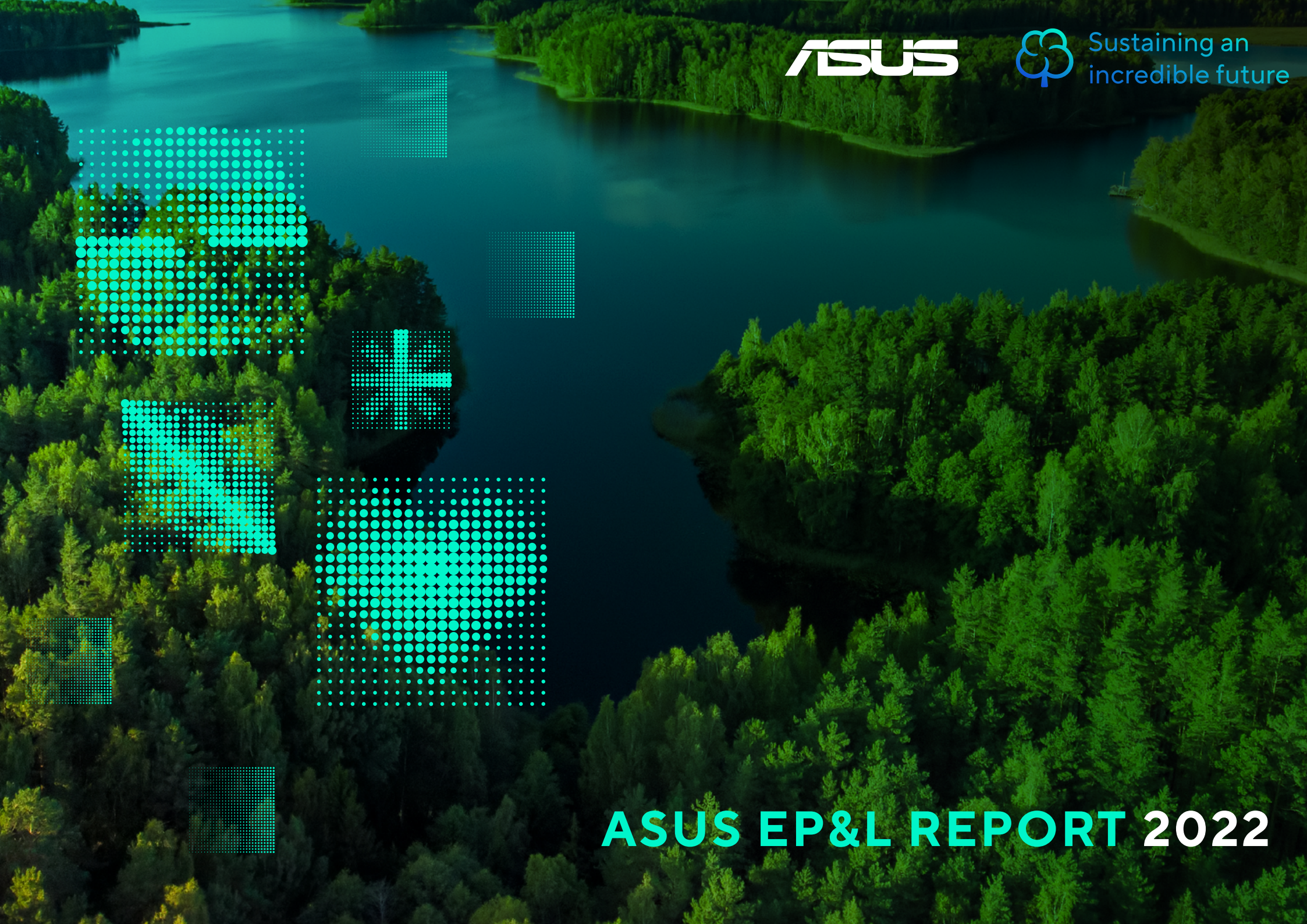

Sustaining an
incredible future
ASUS EP&L REPORT 2022

ASUS EP&L REPORT 2022

Catalog

Message from the Chairman

The Global Risks Report issued by the World Economic Forum lists "biodiversity loss and ecosystem collapse" as one of the top five threats over the next decade. The res earch report indicates that $44 trillion of economic value generation, representing over half of the world's total GDP, is highly dependent on ecosystem services. More over, the loss of natural resources directly and indirectly affects human society and economic activities, and has profound impacts on business operations, supply chai ns, and markets.

ASUS has long employed our core operational capabilities to promote strategic sus tainability using digitized data and scientific management practices. In 2018, ASUS took the lead among our peers by releasing our first environmental profit and loss (EP&L) report, disclosing the results of monetizing environmental impacts and raisi ng awareness within the technology industry on the monetary valuation of the nat ural environment.

In the past, companies have only collected and assessed environmental informati on such as greenhouse gas emissions and waste water creation, which does not eff ectively reflect the severity of the impact of various pollutants on the environment. Through the assessment of environmental profit and loss, ASUS has monetized env ironmental impacts, making them comparable and helping managers to easily allo cate resources and track management performance. This EP&L assessment focuses on the environmental impact of products and shows they mainly come from water pollution and greenhouse gas emissions generated during the mining and manufa cturing of raw materials. As a result, ASUS has prioritized the investment of manage ment resources to enhance the environmental management requirements for supp liers. In addition to meeting the requirements of ISO 9001, new suppliers are requir ed to be ISO 14000 certified and submit wastewater testing reports. Additionally, ASUS has established sustainable procurement performance indicators for the sup ply chain and obtained the world's first ISO 20400 Guidelines for Sustainable Procu rement certification, leading supply chain partners to utilize their collective wisdom and efforts to improve sustainability values for the global economy, society, and the environment.

ASUS follows the Natural Capital Protocol guidelines and has assessed our environ mental and social impacts over the years. This year, we have expanded our assessm ent of corporate dependence on natural capital and the impact of our business ope rations and supply chain on natural resources. We have also reexamined the impact and dependence on the environment and society as an important basis for long-term development of low-carbon products and supply chain management decisio ns. This resonates with the United Nations Sustainable Development Goal 12 of ens uring sustainable consumption and production patterns and achieving sustainable management and efficient use of natural resources.

ASUS Chairman
Jonney Shih

01 About Environmental Profit and Loss

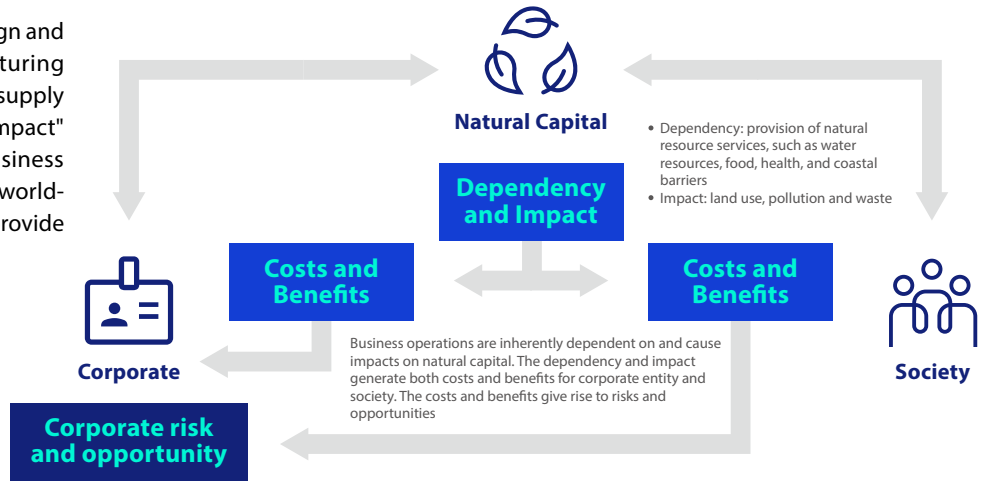
Business operations rely on natural resources and ecosystem services, and it's known as natural capital. However, business operations that consume resources and emit pollutants can have negative impacts on natural capital, referred to as environmental externalities. The international trend of sustainable development shows that an increasing number of investors are not only concerned about a company's profitability but also wish to understand its social and environmental impacts during Business activities. Furthermore, they expect companies to monetize these impacts to enable a comprehensive and objective evaluation of the value created by the company.

In 2015, PwC UK published the methodology of Valuing corporate environmental impacts[1], allowing companies to quantify the environmental impacts resulting from their operations and value chains. It also monetizes the effects of these impacts on humanity and society, facilitating communication with stakeholders through a common monetary language. In 2016, the Natural Capital Coalition released the Natural Capital Protocol[2], which enables companies to assess their dependency on and impact on natural capital. This serves as a crucial foundation for developing environmentally friendly products and sustainable value chain management decisions. The forthcoming launch of the Task Force on Nature-related Financial Disclosures (TNFD) in 2023 will further encourage companies to actively assess and respond to nature-related risks and opportunities.

ASUS and Supply Chain

ASUS, founded in 1989, is the world's largest motherboard manufacturer and one of the top three global consumer laptop brands. Our business revolves around 3C (Computer, Communication, and Consumer electronics) products, including computer systems, motherboards, various cards, tablets, smartphones, and other handheld devices. ASUS focuses on product design, development, and marketing, while its product manufacturing heavily relies on a global network of over 700 raw material suppliers, component suppliers, and product assembly factories. The overall environmental impact mainly arises from the operations within its supply chain, making it a critical area for environmental profit and loss assessment.

ASUS implements green product design and environmentally friendly manufacturing processes and collaborates with our supply chain to reduce "dependency" and "impact" on natural capital and fulfill our business philosophy: strive to be among the world-class green high-tech leaders and to provide valuable contributions to humanity.



Milestones for Environmental Profit and Loss

In 2018, ASUS initiated an Environmental Profit and Loss (EP&L) assessment project, focusing on laptop computers and released first EP&L report. To fully understand the overall impact of ASUS' operations and supply chain on environment, we have expanded the inclusion of major products in the scope of calculation year by year, covering 90% of our products.

In 2022, based on the evaluation of businesses environmental and social "impact" over the years, we increase the evaluation of "dependency" on natural capital to exam the effects of a company's operations and supply chain resulting from their reliance on natural resources. Following the ISO 14008:2019 framework for monetary evaluation of environmental impacts and related considerations, ASUS released our first independent Environmental Profit and Loss (EP&L) report. The purpose of this report is to provide essential insights for organizational decision-makers for future product development and supply chain management strategies. Moreover, it aims to communicate ASUS's environmental performance to stakeholders.

2018

- Released the world's first report on Environmental Profit and Loss (EP&L) in technology industry

2019-2021

- Expand the inclusion of major products in the scope of calculation year by year, covering 90% of our products

2022

- Based on the evaluation of businesses environmental and social "impact" over the years, we increase the evaluation of "dependency" on natural capital to exam the effects of a company's operations and supply chain resulting from their reliance on natural resources
- Pursuant to ISO 14008:2019 (monetary evaluation of environmental impacts and related considerations)

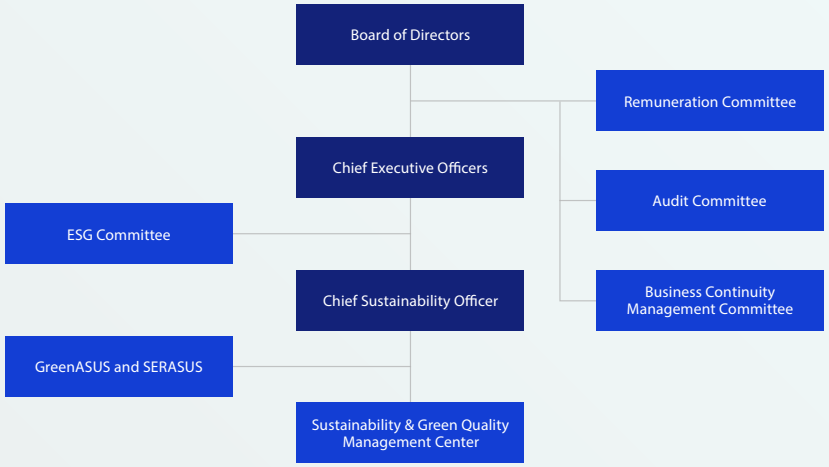
2023

- Based on The Taskforce on Nature-related Financial Disclosures (TNFD) framework, assess the financial risks related to nature

02 Governance

Board of Directors

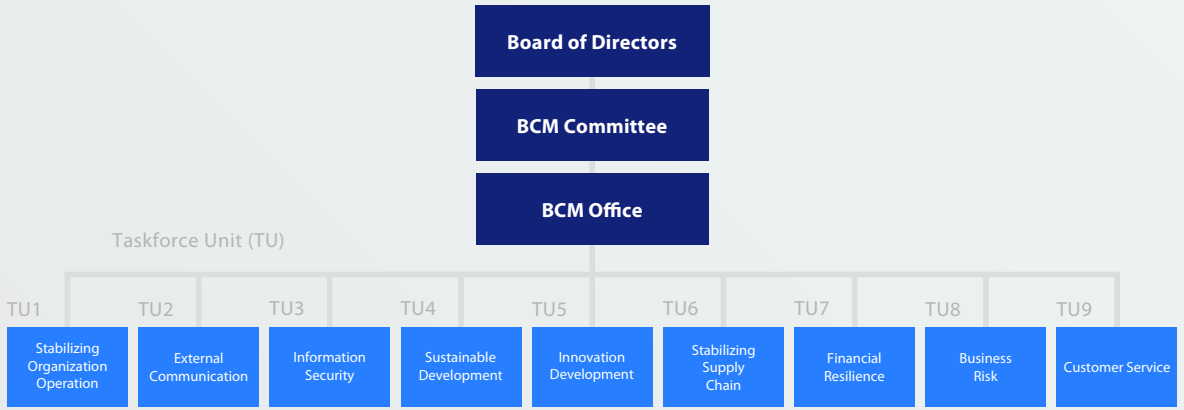
Suppliers are strategic partners upon whom ASUS relies for its manufacturing strategies, and they are categorized as a key issue within sustainable governance. The sustainable governance of ASUS is overseen directly by the Board of Directors, with the Chairman designating the CEO as the highest-ranking executive responsible for sustainability management. Under the purview of the CEO, the Sustainability& Green Quality Management Center(SGQM) is established to collaborate with the procurement and outsourcing management departments, jointly assuming responsibility for supply chain management processes.



Business Continuity Management Committee (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 Office, and various task units to ensure the establishment of protective mechanisms during daily operations.

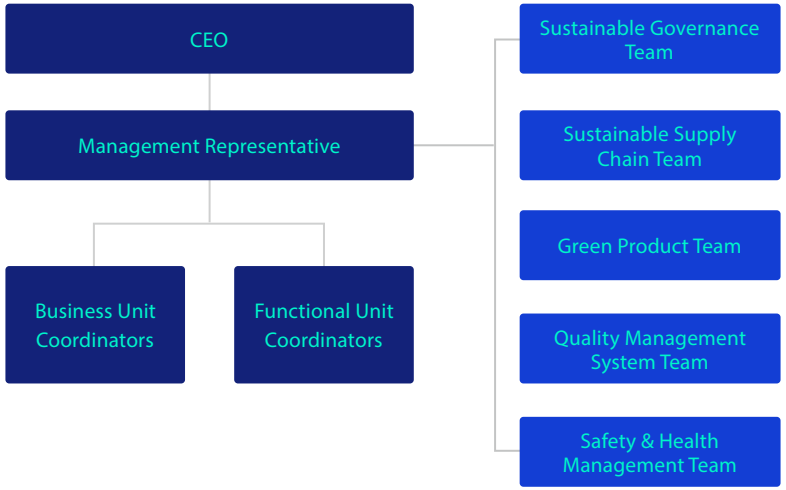
Sustainable Development and Stable Supply Chain are included as Taskforce Units(TU) in the BCM committee. The Sustainable Development TU oversees ESG risks in the supply chain and establishes supplier contingency capabilities. The Stable Supply Chain TU ensures the continuous supply of materials to guarantee uninterrupted production. Also, through collaborative efforts with our supply chain partners, we aim to reduce our dependency and impact to natural capital and fulfill our corporate commitment: Strive to be among the world-class green high-tech leaders and to provide valuable contributions to humanity.



GreenASUS and SERASUS Committee

The GreenASUS and SERASUS Management Committee is responsible for coordinating highly impactful issues related to products, supply chain, and organizational operations across different units within the company. This committee, authorized by the CEO, is led by the Chief Sustainability Officer (CSO) as the management representative, reporting directly to the CEO, and implementing sustainability strategies in product, operations, and value chain management.

To strengthen horizontal cross-unit communication within the company, ESG Committee was established in 2022. Committee members were from each business unit as well as the design center, certification, marketing, sales, percuments, outsourcing Management and other support units. With regular communication mechanism, we can effectively focus on the overall product, marketing, and design sustainability issues of the company.



Sustainability & Green Quality Management Center (SGQM)

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 Scientific 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. Responsible manufacturing focuses on sustainable supply chain management, devising supply chain code of conduct, and promoting critical issues like human rights protection, responsible minerals, and reducing manufacturing environmental footprints.

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

Climate Action | **Circular Economy** | **Responsible Manufacturing** | **Value Creation**

03 Strategy

Material Issues Impact Assessment

ASUS follows the process of GRI Standards (2021) for materiality identification and adopts the Double Materiality principle proposed by the European Union to identify highly significant issues that have a significant impact on ASUS and on the external economy, environment, and people.

In 2022, the material issues identified related to the environment include climate and carbon management, eco friendly products, and supply chain environmental impacts. To adequately assess the impacts of these material issues on the external environment and stakeholders, ASUS utilizes life cycle assessment and environmental Profit and Loss assessment methods. By monetizing the environmental impacts caused by operations and product manufacturing, ASUS can better plan and manage resources and optimize the quality of decision-making.

Life Cycle Assessment

We perform the Life Cycle Assessment in accordance with ISO 14040:2016 and analyze the major environmental impacts of the overall supply chain come from consumption of resources and pollution emissions during mining of raw material, component manufacturing, and product assembly, including electricity and water consumption, wastewater and waste discharge, and other operational activities. Assessment of environmental profit and loss based on four environmental indicators, namely greenhouse gases, water consumption, water pollution and solid waste.

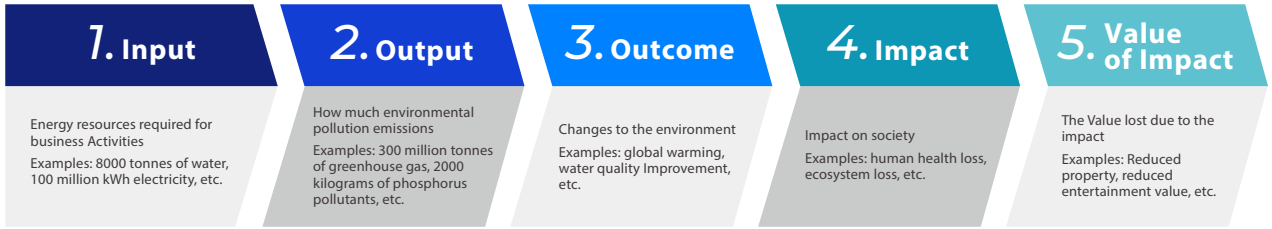
Environmental Profit and Loss Assessment

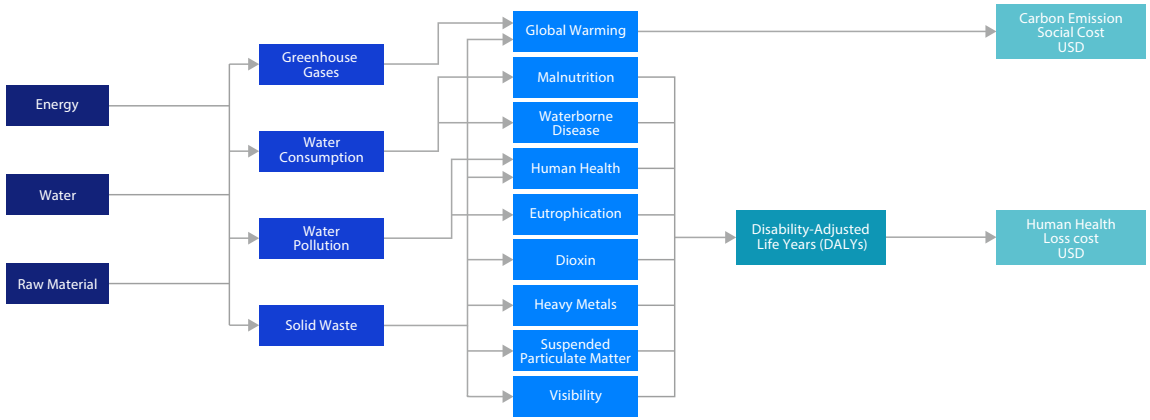
ASUS follows methodology published by PwC to monetize corporate environmental impacts.

The major difference between Environmental Profit & Loss (EP&L) and a traditional environment report is that EP&L, in addition to quantify the environmental resources (such as water) or emissions (such as greenhouse gas emission) consumed by a company's operating points and supply chains, it further measured the influences of environmental impacts on human and social well-being, identified the monetary values of these social influences, expressing all impacts in the same monetary unit.

For example, in the past, only the amount of greenhouse gas produced by a company's operating activities was investigated. After applying the EP&L methodology, we can further calculate the social impact of climate change due to the emission of greenhouse gases, and consider the loss of the overall economic value such as the loss of the agricultural industry, the destruction of construction assets and the impact on the environment caused by extreme weather events (such as drought or flooding) due to climate change. In other words, in the past, the “value” of a company’s environmental impact, or the externality, was not considered. Calculating EP&L allows us to better understand the externalities (i.e. water consumption, water pollution, greenhouse gas emission and solid waste), and thus use the same monetary value (US dollars in this project) to measure these impacts and communicate with stakeholders.

Environmental Profit and Loss Assessment Process





Benefits of Promoting Environmental Profit and Loss

- Establish a language for effective communication between internal and external interested parties
  - We understand that the impact of corporate operations on society and the environment has been taken seriously by interested parties. Therefore, we continued the project of Social Return on Investment (SROI) and further chose the iconic product of ASUS laptop computer to report the critical environmental impact of supply chain by monetary valuation. Apart from serving as the beginning of evaluating the external environmental cost, monetary valuation also allowed the stakeholders (customers or consumers) to realize ASUS’s "total impact".
  - Due to different units of measurement, current performance on environmental management of supply chain normally does not allow for an "intuitive comparison". Nonetheless, ASUS applies new assessment method in hopes of communicating the performance of supply chain management externally (including customers) by the comparison with single unit of measurement for supply chain EP&L at different times and in different locations.
- Creating an innovative management model
  - Extend (or break through) the existing signification of life cycle management (or difficulty). Monetary valuate is different from pollution effect for it makes impact hot spot more focused, and provide the decision making tool on resource input for top management through "financial" and "universal" language.

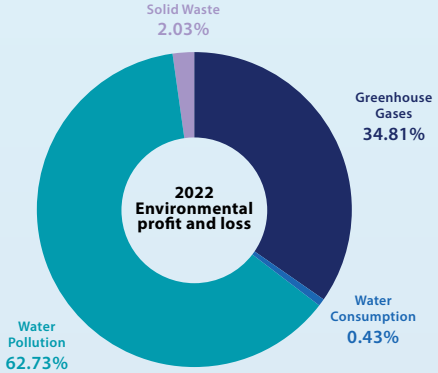
04 Risk Management

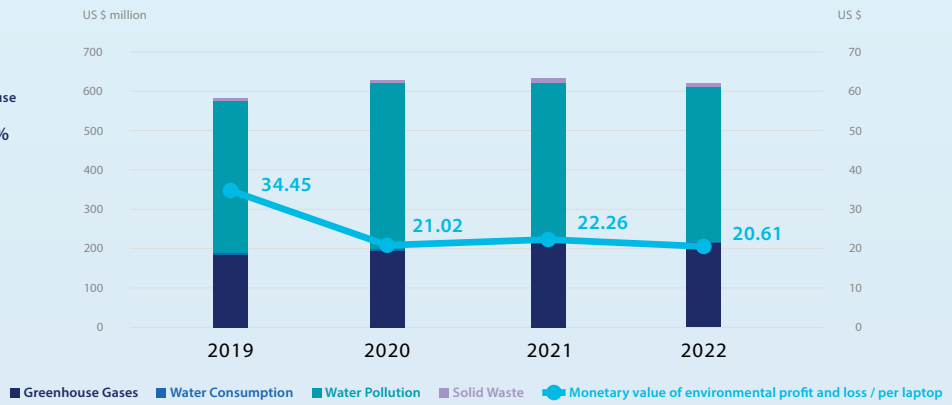
We perform the Life Cycle Assessment in accordance with ISO 14040:2016 to analyze the major environmental impacts of the overall supply chain are from mining of raw material and products manufacturing. These key environmental impacts include greenhouse gases, water consumption, water pollution and solid waste.

ASUS follows the valuing corporate environmental impacts from PwC and Natural Capital Protocol to monetize the environmental profit and loss and dependency on natural capital throughout the value chain of its products, which account for 90% of the company's revenue. These products include laptops, desktop computers, motherboards, monitors, and smartphones.

Analysis of Environmental Profit and Loss

1. In 2022, the environmental profit and loss results showed that external environmental costs were highest in water pollution, accounting for 62.73%, followed by greenhouse gas at 34.81%.
2. The trend of environmental profit and loss over the years has shown a gradual increase since 2019, but decreased from 2022, with a 3.42% decline compared to the previous year.
3. The environmental profit and loss per laptop showed an average annual downward trend, with a decrease of 7.41% in 2022 compared with the previous year.





Environmental Impact	2019	2020	2021	2022
Greenhouse gases	167.68	199.60	219.80	217.60
Water consumption	1.77	2.15	2.70	2.70
Water pollution	402.52	431.92	412.72	392.09
Solid waste	6.27	9.11	12.00	12.69
Total amount (US $ million)	578.25	642.78	647.23	625.08

Greenhouse Gases

The analysis results manifest that the external environmental costs of greenhouse gas in 2022 was US$ 217.60 million, accounting for 34% of the total environmental external costs, presenting a 1% decrease from the previous year. The main sources of greenhouse gas emissions in 2022 were indirect emissions caused by the use of electricity during raw material mining, component manufacturing, and product assembly. These indirect emissions are a result of the greenhouse gas emissions from the electricity generation process.

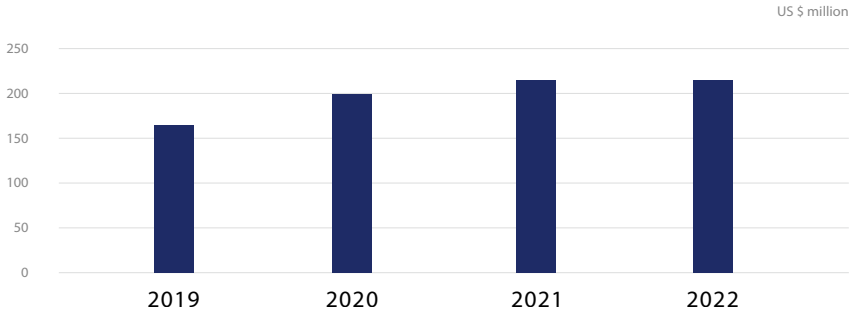
External environmental costs of greenhouse gas in 2022	Compared with 2021
US$ 217.60 million	● A decrease of US$ 2.2 million ● A decrease of 1%

Action:

- To reduce the greenhouse gases caused by operations, ASUS has set the 2025 Sustainability Goal with 2020 as the baseline year. We aim to lower greenhouse gas emissions resulting from its overall value chain operational activities by improving product energy efficiency, expanding the use of renewable energy, and coordinating with the supply chain to promote low-carbon processes
- Increase the use of environmentally friendly materials, including post-consumer recycled plastics (PCR), recycled paper, and halogen-free components

Performance in 2022:

- ASUS operation and 29% of key suppliers have ISO 50001 certification
- Global operating locations achieved RE15 and 29% of our suppliers use solar energy as renewable energy
- 62% of key suppliers have set greenhouse gas reduction targets and included them in their ISO 14001 environmental management objectives for performance tracking
- Post-consumer plastic utilization rate has increased by 25%, packaging material utilization of recycled pulp has reached 90% and halogen-free components accounted for 89.6%



Hot Spot Analysis of Suppliers of Laptop Computers

We have analyzed the environmental profit and loss data, and identified emission hot spots using greenhouse gas as an indicator. The results indicated that suppliers of IC base (CPU, RAM, VGA) had the highest emission, followed by PCB, panel, EMS, mechanical, adapter, battery, HDD, cable, and keyboard in descending order.

Through the analysis of hotspots in the supply chain environment, ASUS have conducted a comprehensive review of its procurement strategy, identified key suppliers with high potential environmental impact, checked activity data, and developed improvement projects to reduce the environmental externalities and social costs derived from the production.

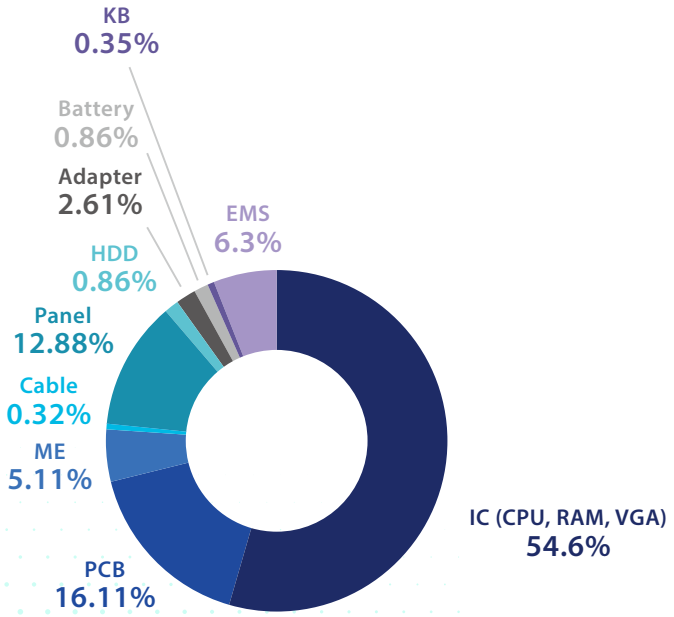
Action:

- Key Supplier Carbon Reduction Engagement and Counseling Program

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 carbonemissions.

2024-2025: Work with our suppliers on the project to promote carbon reduction technologies in low-carbon materials, process optimization, equipment energy efficiency improvement, and renewable energy.



Water Pollution

The analysis results manifest that the external environmental costs of wastewater pollution in 2022 was US$ 392.09 million, accounting for 62.73% of the overall environmental external costs, representing a 5% decrease from the previous year. The main sources of water pollution are from raw material mining and motherboard manufacturing processes.

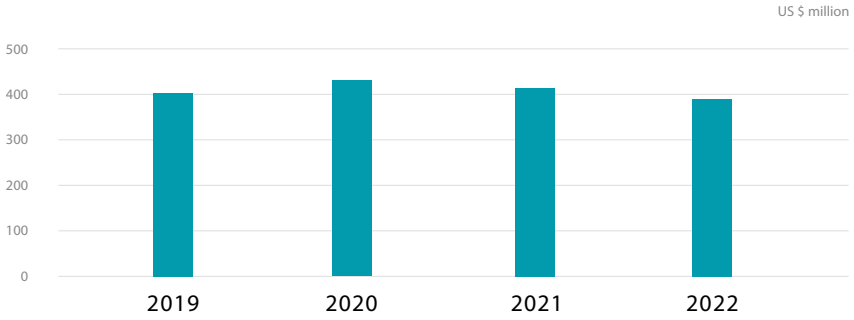
Action:

- New suppliers must have ISO 14001 certification, and they are also requested to manage their upstream suppliers to monitor their wastewater emissions for compliance with regulations
- Motherboard manufacturers are required to provide the annual wastewater test reports. Those who do not meet the required standards are required to undertake remediation within a specified timeframe and may be included in the list for the yearly on-site audits

Performance in 2022:

- 100% of new suppliers and key existing suppliers have attained ISO 14001 certification. Additionally, all wastewater test reports from motherboard suppliers are in full compliance with regulations

External environmental costs of water pollution in 2022	Compared with 2021
US$ 392.09 million	● A decrease of US$ 20.64 million ● A decrease of 5%



Water Consumption

The analysis results manifest that the external environmental costs of water resource consumption in 2022 was US$ 2.70 million, accounting for 0.43% of the total environmental external costs, presenting a 0.1% decrease from the previous year. The main sources of water consumption is employee domestic water.

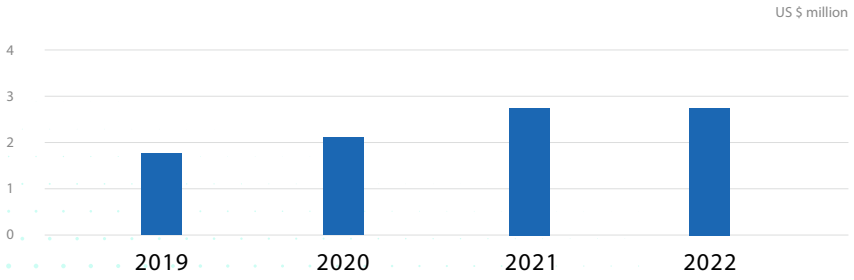
Action:

- According to the WRI Aqueduct Global Water Risk Mapping Tool, ASUS assesses that the area where it operates is not a high-risk area, and ASUS' operation type is not a water-consuming industry. Besides, ASUS is not located in water stressed sites, and also not high water-consuming industry. Nevertheless, considering the global water scarcity challenges and corporate social responsibility, ASUS takes proactive measures to promote water conservation in its own operations and enforces the implementation of water-saving initiatives throughout its supply chain
- The ISO 14001 Environmental Management System certification is required for qualified suppliers

Performance in 2022:

- ASUS and all its suppliers have attained ISO 14001 environmental management certification
- 58% of key suppliers have set water resource reduction targets, and included them in their ISO 14001 environmental management objectives for performance tracking

External environmental costs of water consumption in 2022	Compared with 2021
US$ 2.70 million	● A decrease of US$ 0.003 million ● US$ 2.70 million



Solid Waste

The analysis results manifest that the external environmental costs of waste in 2022 was US$ 12.69 million, accounting for 2.03% of the overall environmental external costs, representing a 5.8% decline from the previous year. The main reason for this increase is due to ASUS' higher procurement amount from suppliers, with the primary source being waste generated from the assembly processes.

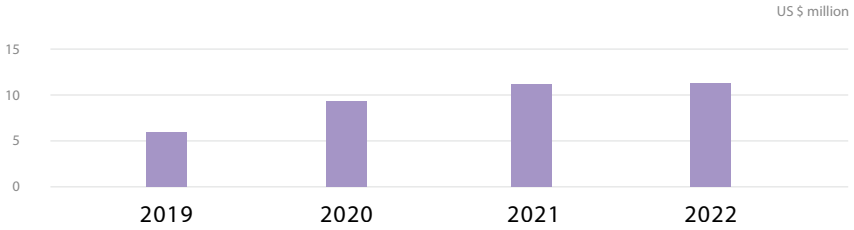
Action:

- New suppliers must have ISO 14001 certification

Performance in 2022:

- 100% of new suppliers have ISO 14001 certification and 7% of key suppliers have zero waste certification

External environmental costs of solid waste in 2022	Compared with 2021
US$ 12.69 million	● A increase of $0.69 million ● A increase of 5.8%



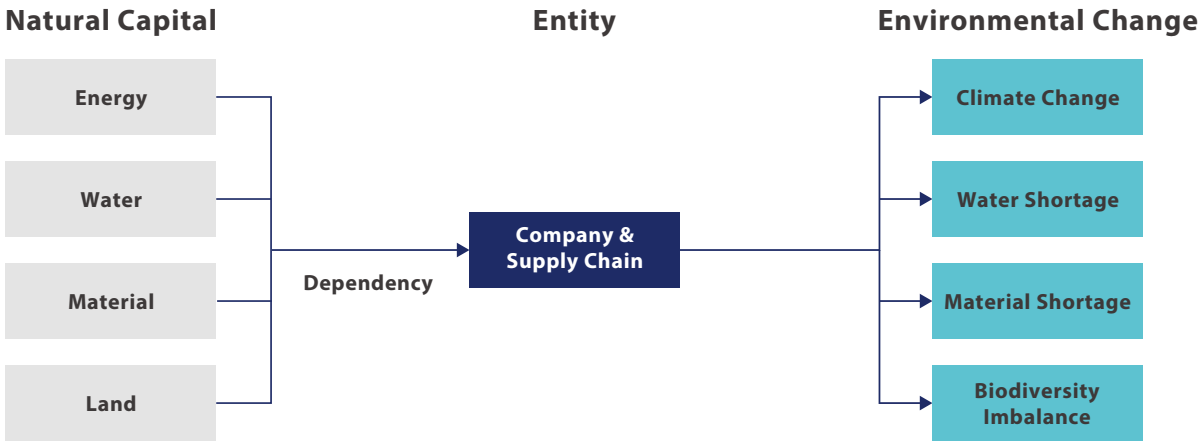
Dependency on Natural Capital

Business operations are directly or indirectly reliant on natural capital and associated ecosystem/non-ecosystem services. For instance, the inputs required for business operations, such as land, raw materials, water, and energy. Taking the semiconductor and panel industries as examples, which heavily rely on water resources for their processes, water scarcity could lead to reduced production output, affecting profitability, increased water sourcing costs, and even competition for water resources among industries or communities.

Due to the ongoing development of methodologies for monetizing the dependency on natural capital, ASUS continues to monitor these developments while formulating action plans to mitigate the overall dependency and impact on natural capital across our value chain.

Action:

- Expanding the utilization of recycled materials
- Expanding global product recycling centers
- Investigating the water footprint of key suppliers through Water Inventory
- Incorporating biodiversity requirements into supplier code of conduct



05 Metrics and Targets

ASUS utilizes the monetized results from environmental profit and loss assessment to prioritize and weigh the importance of product design, material procurement, and manufacturing research and development. This approach helps in creating more environmentally friendly products and ensures efficient allocation and utilization of resources. For significant environmental impacts, ASUS formulates indicators and targets, and sets action plans to reduce their effects.

Climate Action

The ongoing environmental changes caused by climate change continue to impact the global economy and society. After the Paris Agreement, consensus was reached worldwide to work together in mitigating climate change. In line with this significant trend, ASUS conducts scenario-based simulations to analyze potential climate-related financial impacts. We proactively take climate action by incorporating renewable energy into our operational strategies. We enhance product energy efficiency through software and hardware R&D and drive our supply chain towards low-carbon manufacturing transformation, aiming to comprehensively reduce the carbon footprint of our operations.

Circular Economy

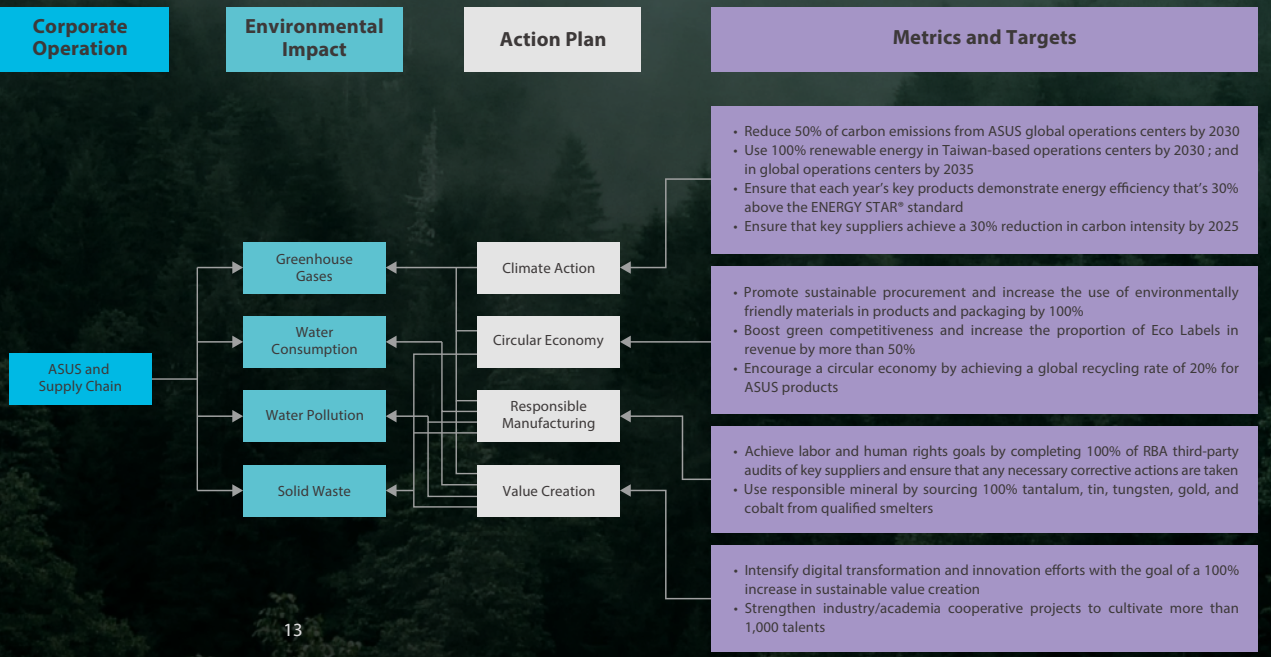
Moving away from the traditional linear economic model of "take-make-dispose," transitioning towards a circular economy is a key factor in corporate sustainability. In our designs, ASUS considers the lifecycle impact and expands the use of environmentally friendly materials. We develop green products to enhance our green competitiveness and continuously expand producer responsibility by providing global recycling services to improve resource utilization efficiency. Additionally, we introduce digital tools to accelerate the implementation of circular economy practices while safeguarding the research and development environment.

Responsible Manufacturing

Sustainable operations extend beyond the enterprise itself and should encompass the entire supply chain, creating shared value with business partners to drive positive social change. ASUS incorporates the sustainability performance of the supply chain into our procurement assessment and is a full member of the Responsible Business Alliance (RBA). We ensure that supply chain processes meet environmental standards and safeguard the workplace safety and human rights of laborers. Furthermore, we extend information security management to the supply chain to enhance its resilience.

Value Creation

In addition to practicing corporate social responsibility, ASUS seeks to create shared value by combining our core digital capabilities to meet genuine environmental and societal needs. We collaborate with startups on sustainable innovation and low-carbon transformation projects in order to fuel the next wave of corporate growth and innovation, develop new business markets, and become the driving force of the company's new growth curve. We hope to cultivate and recruit key talents who share ASUS's goals, driving social progress and positive change.

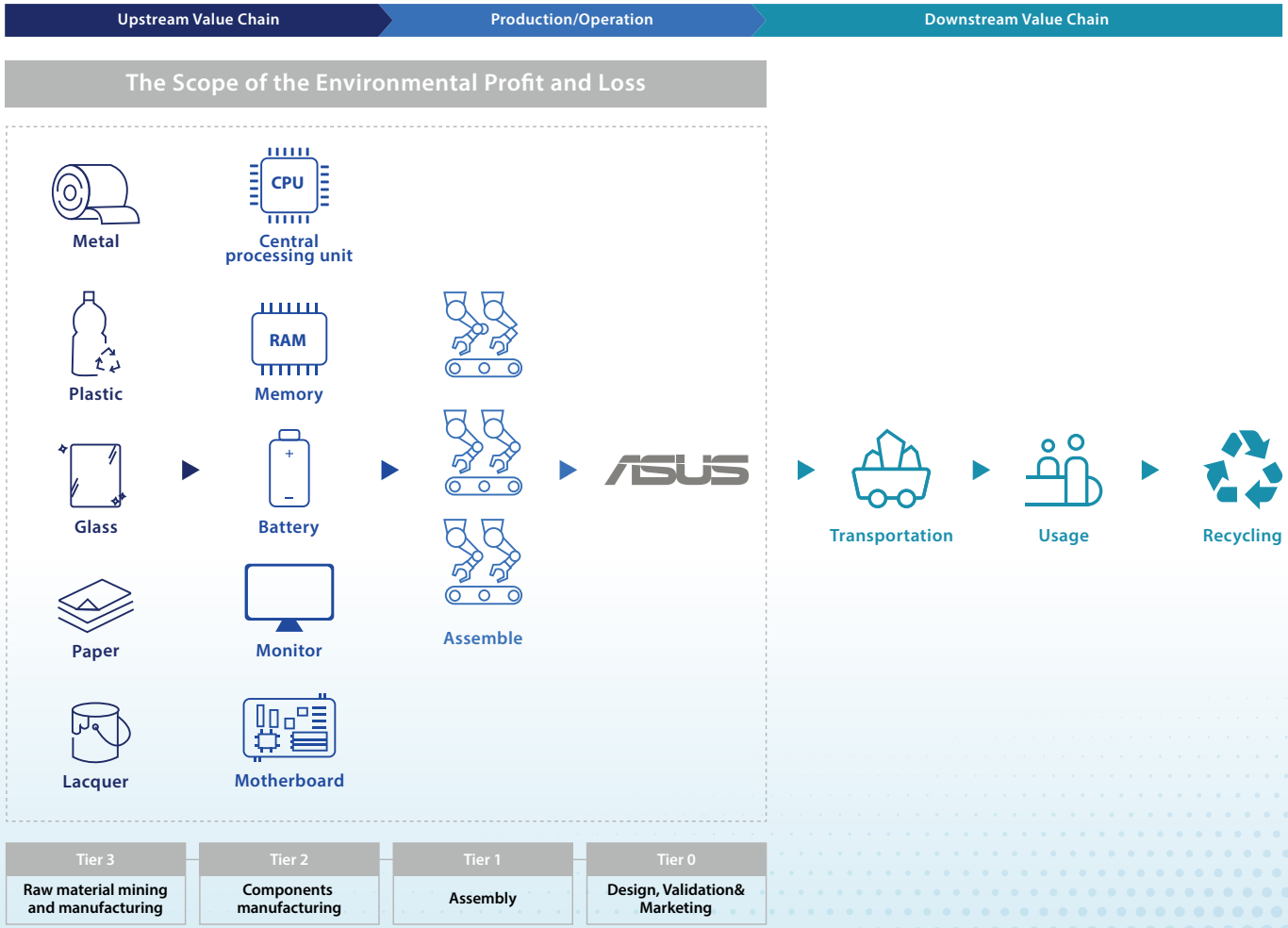


06 Methodology of Environmental Profit and Loss

Boundary and Scope

According to the definition of Product Category Rules (PCR), ASUS defines boundary and scope that cover 90% of its products, major components, and supply chains:

- Value chain and geographical boundary: Tier 3 Raw Materials, Tier 2 Components, Tier 1 Assembly, Tier 0 ASUS Operations: Design, Validation & Marketing
- Main components: CPU, memory, display, GPU, resistor, capacitor, host board, connector, mechanism, hard drive, cable, battery, power supply, packaging, keyboard
- Indicators of environmental impacts: greenhouse gases, water consumption, water pollution, solid waste



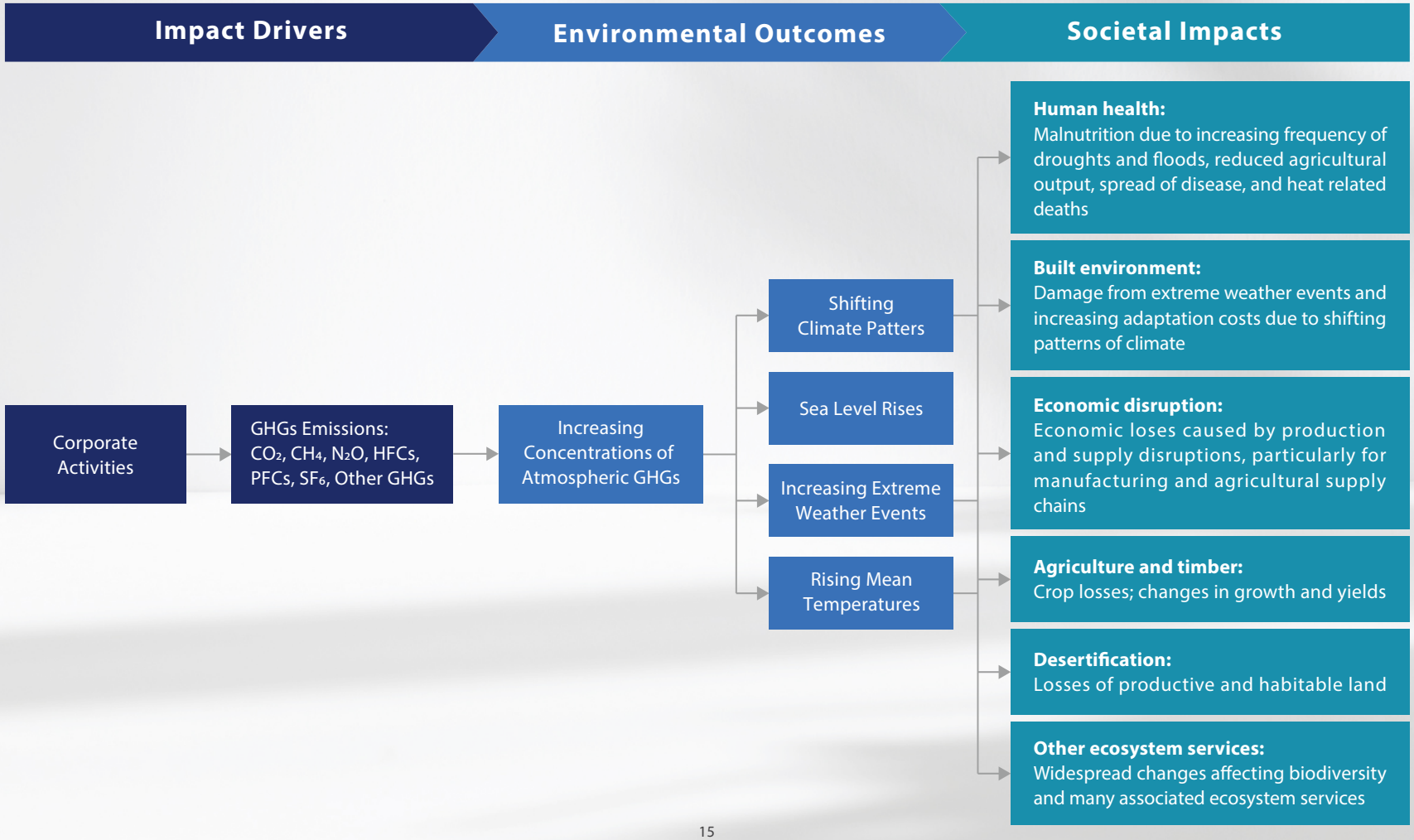
The Impact Pathway

ASUS depicts the environmental externalities of operations and the upstream value chain through the impact pathway, and evaluates the environmental impact of global operation sites and upstream supply chains using life cycle assessment and coefficients and methodologies of environmental profit and loss.

Greenhouse Gases

Climate change is a global problem. Because greenhouse gases ow in the atmosphere, greenhouse gases emitted in certain countries will affect other regions of the world. For example, Tuvalu and Solomon Islands, the Paciffic island countries, are severely threatened by rising sea levels caused by climate change although they have emitted a small amount of carbon. Therefore, environmental changes, social impact and economic loss caused by climate change cannot be solved by a single country. Accordingly, when viewing monetary valuation of greenhouse impact from the environmental impact of greenhouse gas emissions and the social impact of climate change, we should regard the globe as an integral concept.

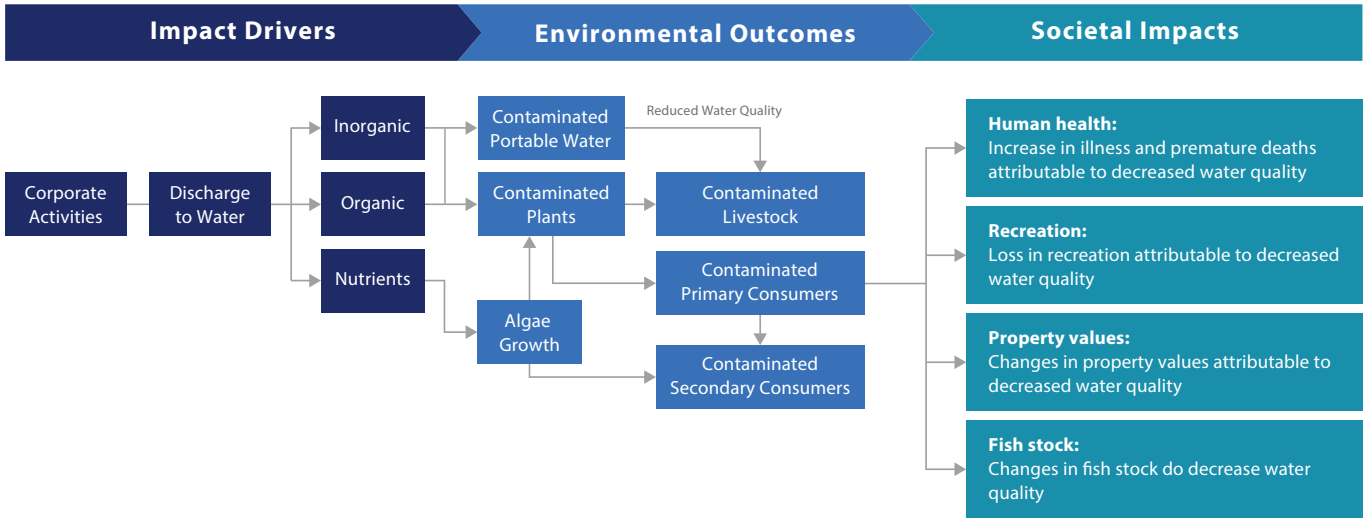
ASUS adopts carbon emission social costs technical report published by the US Environmental Protection Agency to estimatethe social cost of every tonne of carbon emission.



Water Pollution

Wastewater contains toxic substances and nutrient salts. The former may cause damage to human health, while the latter may lead to eutrophication and affect the ecosystem. Toxic pollutants in water bodies include heavy metals, chemicals and dioxins, which may affect human health through direct ingestion of contaminated water sources or through indirect ingestion (through ingestion of contaminated fish).

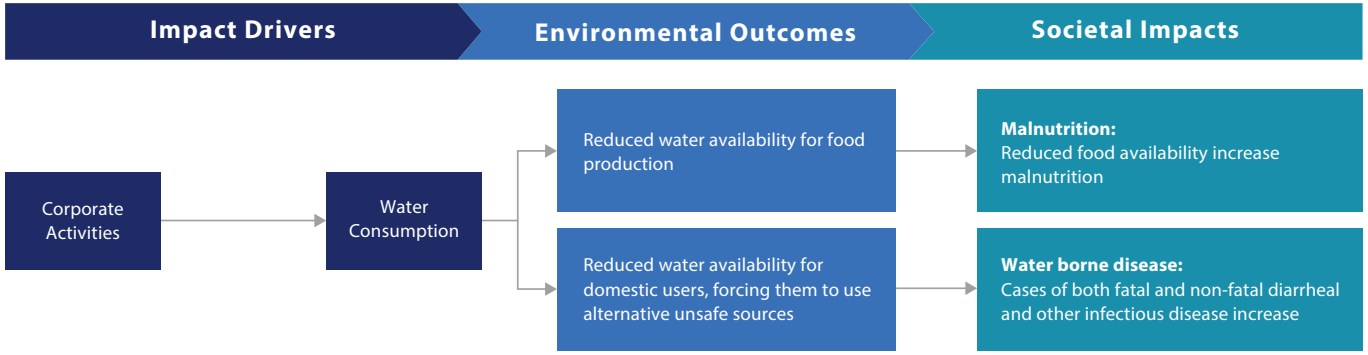
ASUS uses USEtox to analyze the dose response of different pollutants, obtain the relative risk characterization factors and DALYs of water pollutants, and incorporates the average carcinogenic and non-carcinogenic coefficients from Huijbregts et al. (2005)[5]. The monetized value of DALYs is derived using value transfer functions to assess the monetary value of health impacts caused by water pollution in different regions.



Water Consumption

Enterprises consume water in the process of manufacturing and operation. However, water resources are not inexhaustible, and other production activities also need water, such as agriculture. Water shortage is a limiting factor for agricultural development, so water consumption by enterprises may indirectly crowd out agricultural water, resulting in insufficient food production, affecting local food supplies, and leading to malnutrition among the population. On the other hand, waterborne diseases may also be caused by the lack of clean water for people's livelihood.

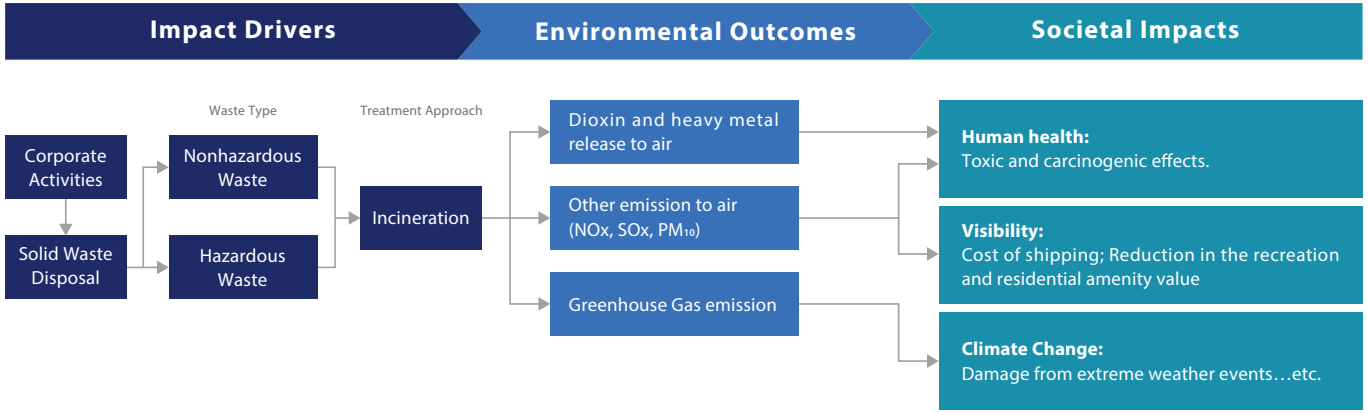
ASUS has employed the Life Cycle Assessment (LCA) proposed by Pfister et al. in 2009[3] to work out disability-adjusted life years (DALYs) due to malnutrition, estimate DALYs of waterborne diseases by using the LCA put forward by Motoshita et al. in 2010[4], and then figure out the external cost of human health loss caused by water consumption in each operating site according to the value of a statistical life (VSL).



Solid Waste

One of the waste disposal methods is incineration. The process of combustion will cause air pollutants such as dioxin, heavy metals (arsenic, cadmium, chromium, mercury,nickel, lead) and traditional air pollutants, including nitrogen oxide (NOx), sulfur oxides (SOx) and particulate matter (PM), such as $PM_{2.5}$, and PM_{10}. The inhalation of these air pollutants into human body may cause respiratory diseases which will bring enormous social costs (medical treatment), including asthma, early death from cardiovascular diseases, lung diseases.

LCA USEtox and LCA ReCipe (Hierarchist version) Endpoint models to analyze the dose - response of different pollutants to obtain the risk characterization factor of air pollutions and DALY value and incorporates the average carcinogenic and non-carcinogenic coefficients from Huijbregts et al. (2005). The monetized value of DALYs is derived using value transfer functions to assess the monetary value of health impacts caused by water pollution in different regions.



Activity Data Collection

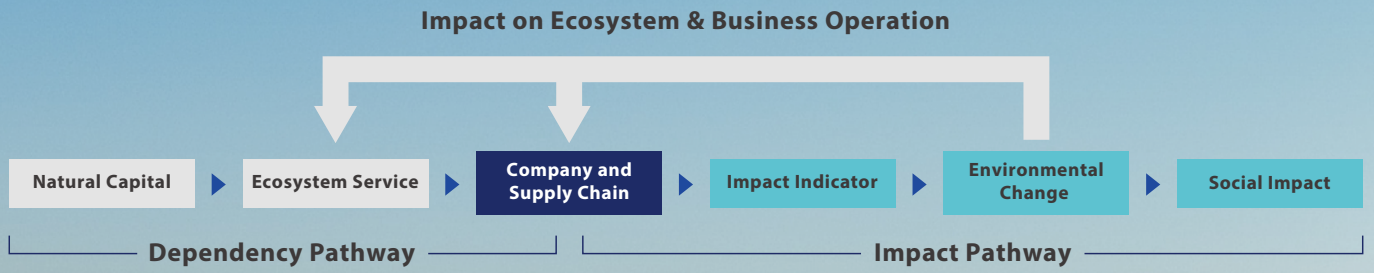
The data of environmental activity of the supply chain was divided into primary data and secondary data. Primary data referred to the actual fieldwork data, and secondary data referred to the data from the industrial environment database.

- The data of Tier 0 ASUS operations and Tier 1 OEM Assembly came from primary data. In ASUS operations, it included the actual fieldwork data of power consumption, water consumption, wastewater and solid waste discharged from office areas, laboratories and warehouses, and in OEM assembly it included the actual fieldwork data of power consumption, water consumption, wastewater and solid waste discharge by manufacturing process of production lines and personnel.
- Secondary data was used in Tier 2 and Tier 3, and the source was the Ecoinvent database of the lifecycle assessment software SimaPro.

07 Future Prospect

As a management tool, Environmental Profit and Loss (EP&L) assessments still have their limitations, such as the lack of ability to evaluate a company's reliance on natural capital and the failure to identify nature-related risks and opportunities. ASUS aims to address these limitations by utilizing the Nature-related Financial Disclosures framework (TNFD) jointly launched by the United Nations Development Programme (UNDP), the United Nations Environment Finance Initiative (UNFI), the World Wildlife Fund (WWF), and the non-profit environmental organization Global Canopy.

The TNFD framework will enable a comprehensive assessment of the value chain's reliance on and impact on nature, as well as the associated risks and opportunities. This will allow us to respond to stakeholders' concerns and meet the growing demand for integrating natural factors into financial and business decision-making processes. By adopting the TNFD framework, ASUS seeks to enhance its understanding of its environmental impact and align its operations with sustainable practices, ultimately contributing to a more sustainable and responsible business approach.



Appendix: Reference

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