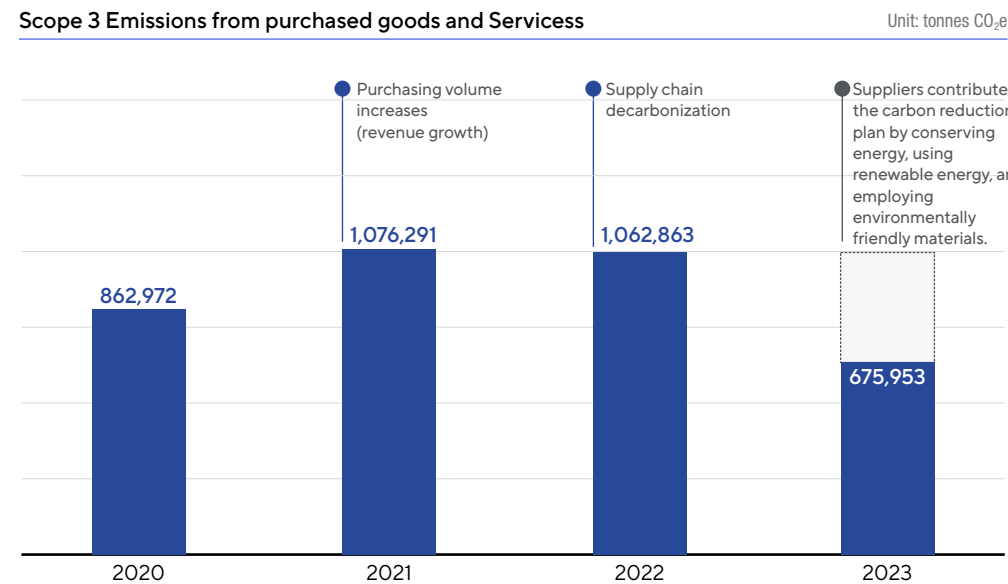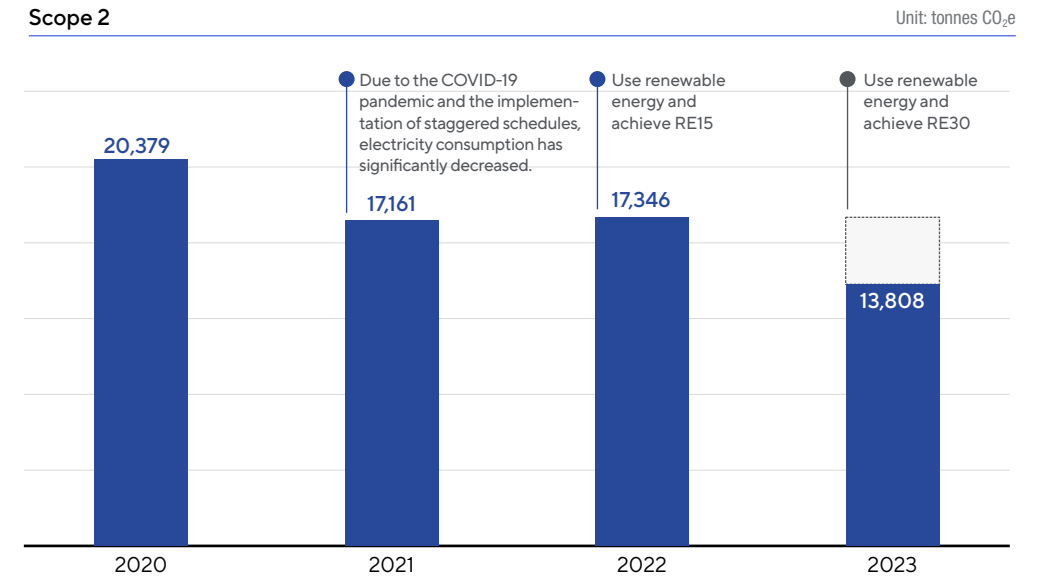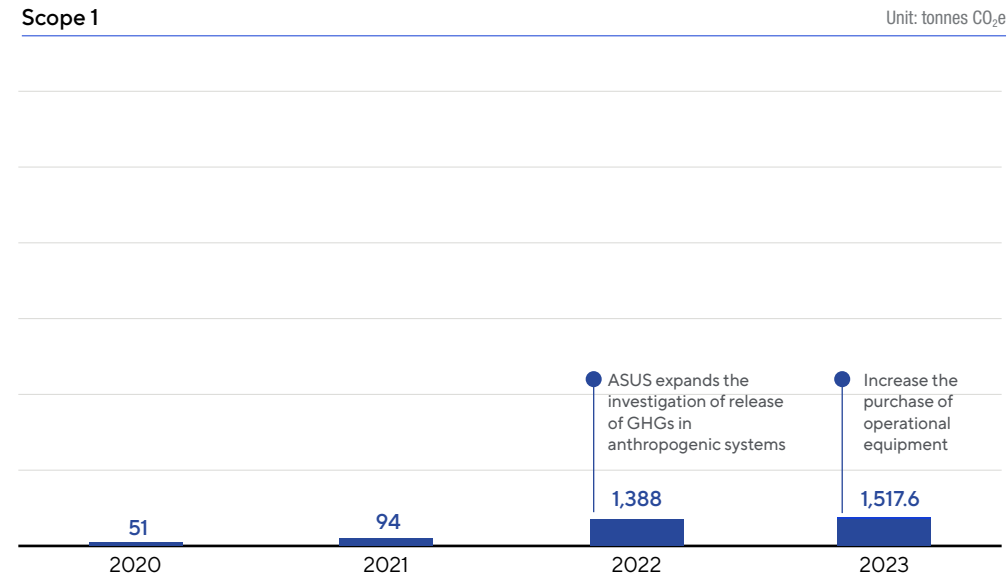
2.4 SBTi – Group's GHG Inventory

Since 2022, ASUS has committed to comply with the SBTi within the scope of consolidated financial reports of subsidiaries. According to the organizational boundaries defined in the latest annual consolidated financial statements, the scope includes "ASUS Group", "ASUSCloud Group", "Askey Group", "AAEON Group", "Onyx Group", "Sino Speed Group", "Shinewave Group", and "Jetway Group" to conduct greenhouse gas (GHG) inventory with reference to the framework and calculation principles of the GHG Protocol, and the data was verified by a third party.

ASUS has set science-based reduction targets for the entire group. In 2023, the Company passed the SBTi (Science Based Target Initiative) Near-Term validation, following a 1.5°C reduction path. The Company is committed to reducing Scope 1 and Scope 2 carbon emissions by 50% and Scope 3 emissions from "purchased goods and services" and "use of sold products" by 30% by 2030, with 2021 as the base year. ASUS plans to further commit to the more ambitious SBTi Net-Zero pledge, guiding the entire group towards the net-zero target by 2050.

Short-term Goals

Long-term Goals

SBTi Emission Reduction Targets Base Year

The SBTi has Validated the Near-Term Science-Based Emissions Reduction Targets.

- Scope 1+2 ↓50%
- Scope 3 "Procurement of Goods and Services" "Use of Sold Products" ↓30%

Group-wide Net Zero Transition

2021   **2023**   **2030**   **2050**

In 2023, ASUS's total carbon emissions was 4,670,902.32 tonnes CO$_2$e

Scope	Carbon emissions (tonnes CO$_2$e)
Scope 1	3,851.49
Scope 2	36,899.62
Scope 3	4,630,151.21
Total carbon emissions	4,670,902.32

Investment 2.26%

Final disposal of sold products 0.17%

Use of sold products 32.64%

Downstream transportation and distribution 1.59%

Employee commuting 0.17%

Upstream transportation and distribution 1.45%

Capital Goods 0.16%

Direct GHG Emissions 0.08%

Indirct GHG Emissions from Imported Energy 0.79%

Procurement of products and services 60.32%

Business travels 0.15%

Fuel and energy-related activities 0.19%

Trend of Carbon Emission over the Years

	2021 (tonnes CO_2e)	2022 (tonnes CO_2e)	2023 (tonnes CO_2e)
Scope1 and 2	58,182.28	43,929.72	40,751.11
Scope3 C1 Emissions from purchased goods and services	2,430,595.93	2,915,901.21	2,817,595.41
Scope3 C11 Emissions from use o f sold pr oducts	2,264,811.26	1,974,040.79	1,524,446.85

Scop1 & 2   Unit: tonnes CO_2e

● Entire Group Use of Renewable Energy RE18

58,182.28   43,929.72   40,751.11
2021   2022   2023

Scope 3 C1 Purchased goods and services   Unit: tonnes CO_2e

● Optimize methodology to improve data quality

2,430,595.93   2,915,901.21   2,817,595.41
2021   2022   2023

Scope 3 C11 Use o f sold pr oducts   Unit: tonnes CO_2e

● Improvement in product energy efficiency

2,264,811.26   1,974,040.79   1,524,446.85
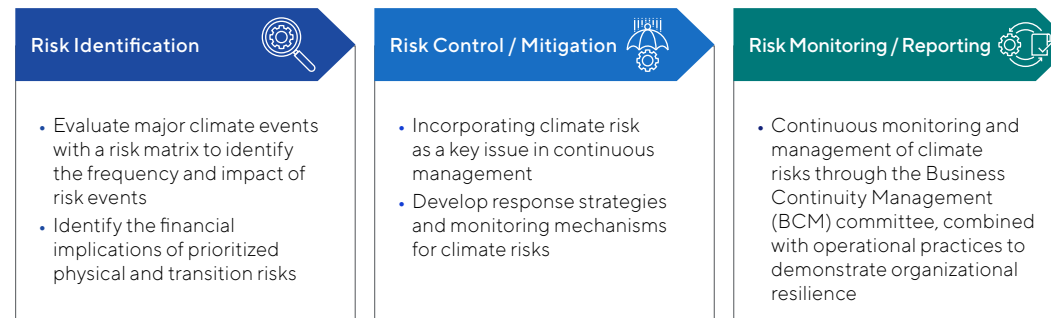2021   2022   2023

03 Risk Assessment and Management

The World Meteorological Organization (WMO) stated[7] that continuing climate change, an increasing occurrence and intensification of extreme events, and severe losses and damage, affect economy, society, and the environment. On the other hand, after the Paris Agreement came into effect, the world has accelerated its pace towards a low-carbon economy with a common goal of limiting earth's warming to 2°C above the pre-industrial levels by the end of the century, and striving not to exceed 1.5 °C . This means that global businesses will jointly bear the potential impact of climate change risks on their operations. To mitigate the impact of climate change, they also provide innovative low-carbon products or services to create momentum for business growth.

3.1 Structure of Risk Management

To enhance the supervision of the Board of Directors on the risk management of ASUS and enable the risk management to be more "comprehensive" and "regular", ASUS established the Business Continuity Management (BCM) Committee to constantly monitor and manage climate risks and demonstrate organizational resilience by integrating operational practices.

ASUS has incorporated climate action into the BCM Sustainable Development Task Unit, which is liable for risk monitoring and prevention management. Through continuous review of business continuity management, ASUS dynamically adjusts major issues of concern and effectively integrates internal and external resources, to better predict, prepare, respond to and adapt to the continuous changes in the environment, thereby minimizing the relevant impacts and interruption periods.

Risk Identification	Risk Control / Mitigation	Risk Monitoring / Reporting
• Evaluate major climate events with a risk matrix to identify the frequency and impact of risk events • Identify the financial implications of prioritized physical and transition risks	• Incorporating climate risk as a key issue in continuous management • Develop response strategies and monitoring mechanisms for climate risks	• Continuous monitoring and management of climate risks through the Business Continuity Management (BCM) committee, combined with operational practices to demonstrate organizational resilience

7   Source: https://public.wmo.int/en/media/press-release/climate-change-indicators-and-impacts-worsened-2020.

3.2 Climate Risk and Opportunity Identification

1. Framework for Financial Assessment of Climate Risks and Opportunities

ASUS identifies climate risk and opportunity based on the TCFD framework. It distinguishes the impact level and period of occurrence to identify potential effects on ASUS and our upstream/downstream of value chain. ASUS then selects sources of risks and opportunities that highly impact on ASUS's individual financial statements.

- **Transition risks:**
  In order to respond to the complexity and impact of the market caused by climate change, we must adjust the supply and demand with various methods, including policy, law, technology, and market changes to mitigate and adapt to the needs of climate change prevention.

- **Physical risks:**
  The actual risks caused by long-term climate change and immediate extreme weather disasters would have a direct impact on the industry and supply chain disruptions.

- **Climate opportunities:**
  Seize opportunities to reduce risk or adapt through transformation to improve market competitiveness

2. ASUS Climate Risk/opportunity Event Chain

ASUS examines its own operations and supply chain business models and identifies potential climate risks and opportunities in its operations and value chain according to the TCFD guidelines. This includes categorizing and timing the risks and opportunities, describing their impact on ASUS operations and suppliers, and assessing their financial impact on ASUS.

ASUS identifies climate risks and opportunities, which are:

· **Transitional risks:**
  Carbon pricing, such as Mainland China's carbon tax, the EU's Carbon Border Adjustment Mechanism (CBAM), regulatory requirements to disclose emissions information, regulations requiring ASUS Taiwan sites to meet renewable energy electricity consumption obligations, and changes in customer behavior (preference for energy-efficient products, preference for environmentally certified products), among others.

· **Physical risks:**
  Classified by timing into immediate and long-term risks. Immediate risks include operational disruptions and supplier outages due to extreme weather events. Long-term risks include rising sea levels and increasing temperatures.

· **Climate opportunities:**
  In response to climate change-related issues, ASUS will have the opportunity to introduce new products and services, such as low-carbon products and carbon-neutral services.

	Risk classification	Risk description (Issues)	Stages of occurrence[8]	Impact scenarios (Event outcome)	Impact on ASUS
Transition risks	Policies and regulations	Carbon pricing (Mainland China Carbon Trading Market)	Medium-term: The carbon pricing system will be implemented within 3 to 10 years	Supplier cost pass through: • Increase in ASUS' own material costs • Assembly plant's increased costs for purchased materials • Assembly plant's increased service fees for original equipment manufacturing	High, increase in operating costs
	Policies and regulations	Carbon Border Adjustment Mechanism (CBAM)	Medium-term, the CBAM may be expanded within 3 to 10 years	Changes in trade conditions, new operational tasks: • Carbon footprint calculation and reporting personnel • Purchase CBAM certificates • Fines for non-compliance with reporting regulations	High, increase in operating costs
	Policies and regulations	Regulations require transparent disclosure of information on emissions	Near-term, the disclosure regulations on carbon emissions may be implemented in 1-3 years (Taiwan 2027)	Increased costs for expanded supervising and control: • Carbon emission inventory and verification personnel • Third-party verification operations	Low, increase in operating expenses
	Policies and regulations	Regulations on large electricity users	Near-term, the regulations on large electricity users may be implemented within 1-3 years	Electricity utilization restrictions: • Utilize renewable energy • Invest in energy-saving equipment • Fines for non-compliance with reporting regulations	Low, increase in operating expenses and property, plant and equipment
	Market	Changes in customer behavior (Preference for energy-efficient products)	Near-term, within 1-3 years, EPEAT will initiate new regulations and the US ENERGY STAR® standards will be stricter	Impact on product sales volume: • Commercial customer order transfer • Unable to secure government contracts	High, with a decline in revenue
	Goodwill	Changes in customer behavior (Preference for eco-label products)	Medium-term, small difference in market share of competitive products within 3-5 years	Impact on product sales volume: • If it fails to meet customer needs, the sales volume may be affected	Medium, decrease in operating revenue

8 Stages of occurrence: 1-3 years for the near term, 3-10 years for the medium term, over 10 years for the long term.

	Risk classification	Risk description (Issues)	Stages of occurrence[8]	Impact scenarios (Event outcome)	Impact on ASUS
Physical risks	Immediate	Extreme climate impacts	Near-term, the shift was suspended in the past 1-3 years	Shutdown due to power outage: • Seek temporary electricity supply solutions • Delay in product delivery Road disruptions due to heavy rainfall: • Seek temporary logistics solutions • Delay in product delivery	• ASUS: Low, impairment of property, plant and equipment • Suppliers: High, increase in operating costs
	Long-term	Sea level rise	Long-term, sea level rise may occur in over 10 years	Road disruptions around the operations headquarters: • Remote work • Seek temporary production relocation solutions	Medium, impairment of fixed assets
	Long-term	Rise in temperature	Long-term, sea level rise may occur in over 10 years	Increased electricity consumption at operational sites and in the supply chain: • Increased electricity costs	Low, increase in operating expenses

	Opportunity classification	Opportunity description	Stages of occurrence	Impact scenarios (Event outcome)	Impact on ASUS
Opportunity	Product and service	Launch low-carbon products	Near term, competitors will launch eco-friendly products within 1-3 years	Increase in sales revenue	High, satisfy customer demand for low-carbon products to increase revenue
	Product and service	Provide carbon neutral service	Near term, there will be increasing demand for carbon reduction services from customers within 1-3 years.	Increase in sales revenue	High, satisfy customer demand for low-carbon products to increase revenue

3. Climate Risk and Opportunity Matrix

By using the timing and magnitude of impact of climate risks and opportunities as two axes, the relative position of each risk and opportunity can be mapped. This provides a clear view of the most prioritized and important climate issues for ASUS.

From the diagram below, it is clear that the most urgent issues for ASUS to assess and manage are: carbon pricing (such as Mainland China's carbon tax and the EU's Carbon Border Adjustment Mechanism (CBAM)), changes in customer behavior (preference for energy-efficient and environmentally certified products), business disruptions due to extreme weather events, and emerging products and services such as low-carbon products and carbon-neutral services.
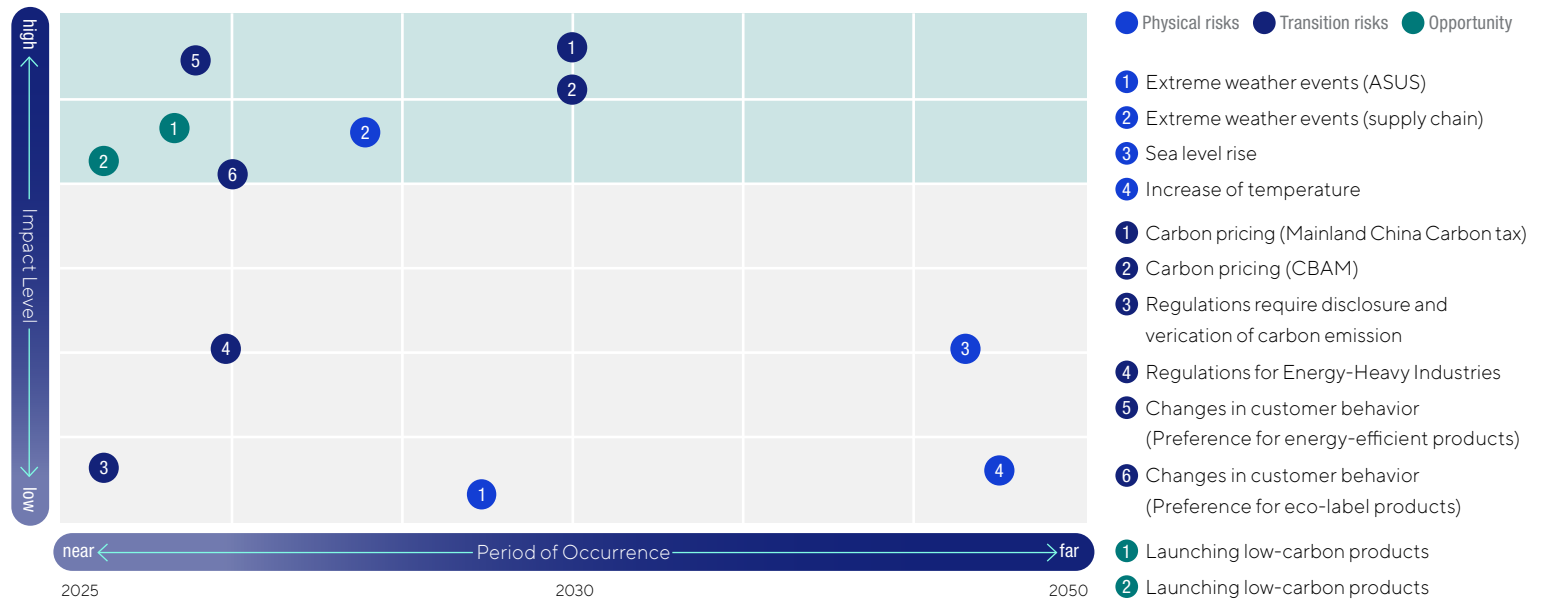
Physical risks   Transition risks   Opportunity

1 Extreme weather events (ASUS)
2 Extreme weather events (supply chain)
3 Sea level rise
4 Increase of temperature

1 Carbon pricing (Mainland China Carbon tax)
2 Carbon pricing (CBAM)
3 Regulations require disclosure and verication of carbon emission
4 Regulations for Energy-Heavy Industries
5 Changes in customer behavior (Preference for energy-efficient products)
6 Changes in customer behavior (Preference for eco-label products)

1 Launching low-carbon products
2 Launching low-carbon products

3.3 Risk and Opportunity Scenario Simulation Assessment

1. Brief Overview of Risk and Opportunity Scenario Simulation

(1) Transition Risk Scenario

Transition risks are analyzed based on the International Energy Agency (IEA) annual publication, the World Energy Outlook, specifically using the Stated Policies Scenario and the Net Zero Scenario, as detailed below.

IEA	Scenario Description	Corresponding Transition Risk Simulation Scenarios of ASUS
Stated Policies Scenario	This includes announced policy content, aiming to highlight the impact of these announced policies on future global economic, environmental, and social systems.	STEPS Scenario
Net Zero Scenario	Scenario for achieving net-zero emissions by 2050	NZE Scenario

(2) Physical Risk Scenario

ASUS referenced the methodology in the sixth Assessment Report (AR6) published by the Intergovernmental Panel on Climate Change (IPCC) in August 2021 to evaluate physical risks ASUS may encounter[9]. AR6 provided the "Shared Socioeconomic Pathways" (SSPs) evaluation method and established an integrated model based on currently quantiable and measurable data. It uses different descriptive scenarios to simulate future social and economic conditions. In addition to the SSP Scenario, AR6 also included radiative forcing in Representative Concentration Pathways (RCP)[10] Scenario from AR5 to evaluate future climate trends[11].

Scenario SSPx-y13[12]	SSP Description	RCP Description	Short Term (2021-2040)	Medium Term (2041-2060)	Long Term (2081-2100)	Simulation Scenario Corresponding to ASUS Physical Risk
SSP1-1.9	Sustainability	Global warming slowing down	1.5	1.6	1.4	-
SSP1-2.6			1.5	1.7	1.8	-
SSP2-4.5	Middle of the road		1.5	2.0	2.7	-
SSP3-7.0	Regional rivalry	Global warming accelerating	1.6	2.1	3.6	-
SSP5-8.5	Fossil-Fueled Development		1.6	2.4	4.4	The most serious impact on operations

9 The World Climate Research Programme of the WMO activated the Coupled Model Intercomparison Project (CMIP) in 1995 to integrate the climate simulation capacity of major meteorological research centers across the world. They followed internationally recognized modeling protocols to systematically conduct climate change simulations and projections using their own developed climate models. These results were the primary scientific basis for writing the IPCC's climate change assessment reports. AR6 used data from the CMIP. Source: https://web.archive.org/web/20180305011744/http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf.

10 RCP measures the degree to which the energy balance of the Earth-atmosphere system is affected by changes in the factors that affect climate. Source: https://www.cwb.gov.tw/V8/C/K/Qa/qa_2_1.html.

11 Source: Framework and summary of the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP) and IPCC assessment report, https://tccip.ncdr.nat.gov.tw/upload/activity_agenda/20211118205605.pdf.

12 The" x" in SSPx-y stands for the socioeconomic pathway and the" y" stands for the approximate level of radiative forcing. Source: https://tccip.ncdr.nat.gov.tw/ds_02_06_ar6.aspx.

Climate Opportunities

According to the IPCC AR6, the process of supporting sustainable development through mitigation and adaptation actions is referred to as "Climate Resilient Development." To address actual or anticipated climate impacts, ASUS evaluates potential opportunities under climate change by managing greenhouse gas reductions and adaptation measures.

Our climate reduction opportunities mainly come from reducing the carbon footprint of our products and providing low-carbon products to customers. Our climate adaptation opportunities are from ASUS carbon neutral services that not only can help our customers reach their net zero goals, but also indirectly protect forests and slow down global climate change with our high-quality carbon credits.

| Opportunities Under Climate Change	IPCC Definition
Risk reduction opportunities	Reducing the sources of greenhouse gases (GHGs) through human efforts
Risk adaptation opportunities	Propose ways to avoid climate impacts and create opportunities to improve climate change when adapting to actual or expected weather condition and its impacts

2. Climate Risk Scenario Simulation Results

Based on the previously identified risks and opportunities, ASUS simulates transition risk scenarios using the IEA's Stated Policies (STEPS) scenario and Net Zero (NZE) scenario, and assesses the impact of extreme climate events on operational disruptions in the supply chain assembly plants, referencing the effects of the IPCC AR6 SSP5-8.5 scenario.

Carbon pricing: Mainland China Carbon Trading Market

⊘ Scenario Assumptions

- Following ASUS Group's science-based emission reduction targets: Reducing Scope 1 and Scope 2 carbon emissions by 50% and Scope 3 emissions from "purchased goods and services" and "use of sold products" by 30% by 2030.
- To comply with the Paris Agreement or achieve their Nationally Determined Contributions (NDCs), governments will utilize policy tools such as carbon pricing to achieve its reduction targets or commitments.
- Mainland China has pledged to attain "peak carbon" by 2030 (CO_2 emission reach its peak) and attain "carbon neutrality" before 2060.
- According to the carbon inventory data compiled by ASUS in 2023, the main carbon emissions of ASUS derived from the supply chain, production, and assembly, which accounted for 70% of the carbon emissions, with more than 90% of the suppliers located in China.
- Assume that China will implement a carbon pricing system to achieve carbon neutrality by 2030, regulating carbon-emitting enterprises within mainland China. The costs form suppliers will be passed on to ASUS, resulting in an increase in product manufacturing costs.

⊘ Financial Risk Event Chain
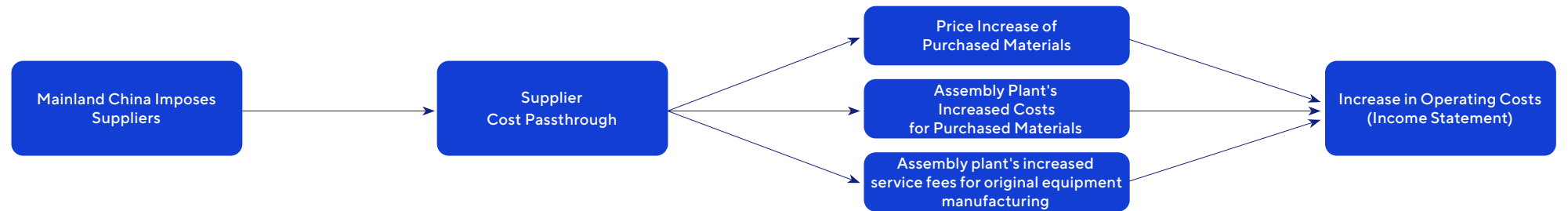
## Financial Parameter Assumptions and Impact Assessment[13]

Stringent policy (Partial coverage and low carbon price)

- In 2023, ASUS's suppliers in Mainland China and their upstream partners, whose emissions exceeded 26,000 tonnes of CO_2e, are regulated by the carbon trading market and do not receive free allowances

- 100% of the costs incurred by first-tier suppliers due to carbon trading in Scope 1 and Scope 2 are passed on to ASUS

- The carbon price is based on the IEA's carbon price estimates for Mainland China. The projected carbon price in 2030 is 28 USD, and in 2050 is 53 USD

- It is reasonable to project ASUS's global sales growth, which will drive the growth of ASUS's carbon emissions from its supply chain in Mainland China

- The financial impact costs for 2030 and 2050 are projected to represent 1.1% and 0.6% of the 2023 operating expenses, respectively

Monetary amount

STEPS

2023 2025   2030   2035   2040   2045   2050
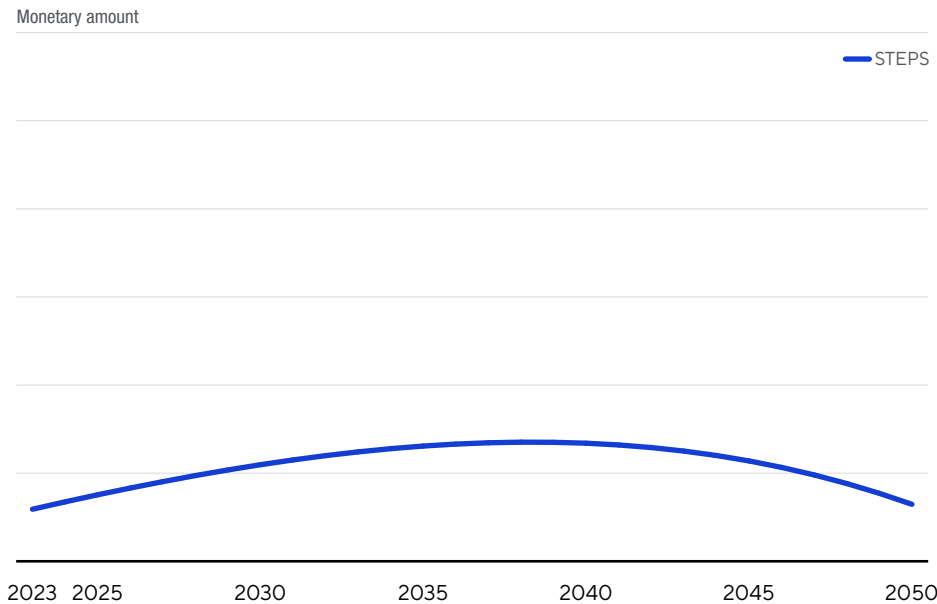
Most stringent policy (Full coverage and high carbon price)

- ASUS's suppliers in Mainland China and their upstream partners are all regulated by the carbon trading market and do not receive free allowances.

- 100% of the costs incurred by first-tier suppliers due to carbon trading in Scope 1 and Scope 2 are passed on to ASUS

- The carbon price is based on the IEA's carbon price estimates for Mainland China. The projected carbon price in 2030 is 90 USD, and in 2050 is 200 USD

- It is reasonable to project ASUS's global sales growth, which will drive the growth of ASUS's carbon emissions from its supply chain in Mainland China

- The financial impact costs for 2030 and 2050 are projected to represent 3.8% and 2.3% of the 2023 operating expenses, respectively

Monetary amount

NZE
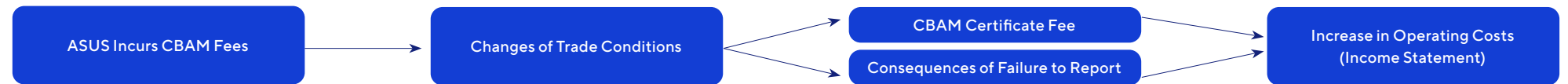
2023 2025   2030   2035   2040   2045   2050
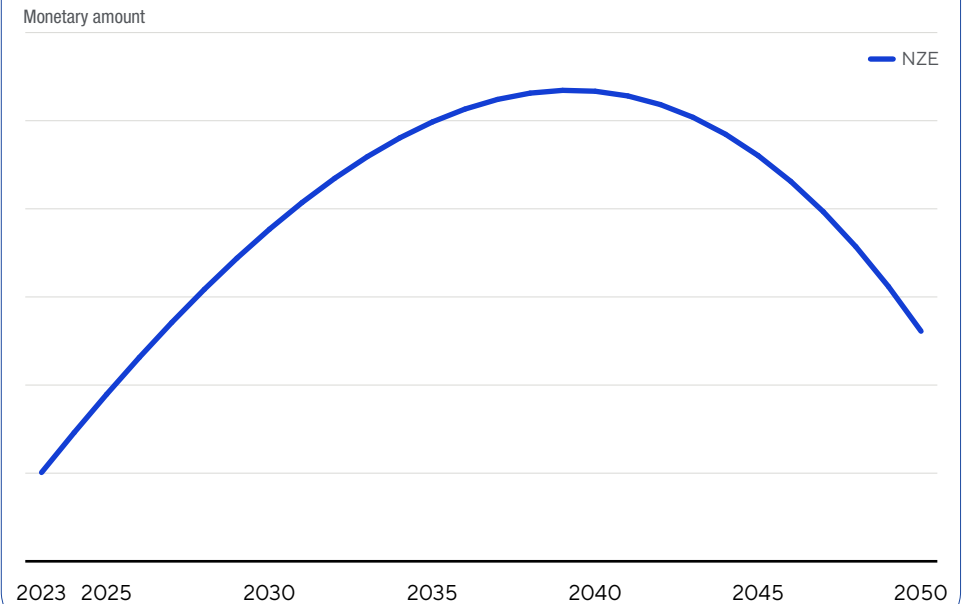
13 In ASUS's assessment of the carbon price scenario in Mainland China, four different potential policy outcomes can be generated considering the scope of coverage and carbon price levels. Only the stringent policy and the most stringent policy outcomes are listed here. Cost pass-through from second-tier suppliers and above is not considered

Carbon Pricing: Carbon Border Adjustment Mechanism (CBAM)

⊘ Scenario Assumptions

- Following ASUS Group's science-based emission reduction targets: Reducing Scope 1 and Scope 2 carbon emissions by 50% and Scope 3 emissions from "purchased goods and services" and "use of sold products" by 30% by 2030.
- The EU officially implements the Carbon Border Adjustment Mechanism in 2026 to ensure that trading partner countries pay the same cost of carbon as industries in the EU and prevent the relocation of industries to other countries with less stringent carbon controls. To import products into the EU, importersmust pay a carbon fee before they may sell their products on the European market.
- The European Commission announced the "Fit for 55" climate change plan on July 14, 2021, requiring the 27 EU countries to achieve a collective goal of reducing net greenhouse gas emissions by 55% by 2030 compared to the 1990 levels. In order to achieve the above goals and maintain the international competitiveness of its domestic enterprises, the European Union announced the Carbon Border Adjustment Mechanism (CBAM) with the aim of requiring all trading partners to bear the same carbon costs as the businesses within the EU. The bill will be piloted in October 2023 and officially come into effect in 2026, initially, it will cover imports of cement, iron and steel, aluminum, fertilizers, electricity and hydrogen.
- It is anticipated that electronic products might be included in the subsequent regulated items. ASUS is proactively assessing the potential impact of CBAM implementation on its exports to the EU.

⊘ Financial Risk Event Chain

ASUS Incurs CBAM Fees → Changes of Trade Conditions → CBAM Certificate Fee / Consequences of Failure to Report → Increase in Operating Costs (Income Statement)

⊘ Financial Parameter Assumptions and Impact Assessment[14]
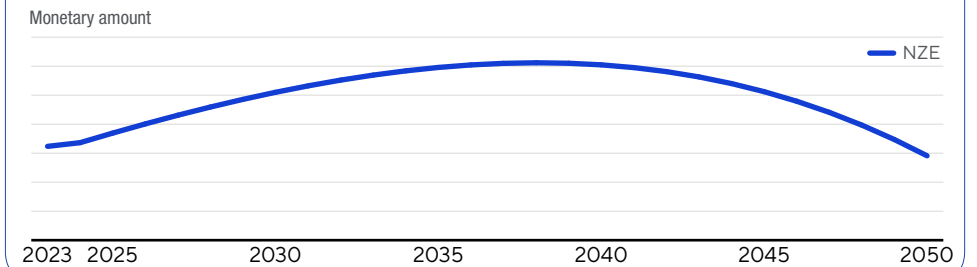
Stringent policy (Partial coverage with free allowance low carbon price)

- The carbon content of the product is calculated based on the raw material and manufacturing stages, and free allowances decrease according to the EU ETS Phase 4 regulations. No carbon tax/fees have been paid in the country of manufacture
- The carbon price amount is based on the IEA's carbon price estimates for the EU, with the projected carbon price being 120 USD in 2030 and 135 USD in 2050
- Reasonably estimate the global sales growth rate of ASUS, which drives the growth of product exports to the EU
- The financial impact costs for 2030 and 2050 are projected to represent 4.1% and 2.5% of the 2023 operating expenses, respectively

Monetary amount — STEPS

2023 2025   2030   2035   2040   2045   2050
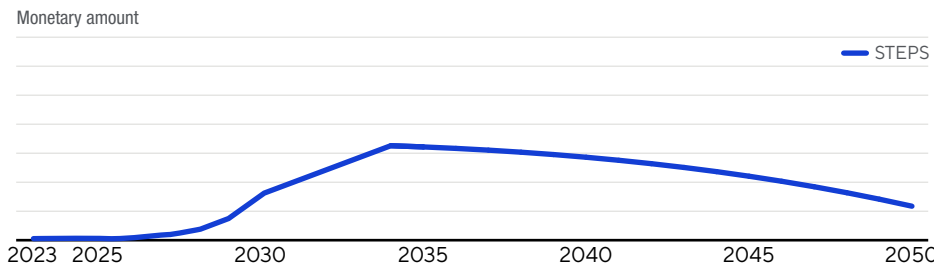
Most stringent policy (Full coverage without free allowance and high carbon price)

- Product carbon content is calculated based on the ASUS product carbon footprint without free allowance. No carbon tax/fees have been paid in the country of manufacture
- The carbon price is based on the IEA's carbon price estimates for the EU. The projected carbon price in 2030 is 140 USD, and in 2050 is 250 USD
- Reasonably estimate the global sales growth rate of ASUS, which drives the growth of product exports to the EU
- The financial impact costs for 2030 and 2050 are projected to represent 13.4% and 6.3% of the 2023 operating expenses, respectively

Monetary amount — NZE

2023 2025   2030   2035   2040   2045   2050

14 IEA carbon price reference: https://iea.blob.core.windows.net/assets/86ede39e-4436-42d7-ba2a-edf61467e070/WorldEnergyOutlook2023.pdf. ASUS product sales data reference: https://www.statista.com/outlook/tmo/devices/pcs/worldwide. EU ETS Phase 4 regulations reference:https://icapcarbonaction.com/en/news/eu-adopts-landmark-ets-reforms-and-new-policies-meet-2030-target

Internal carbon pricing (ICP) applied to commercial and consumer notebook computer cases
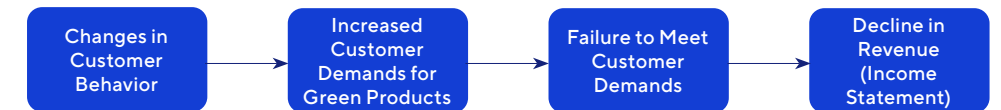
- ASUS refers to the United Nations Climate Change Conference COP resolutions and IPCC official documents and considers the EU carbon market as a benchmark for global carbon markets. After an internal comparison of major international carbon pricing mechanisms, ASUS has decided to use the EU Carbon Border Adjustment Mechanism (CBAM) and Emissions Trading System (ETS) prices as its internal carbon pricing evaluation framework.

- In the computer equipment industry, production is largely done through contract manufacturing. Therefore, Scope 1 and 2 greenhouse gas emissions, which are related to direct and indirect emissions from the company's operations, are not significant. Instead, Scope 3 emissions, which include supplier emissions and emissions from product use, account for more than 90% of value chain emissions.

- As a leading global green technology brand, ASUS is committed to advancing product design and manufacturing to reduce carbon emissions. In line with ASUS' SBTi-approved carbon reduction pathway (50% reduction for Scopes 1 and 2, and 30% reduction for Scope 3 supply chain and product use), the product carbon footprint is used as the basis for internal carbon pricing calculations.

- By referencing the EU ETS quota calculation method and using the industry benchmark approach, carbon footprint benchmark values for various products are established, along with the quantity of products shipped to the EU, to calculate the amount of free allowances. By determining ASUS' annual average product carbon footprint and shipment quantities, the required allocation amount is calculated. Therefore, the internal carbon price for major products is set at 80 USD per metric ton of CO_2e.

- The financial impact percentage of simulated shipments of key products to Europe in 2023 ranges from 0.7% to 1.6%.

- ASUS will disclose the results of the internal carbon pricing assessment in its reports, providing the product operations department with references for tracking and managing carbon reduction performance.

- After implementing the internal carbon pricing mechanism, ASUS will promote strategies such as supply chain collaboration programs, green product management, and renewable energy expansion. It is expected that the carbon footprint of major products can be reduced by at least 16% by 2030.

Changes in Customer Behavior

⊙ Scenario Assumptions

- Customers' environmental protection awareness has increased, and products that meet energy efficiency standards have become a criterion for their purchases. If products do not receive voluntary energy efficiency standards or do not meet customers' energy efficiency requirements, they will lose their competitiveness in the green market, which will result in loss of revenue.

- According to a survey on consumer purchase intentions conducted by First Insight and Wharton Business School, consumers are paying more and more for sustainable products every year. In addition, a survey on oversea consumer trends conducted by Simon Kucher&Partners reveals a significant increase in the willingness of the new generation to purchase sustainable products.

- To accelerate the transition to net-zero, governments around the world are implementing higher standards for energy management policies and regulations. In addition, increased consumer environmental awareness is driving demand for green products with environmental certifications. From both compliance and market perspectives, this will drive ASUS to develop more efficient and environmentally friendly product.

⊙ Financial Risk Event Chain

Changes in Customer Behavior → Increased Customer Demands for Green Products → Failure to Meet Customer Demands → Decline in Revenue (Income Statement)

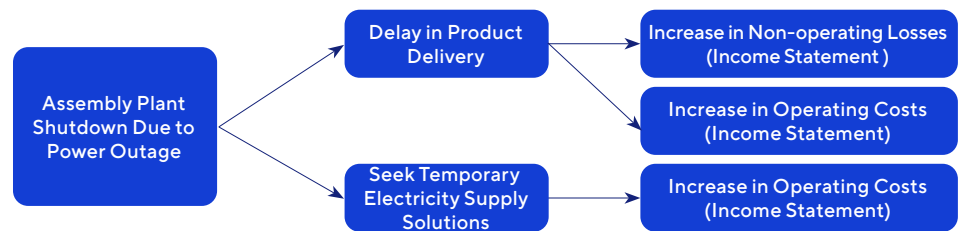#### ⊙ Financial Parameter Assumptions and Impact Assessment

- To meet increasingly stringent green product standards, such as the updated EPEAT and ENERGY STAR® 9.0 standards, ASUS continues to invest annually in material selection, research and development of energy-efficient designs, and enhancement of supply chain carbon reduction capabilities to maintain environmental certifications to lower potential risks.

Extreme Weather EventsAssembly Plant Shutdown due to Power Outage

⊘ Scenario Assumptions

- Extreme weather events impact people and industries in environmentally fragile areas and have a negative impact on ASUS supply chain. The occurrence of heavy rainfall and drought often cause uneven rainfall distribution, which has a significant impact on hydroelectric power generation and leads to unstable power supply and power outages. These would in turn affect suppliers' normal operations and deliveries, and pose risks to ASUS operations and reputation that cannot be ignored.

- ASUS main Notebook product assembly plant is located in Chongqing, Mainland China. According to China's "2050 High Renewable Energy Penetration Scenario and Roadmap Study", power generated by renewable energy will reach 86% with 14% hydropower. This shows that hydropower will become one of the key sources of power supply in Chongqing in the future.

- The area where the ASUS product assembly plant is located is powered by the Ertan Power Plant. Shutdown of the assembly plant due to unstable power supply caused by extreme weather events may carry a finanical impact.

⊘ Financial Risk Event Chain

⊘ Financial Parameter Assumptions

- According to Zhao et al. (2022) and the CIMP6 model, ASUS estimates that under the SSP 5-8.5 scenario. It is estimated that the probability of power outages lasting 15 days and 21 days in Chongqing in 2025 and 2050 are 4.11% and 5.75% respectively.

- Based on ASUS's 2023 revenue, the notebook product line accounts for approximately 60% of revenue.

⊘ Financial Impact Assessment on ASUS

- Based on the probability of power outages, ASUS's expected loss amounts to 0.2% and 0.5% of its 2023 notebook revenue.

Extreme Weather Events Land Transportation Disruption

⊘ Scenario Assumptions

- Extreme weather events such as heavy rainfall often result in road flooding or waterlogging, making it difficult for vehicles to pass through, so that our delivery will be delayed and our reputation will be damaged.

- ASUS main revenue product assembly plant is located in Chongqing, Mainland China. As it is a place full of multi-river confluence terrains, the main reason for the 2020 flooding was because rivers overflowed in the upstream due to heavy showers, resulting in flooding in many parts of the city. If flooding caused by heavy rainfall interrupts land transportation in the region, it will result in revenue loss for ASUS.

⊘ Financial Risk Event Chain
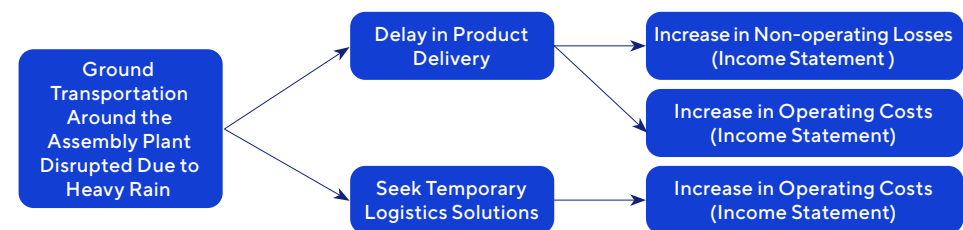
⊘ Financial Parameter Assumptions

- According to Wang et al. (2022), under the SSP5-8.5 scenario, it is estimated that by 2050, the precipitation in the upstream basin of major rivers in Chongqing City will increase by 5.3%. This increase in precipitation leads to probabilities of continuous flooding in Chongqing City for 3 days, 7 days, and 15 days at 3.88%, 3.42%, and 3.12%.

- Based on ASUS's 2023 revenue, the laptop production line contributes approximately 60% of the total revenue.

⊘ Financial Impact Assessment on ASUS

- Based on these probabilities, the respective revenue loss for ASUS is estimated to be 0.05%, 0.1%, and 0.2% of the 2023 laptop revenue.

⊘ Response Strategy

To address the impacts of extreme climate events, ASUS has established a screening process for suppliers facing extreme climate risks and conducted risk assessments to identify and manage high-risk suppliers. We have implemented business continuity management operations and a Business Continuity Plan (BCP) to enhance risk management awareness and minimize the impact and downtime caused by disasters or management failures. Risk assessment factors include areas prone to frequent natural disasters (short-term/long-term disasters due to climate change) and regions where supply chain disruptions have previously affected ASUS's operations and caused losses. We expand the management content annually to ensure suppliers can respond to potential risks.

3. Climate Opportunities Scenario Simulation Results

Risk reduction opportunity: Launch low-carbon products

◇ **Scenario Assumptions**

- According to a survey on consumer purchase intentions conducted by First Insight and Wharton Business School, consumers are paying more and more for sustainable products every year
- ASUS provides high-energy-efficient products to meet customer demands for energy-saving solutions, thereby increasing revenue from green products[15].

◇ **Financial Opportunity Event Chain**

◇ **Financial Impact Assessment on ASUS**

- ASUS aims to reduce product carbon footprint primarily by using low-carbon materials and continuously improving product energy efficiency to reduce power consumption. This strategy aligns with customer expectations for green products and meets green procurement specifications, leading to increased revenue from ASUS's green-related products. It is projected that green product revenue will reach 50% by 2030.

Risk adaptation Opportunities by Providing Carbon Neutrality Services

◇ **Scenario Assumptions**

- With 139 countries already announcing net-zero targets, the focus of commodity flow has shifted from solely price competitiveness to considerations of carbon footprint. Nations and businesses now prioritize purchasing low-carbon footprint products to achieve netzero goals. In 2023, ASUS announced the launch of carbon-neutral services, targeting commercial clients facing carbon reduction pressures as the initial service recipients. Carbon credits used to offset the remaining carbon emissions of products are sourced from high-quality nature based projects.
- ASUS also provides carbon-neutral product services to meet customer demands for reducing product carbon footprint.

◇ **Financial Opportunity Event Chain**

◇ **Financial Impact Assessment on ASUS**

- Estimating carbon-neutral revenue for 2030 to account for 0.09% to 0.45% of ASUS's 2023 green product revenue.

15 Green products are defined as the revenue meeting EPEAT or equivalent standards.
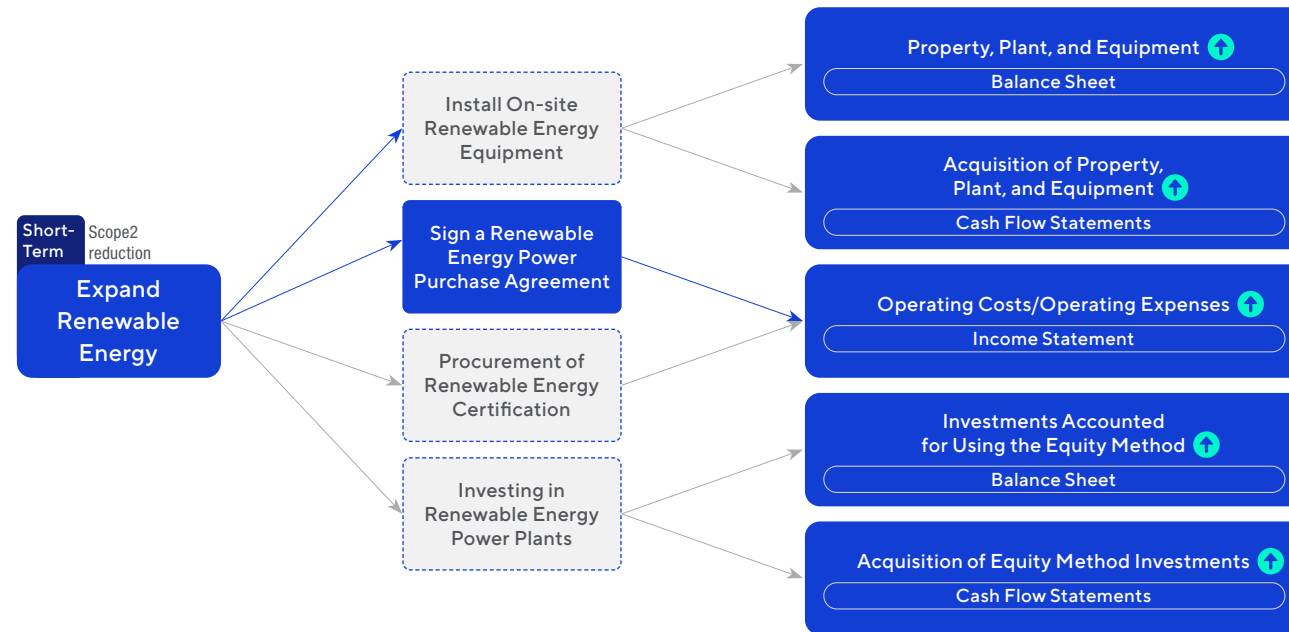
3.4 ASUS's Response Measures as Financial Impact Pathways and Financial Impacts

1. Response measures in terms of financial impact pathways

Based on the previous chapter, after committing to SBTi targets, ASUS has embarked on several initiatives, including sourcing renewable energy, optimizing carbon management in the supply chain, sourcing low-carbon materials, and expanding product R&D. The following outlines the financial impact pathways of each reduction strategy for ASUS:

Financial impact pathway of procuring renewable energy

In expanding renewable energy strategies, ASUS may take actions such as installing self-generated renewable energy systems, signing renewable energy power purchase agreements (CPPAs), purchasing renewable energy certificates, and investing in renewable energy facilities. Different actions will have different financial impact pathways; for example, installing self-generated renewable energy systems is classified as property, plant, and equipment (PP&E) investment, while investing in renewable energy facilities is classified as equity method investment.

Financial Impact Pathway of Supply Chain Management

In supply chain management strategies, ASUS can take actions such as implementing supplier carbon reduction programs (e.g., sourcing low-carbon materials, process optimization, improving equipment energy efficiency), conducting supplier environmental audits, and establishing a carbon data management platform. Each of these actions will result in an increase in ASUS' operating costs/ expenses.
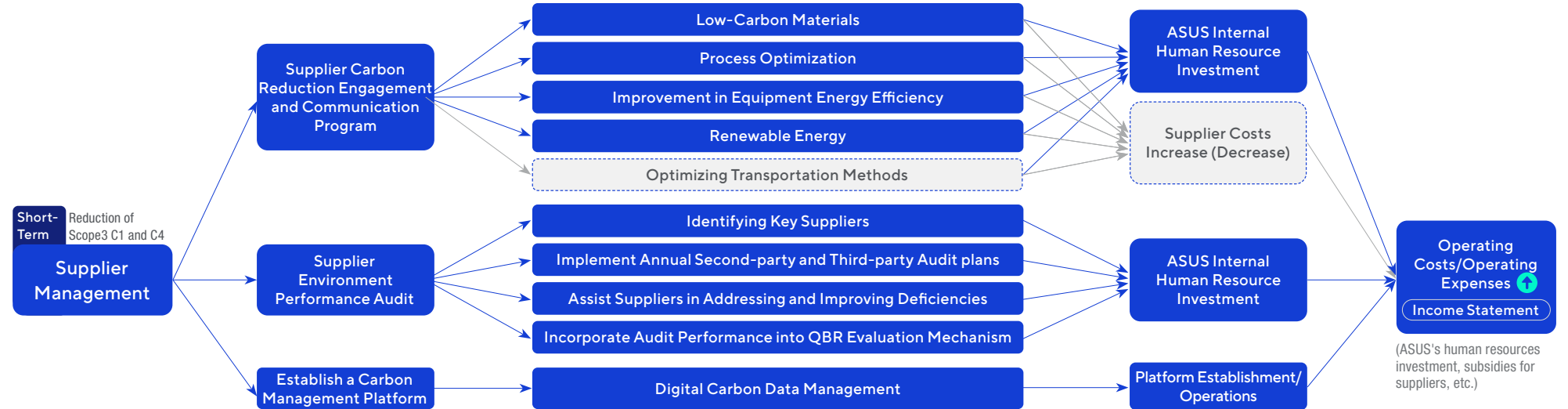
Financial Impact of Sourcing Low-carbon Materials and Improving Product Energy Efficiency

In the strategies for sourcing low-carbon materials and improving product energy efficiency, ASUS can take actions such as sourcing recycled materials, developing recycled materials, and designing high-efficiency products. Different actions will have different financial impacts; for example, procuring recycled materials will increase operating costs, while purchasing R&D equipment will be classified as real estate and plant investment.

2. Financial Impacts of Reduction Response Measures

Based on the financial impact pathways outlined in the previous section, it is estimated that by 2030, the costs of sourcing recycled materials, increasing staff, EPEAT certification costs, and procuring renewable energy will account for 0.9% of 2023 operating expenses.

04 Climate Action Goals

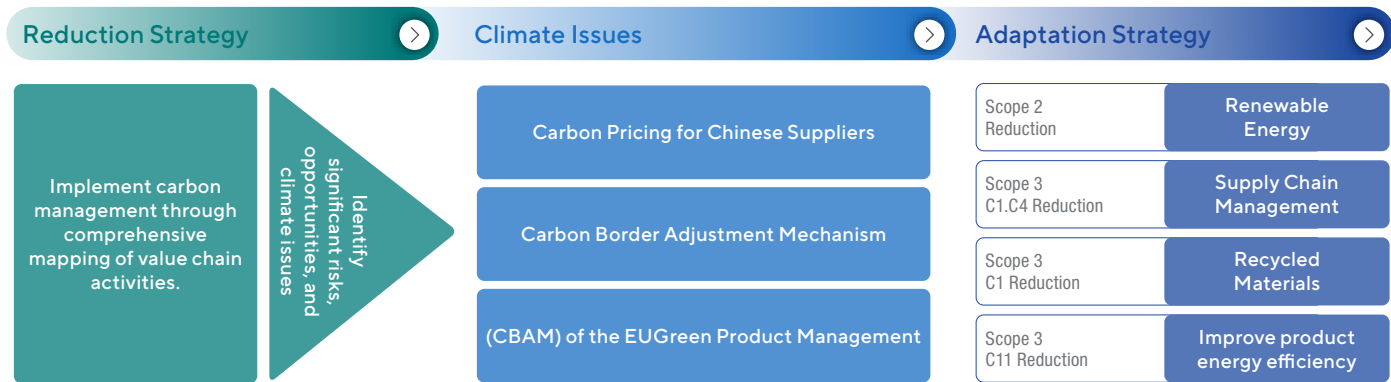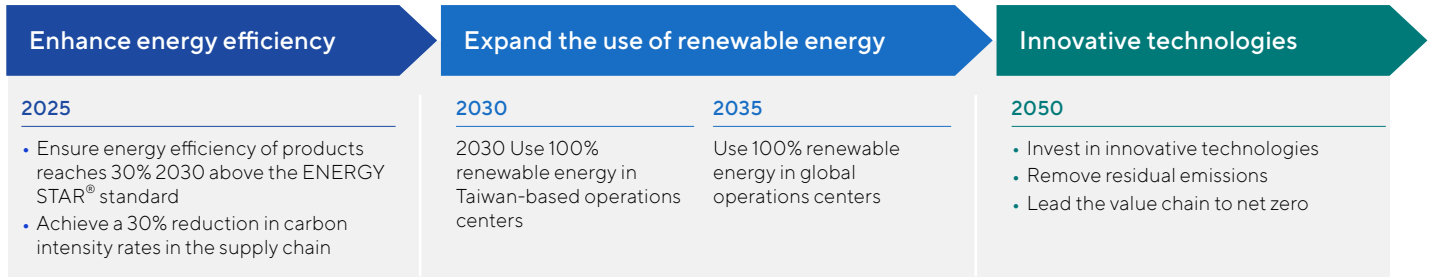## 4.1 Net Zero Vision and SBT Reduction Targets

Net Zero Vision of ASUS

As the threat of climate change intensifies, Net Zero Emissions by 2050 has become a unified global consensus for climate action. According to UNEP's 2023 Emissions Gap Report[16], greenhouse gas emissions from human activities have reached an all-time high of 57.4 billion tons. Without aggressive action to reduce carbon emissions, global warming could reach 2.5°C by the end of this century. Nearly 140 countries around the world have committed to achieving net zero emissions by 2050, representing 88% of global carbon emissions. This reflects a clear global shift toward net zero emissions. We believe that carbon is not only becoming monetized but is also influencing financial flows, meaning that every industry needs to manage carbon. Products contain carbon from the extraction of raw materials and through stages such as manufacturing, assembly, storage, sale and recycling. This not only adds value to the product, but also results in the movement and accumulation of carbon.

According to the "Net Zero Economy Index 2021[17]" published by PwC, in 2021, achieving net zero emissions by 2050 will be difficult. Reducing carbon emissions by half by 2030 and achieving net zero emissions by 2050 require a five-fold increase in the rate of global decarbonization. It means that every industry across the world must accelerate their carbon reduction transformation to attain net zero emissions. ASUS' climate strategy is based on a science-based reduction pathway that includes a three-phase approach: "Improving Energy Efficiency," "Expanding the Use of Renewable Energy," and "Investing in Innovative Technologies" to eliminate remaining emissions and gradually move the entire value chain toward net zero.

16 Source: https://wedocs.unep.org/bitstream/handle/20.500.11822/43922/EGR2023.pdf?sequence=3.
17 Source: https://www.pwc.com/ve/en/publicaciones/assets/net-zero-economy-index-2021.pdf.

SBTi 1.5°C Reduction Pathway

- 2030: Reduce Scope 1 and Scope 2 carbon emissions across the entire group by 50% compared to the base year of 2021.
- 2030: Reduce Scope 3 C1 (Purchased Goods and Services) C11 (Use of Sold Products) carbon emissions across the entire group by 30% compared to the base year of 2021

Enhance energy efficiency

2025
- Ensure energy efficiency of products reaches 30% 2030 above the ENERGY STAR® standard
- Achieve a 30% reduction in carbon intensity rates in the supply chain

Expand the use of renewable energy

2030
2030 Use 100% renewable energy in Taiwan-based operations centers

2035
Use 100% renewable energy in global operations centers

Innovative technologies

2050
- Invest in innovative technologies
- Remove residual emissions
- Lead the value chain to net zero

Reduction Strategy ⟩ **Climate Issues** ⟩ **Adaptation Strategy** ⟩

Implement carbon management through comprehensive mapping of value chain activities.

Identify significant risks, opportunities, and climate issues

- Carbon Pricing for Chinese Suppliers
- Carbon Border Adjustment Mechanism
- (CBAM) of the EUGreen Product Management

Scope 2 Reduction	Renewable Energy
Scope 3 C1.C4 Reduction	Supply Chain Management
Scope 3 C1 Reduction	Recycled Materials
Scope 3 C11 Reduction	Improve product energy efficiency

SBT Reduction Targets

Launched by the United Nations Global Compact and the Carbon Disclosure Project (CDP), the Science Based Targets Initiative (SBTi) advocates for science-based reduction targets. SBTi is a third-party certified scientific methodology based on the global carbon budget[18] scenario of limiting global warming to $1.5^{\circ}C$. It is a methodology that companies can use to develop their carbon reduction targets. SBT reduction targets have commercial significance, as they can accommodate future business growth, save costs, provide flexibility to comply with regulations, increase investor confidence, and stimulate innovation and competitiveness.

Achieving net zero emissions is ASUS' primary climate goal. In 2022, we committed to align with the Science Based Targets Initiative (SBTi) to achieve "science-based reduction targets. We are actively following the SBTi framework to establish reduction pathways and targets that align with the Company's consolidated financial statements. Our goal is to align the entire Group with the 1.5°C reduction pathway to address the risks of global climate change. In 2023, we passed the Science Based Targets initiative (SBTi) Near-Term target review, with 2021 as the baseline year, commting to reduce Scope 1 and Scope 2 emissions by 50% and Scope 3 emissions from 'purchased goods and services' and 'use of sold products' by 30% by 2030 ASUS plans to further commit to the more ambitious SBTi Net-Zero pledge, guiding the entire group towards the net-zero target by 2050.

Furthermore, ASUS acknowledges that emission reductions within the value chain may be constrained by factors such as the feasibility and commercial viability of carbon reduction technologies. Therefore, achieving net-zero goals necessitates the importance and necessity of engaging in emission reduction actions beyond the value chain. In alignment with the recommendations outlined in the "Beyond Value Chain Mitigation" (BVCM) guidance released by SBTi in February 2024, ASUS plans to participate in carbon reduction projects that adhere to BVCM criteria.

The BVCM (Beyond Value Chain Mitigation) represents recommendations by the Science Based Targets initiative (SBTi) for enterprises, encouraging them to take actions beyond their value chains to reduce greenhouse gas (GHG) emissions. The BVCM guidance suggests the following steps for enterprises to achieve this:

1. Establish BVCM objectives: Enterprises can set targets for reducing emissions beyond their value chains, which should align with the climate goals committed to by the company.
2. Identify BVCM opportunities: Collaborate with other companies, non-governmental organizations, and governments to examine and identify opportunities for emission reductions beyond the company's value chain.
3. Invest in BVCM projects: Enterprises can invest in BVCM projects to help reduce emissions beyond their value chains. These projects may include renewable energy, afforestation, carbon capture and storage technologies, etc.

18 By utilizing the critical warming threshold as a benchmark to evaluate the remaining global carbon emissions quota. This assessment allows for the observation of the carbon emission trend.

4.2 Actions Taken

Improving Energy Efficiency

I. Low Carbon Products

ASUS quantifies the potential environmental impacts it may cause in accordance with ISO 14040 and 14044 Life Cycle Assessment (LCA) standards. In order to reduce the carbon footprint generated by our products in their lifecycle, ASUS applies a circular economy mindset into product design and services, uses eco-friendly materials, improves energy efficiency, and extends usage cycles in our transition to low-carbon product development.

The amount of plastic used in ASUS products accounts for over 30% of the overall weight of the mainstream products, making it the most commonly used material. Therefore, we work with our major raw material suppliers to explore ways to increase the use of Post Consumer Recycled Plastic (PCR) as much as possible without compromising high quality and durability of ASUS products. Since 2017, more than 2,400 tonnes of recycled plastic have been used in our key products, resulting in a cumulative reduction of approximately 17,000 tonnes of CO_2e carbon emissions.

The ENERGY STAR® Program is the strictest energy efficiency program in the world. The energy efficiency design of our key products exceed the ENERGY STAR® standards. Our external power supplies use the highest energy efficiency level in the market, Level VI, to overcome sales obstacles caused by global energy efficiency laws and create competitiveness in the green product market. ASUS newly launched commercial and consumer laptops in 2023 exceed ENERGY STAR® standards by an average of 42%.

II. Supply Chain Carbon Reduction

The supply chain is the major source of greenhouse gas emissions for ASUS. Analyzing more than 100,000 data entries from environmental footprint surveys over the years, we identified 90% of emission was from key suppliers in the manufacturing process, including IC base(CPU, GPU), hard drives(SSF, HDD), panels, power supplies, motherboards, memory as well as EMS. Also, we collaborate with key suppliers on carbon reduction : "ASUS Climate Action Management Requirements. The Supporting initiatives include: setting Science Based Targets (SBT) and publicly reporting carbon reduction progress, using renewable energy, achieving ISO 50001 certification, reducing fluorinated greenhouse gases (F-GHGs) by 90% for panel manufacturers, and reducing fluorinated greenhouse gases (F-GHGs) by 75% for semiconductor manufacturers.

The ASUS Carbon Reduction Engagement and Communication Program aims to encourage our suppliers to continuously expand their use of renewable energy, actively request them to improve energy efficiency, and assist them in setting their greenhouse gas reduction targets and SBT reduction targets. In 2022, the proportion of our suppliers in solar power generation increased by 8% compared to 2021, while the proportion in setting greenhouse gas reduction targets was up by 8% compared to 2021. 33% of our suppliers obtained ISO14064 third-party verification, while 29% of them obtained ISO50001 certification.

Case Study | ASUS Key Supplier Carbon Reduction Engagement and Counseling Program

To lead our key suppliers to take proactive carbon reduction actions and achieve the sustainable goal of reducing greenhouse gas emissions intensity by 30% by 2025. Since initiating the Key Supplier Carbon Reduction Engagement and Counseling Program in 2021, ASUS has been establishing a low-carbon supply chain. The goal is to achieve by 2025 that 75% of ASUS's key suppliers meet setScience Based Targets initiative (SBTi) carbon reduction goals, utilize renewable energy sources ranging from RE40 to RE65, and certified with ISO 50001. ASUS's sustainability team engaged in one-on-one discussions and key issue forums with suppliers to develop tailored carbon reduction actions and targets that align with each supplier's business model. Quarterly surveys of greenhouse gas emissions data were conducted to monitor carbon reduction progress. We also work on this project with the Sustainable Technology Management Research Office of National Taipei University of Technology to regularly share international trends in carbon reduction with our suppliers and assist them in using decision matrix tools to develop their carbon reduction strategies.

In 2023, the Key Supplier Carbon Reduction Engagement and Counseling Meeting saw a total of 425 participants. During the Sustainable Supplier Conference, ASUS outlined its supply chain sustainability management goals and its path towards net-zero strategies, with a combined total of 556 participants attending both physical and online sessions.

This year, ASUS has selected 10 priority suppliers for assistance through its "Bringing up the small" scientific project initiative. ASUS leverages its own carbon reduction experience by conducting onsite inspections to identify carbon hotspots and providing recommendations for process equipment optimization. This guidance leads suppliers to align with Science Based Targets (SBT) reduction goals and international standards, while also assisting them in establishing carbon reduction objectives.

> Engagement and counseling process

Inventory on suppliers' carbon reduction plans

Complete communication and investigation with 100% of our key suppliers:
- Conduct communications on ASUS 2025 carbon reduction goals
- Keep track of suppliers' carbon reduction capabilities and goals

Training on carbon reduction professional skills

- Hold 1 session of a plenary carbon reduction forum
- Hold 2 sessions of supplier conferences to explain carbon reduction goals and net-zero strategies
- Hold 5 carbon reduction forums with individual suppliers

Provide suggestions and goals for carbon reduction actions

- Provide methodology and tools for carbon reduction decision matrix

Regularly track carbon reduction progress

- Track carbon reduction progress quarterly
- Adjust carbon reduction strategies when necessary

> Key supplier carbon reduction pathway

2022

Map manufacturing processes for key components and identify emission hotspots such as equipment with high energy consumption and processes with high carbon emissions.

2023

Map carbon reduction paths for key components based on emission hotspots and suppliers' capacity of reducing carbon emissions.

2024

ASUS aims to have 50% of key suppliers establish goals aligned with Science Based Targets(SBT) for carbon reduction, utilize renewable energy sources to RE40, and certified with ISO 50001.

2025

ASUS aims to have 75% of key suppliers establish goals aligned with Science Based Targets(SBT) for carbon reduction, utilize renewable energy sources to RE40, and certified with ISO 50001.

Group Subsidiary Assistance Program

Since 2022, ASUS has committed to aligning with Science Based Targets (SBT) and initiated a Greenhouse Gas Inventory AssistanceProgram. This program aims to establish comprehensive inventory capabilities for group subsidiaries, assisting each subsidiary in setting reduction targets and carbon reduction pathways, while integrating group-wide reduction requirements and resource allocation. In March 2024, ASUS officially launched the "A+ ESG Carbon Data Management Platform." Through this platform's functionality, which includes one-click generation of inventory lists and reports, ASUS assists group subsidiaries in accelerating their preparation for third-party external verification. ASUS has now completed the digitization platform rollout and greenhouse gas inventory guidance for the ASUS Group.

Expand the Use of Renewable Energy

I. Improve Energy Efficiency at Operational Headquarters

ASUS' carbon emissions came from the use of electricity for office operations. Since 2015, we have built up the ISO 50001 Energy management system. Both of our operation headquarters have received the LEED Platinum certification, the top certification for green buildings. We aim to reduce electricity consumption by 1% each year and we have achieved the marginal benefits for improving energy efficiency. ASUS conducts regular identification of high-energy-consuming areas and equipment, performing performance measurements on items such as chillers, chilled water pumps, cooling water pumps, zone pumps, and cooling towers in air-conditioning rooms. In 2023, ASUS replaced inefficient chillers at its operational headquarters with environmentally friendly refrigerants to reduce the use and emissions of fluorinated greenhouse gases (e.g., HFCs). Additionally, ASUS implemented variable frequency temperature difference control on cooling water pumps and cooling towers, improved central monitoring systems, and anticipates an annual reduction in electricity consumption of 440,000 kWh. In 2023, the global energy consumption within ASUS' operations amounted to 109,653.19 GJ, with a per capita energy consumption intensity of 6.71(GJ/person), representing an 17.58% decrease compared to 2022.

II. Headquarters signed CPPA – Renewable Energy Supply Agreement

In 2023, the ASUS Headquarters signed a Corporate Power Purchase Agreement (CPPA) for renewable energy, supplying sites including the headquarters and the ASUS - AI and Cloud campus. Starting from January 2024, ASUS Taiwan facilities officially commenced using renewable energy, with an estimated supply volume of around 10,000 MWH in 2024. This agreement not only reflects ASUS's commitment to environmental sustainability but also reduces the organizational carbon emissions of the company. Moreover, it fosters the development of the renewable energy market, significantly contributing to driving energy transition and achieving greenhouse gas reduction targets.

III. Accelerating Energy Transition Case - Solar Power Generation at US Facilities

In 2023, the Taiwan operation centers signed a Corporate Power Purchase Agreement (CPPA) for renewable energy, supplying sites including the operational headquarters and the ASUS - AI and Cloud campus. Starting from January 2024, ASUS Taiwan facilities officially commenced using renewable energy, with an estimated supply volume of around 10,000 MWH in 2024. This agreement not only reflects ASUS's commitment to environmental sustainability but also reduces the organizational carbon emissions of the company. Moreover, it fosters the development of the renewable energy market, significantly contributing to driving energy ransition and achieving greenhouse gas reduction targets.

IV. Pathway of Introducing Renewable Energy

ASUS adheres to the RE100 organization's recognition of renewable energy by purchasing renewable energy technologies that are beneficial for improving the environment and reducing carbon emissions, such as wind energy, photovoltaic energy, geothermal energy, and hydropower. We are also in line with the renewable energy supply and matching system to achieve our RE100 target. In our strategies of purchasing renewable energy, ASUS will also take into consideration our global presence and the current situation of the renewable energy market before planning a phased renewable energy procurement goal, and working closely with the renewable energy industry. By introducing renewable energy at overseas operations centers and headquarters, in 2023, ASUS achieved RE30 across its global operations centers. It is anticipated that in 2024, the company will reach RE50. To keep up with the development trend of renewable energy technology, we will adjust our procurement ratio of renewable energy in a rolling manner and take into consideration the level of commercialization of new renewable energy technology, gradually incorporating it into the ASUS RE100 energy portfolio to balance the company's profit momentum and carbon reduction obligations to move towards RE100.

⟩ Map of the ASUS Global RE100 Path

RE15
2022
- Procurement of Renewable Energy Certificates from Overseas Centers
- Promote Energy Transformation in Overseas Centers

RE30
2023
- Signed CPPA
- Procurement of Renewable Energy Certificates from Overseas Centers

RE50
2024-2026
- Signed CPPA and transform to supply renewable energy (mainly photovoltaic)
- Procurement of Renewable Energy Certificates from Overseas Centers

RE85
2027-2029
- Signed CPPA and transform to supply renewable energy (photovoltaic and wind power)
- Procurement of Renewable Energy Certificates from Overseas Centers

RE100
2030-2035
- Attain RE100 Goal: Global Operations Centers RE100

Innovative Technologies According to the IEA Net Zero report

According to the IEA Net Zero report, among the technologies required to achieve the 2050 net zero target, only wind power generation, solar photovoltaics, and electric vehicles are considered mature, commercialized technologies. The majority of the remaining carbon reduction technologies are still at the prototype stage, requiring further technological breakthroughs and market validation. That is why we are striving to keep up with the technological development trends and innovation feasibility, and innovation feasibility by leveraging external resources from academia and industry through its Innovation Development Office.

On the product front, ASUS actively engages in matching external startup technologies through the "ASUS and Taidah Entrepreneurship Center," selecting technologies with promising carbon reduction potential and commercial viability for analysis of their applicability, such as innovative technologies for plastic waste recycling. ASUS conducts alignment and demand assessment between ASUS and innovative technologies, providing Proof of Concept (POC) validation environments for startup concepts.

For beyond value chain carbon reduction projects, ASUS references BVCM[19] (Beyond Value Chain Mitigation) guidelines, as detailed below:

1. Carbon credit projects for investment or procurement must adhere to ASUS's internal carbon credit criteria, which are established with reference to reports from IPCC, The Oxford Principles for Net Zero Aligned Carbon Offsetting, ICVCM, NGO organizations, etc., to avoid greenwashing risks, all of which align with BVCM recommendations.
2. Innovative carbon reduction technologies such as carbon capture and storage, clean technology, although making significant contributions to reducing emissions beyond the value chain, are constrained by insufficient investment funds or technological bottlenecks, preventing major breakthroughs for achieving economies of scale and widespread adoption by enterprises. In light of this, ASUS continues to monitor the development of innovative carbon reduction technologies and conducts feasibility assessments for investments in small hydropower generation, hydrogen energy, and others.
3. ASUS recognizes the contribution of biodiversity richness to climate change mitigation and has planned and will collaborate with industry, government, academia, and other units to increase domestic carbon sink and biodiversity restoration related projects, contributing.

19 Source: https://sciencebasedtargets.org/beyond-value-chain-mitigation.

Appendix I: TCFD Index

Core Elements	TCFD Recommended Disclosures	Corresponding chapters in this report	Page
Governance	Describe the board's oversight of climate-related risks and opportunities.	1. Governance	Page 5-6
	Describe management's role in assessing and managing climate-related risks and opportunities.	1. Governance	Page 5-6
Strategy	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	3.2 Climate Risk and Opportunity Identification	Page 16-17
	Describe the impact of climaterelated risks and opportunities on the organization's businesses, strategy, and _nancial planning.	3.2 Climate Risk and Opportunity Identification 3.3 Risk and Opportunity Scenario Simulation Assessment	Page 16-24
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	3.3 Risk and Opportunity Scenario Simulation Assessment	Page 18-24
Risk Management	Describe the organization's processes for identifying and assessing climate-related risks.	3.2 Climate Risk and Opportunity Identification	Page 15-17
	Describe the organization's processes for managing climate-related risks.	3.1 Structure of Risk Management	Page 14
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	3.1 Structure of Risk Management	Page 14
Metrics and Targets	Disclose the metrics used by the organization to assess climate related risks and opportunities in line with its strategy and risk management process.	3.3 Risk and Opportunity Scenario Simulation Assessment	Page 16-24
	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	2. Greenhouse Gas Inventory 3.2 Climate risk and opportunity identification	Page 15-17
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	4. Climate Action Goals	Page 27-32

Appendix II: Group's GHG Inventory

Group's total carbon emissions in 2021 (base year)[20]

Scope 1:

Category	Total Carbon Emissions (tonnes CO_2e)
Direct emissions	3,292.21

Scope 2:

Category	Total Carbon Emissions (tonnes CO_2e)
Electricity Usage (MWH)	91,609.44
Location-based Carbon Emission (tonnes CO_2e)	54,890.08
Market-based Carbon Emission (tonnes CO_2e)	54,890.08

Scope 3:

Category	Total Carbon Emissions (tonnes CO_2e)
Purchased Goods and Services	2,430,595.93
Capital Goods	20,758.01
Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	11,801.06
Upstream Transportation and Distribution	108,871.98
Waste Generated in Operations	849.46
Business Travel	3,623.80
Employee Commuting	28,947.60
Upstream Leased Assets	-
Downstream Transportation and Distribution	-
Processing of Sold Products	-
Use of Sold Products	2,264,811.26
End-of-Life Treatment of Sold Products	77,019.81
Downstream Leased Assets	2,997.82
Franchises	-
Investments	317,286.55

Group's total carbon emissions in 2022

Scope 1:

Category	Total Carbon Emissions (tonnes CO_2e)
Direct emissions	3,631.89

Scope 2:

Category	Total Carbon Emissions (tonnes CO_2e)
Electricity Usage (MWH)	87,768.64
Location-based Carbon Emission (tonnes CO_2e)	45,859.95
Market-based Carbon Emission (tonnes CO_2e)	40,297.83

Scope 3:

Category	Total Carbon Emissions (tonnes CO_2e)
Purchased Goods and Services	2,915,901
Capital Goods	11,797
Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	10,535
Upstream Transportation and Distribution	130,697
Waste Generated in Operations	743
Business Travel	2,047
Employee Commuting	16,163
Upstream Leased Assets	2,089
Downstream Transportation and Distribution	-
Processing of Sold Products	-
Use of Sold Products	1,974,041
End-of-Life Treatment of Sold Products	16,389
Downstream Leased Assets	2,998
Franchises	-
Investments	399,773.62

Group's total carbon emissions in 2023

Scope 1:

Category	Total Carbon Emissions (tonnes CO_2e)
Direct emissions	3,851.49

Scope 2:

Category	Total Carbon Emissions (tonnes CO_2e)
Electricity Usage (MWH)	94,489.52
Location-based Carbon Emission (tonnes CO_2e)	46,419.24
Market-based Carbon Emission (tonnes CO_2e)	36,899.62

Scope 3:

Category	Total Carbon Emissions (tonnes CO_2e)
Purchased Goods and Services	2,817,595.41
Capital Goods	7,571.14
Fuel- and Energy-Related Activities Not Included in Scope 1 or Scope 2	8,974.08
Upstream Transportation and Distribution	141,854.74
Waste Generated in Operations	251.74
Business Travel	6,876.79
Employee Commuting	7,743.20
Upstream Leased Assets	480.87
Downstream Transportation and Distribution	-
Processing of Sold Products	330.36
Use of Sold Products	1,524,446.85
End-of-Life Treatment of Sold Products	7,847.85
Downstream Leased Assets	676.82
Franchises	-
Investments	105,501.35

20 The data has been verified by SBTi, therefore the 2021 carbon emissions data in ASUS's 2022 TCFD report has been corrected.

Appendix III: IFRS S2 Cross-Industry Metric indext

Cross-Industry Metric	Corresponding chapters in this report	Page
greenhouse gases	2. Greenhouse Gas Inventory	Page 9-13
climate-related transition risks	3. Risk Assessment and Management	Page 18-22
climate-related physical risks	3. Risk Assessment and Management	Page 18-23
climate-related opportunities	3. Risk Assessment and Management	Page 18-24
capital deployment	4. Climate Action Goals	Page 25-26
internal carbon prices	3. Risk Assessment and Management	Page 22
remuneration	1. Governance	Page 5

ASUS
IN SEARCH OF INCREDIBLE