5

Responsible Production and Circular Economy

5.1 Task Force on Climate-related Financial Disclosures (TCFD)

5.1.1 Climate Governance

As the impacts of climate change become increasingly apparent, extreme weather events such as typhoons, floods, and heatwaves are becoming more frequent and severe. These events not only pose direct threats to business production, supply chains, and market environment but also have the potential to trigger widespread environmental and social issues, affecting the balance and sustainable development of entire ecosystems. Therefore, businesses must pay close attention to risks like extreme rainfall and drought, incorporating them into their operational considerations to ensure the continued and stable growth of their activities.

As a global citizen, Giga Computing will actively address the risks posed by climate change by developing management strategies and actions to enhance climate resilience. At the same time, to mitigate the pace of climate change, we also plan to gradually transform our operations toward a low-carbon approach.

Board of Directors

The highest governing body of climate governance at Giga Computing is the Board of Directors, which is responsible for overseeing the overall progress of the Company's climate actions and plays a key role in setting the Company's climate commitments and goals to ensure sustainable operations.

Sustainable Development Committee

To strengthen its climate governance structure, Giga Computing has established a "Sustainable Development Committee" in its organizational structure as the governance body to oversee the Company's responses to climate change. In 2024, as the climate governance structure continues to be refined, the Sustainable Development Committee has not yet commenced operation. Moving forward, we will continue to plan and gradually implement climate governance to enhance climate resilience.

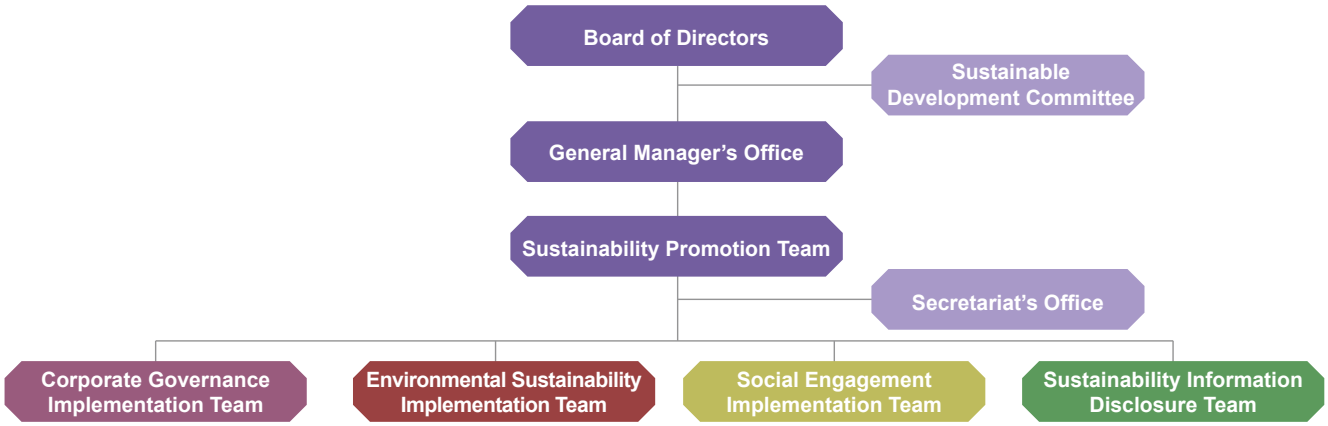
Sustainability Promotion Team

To strengthen Giga Computing's management and identification of climate-related risks and opportunities, we established the Sustainability Promotion Team in 2023. This team is chaired by the General Manager, with the Assistant Vise President of the Development Platform Center serving as the Convener. Additionally, we formed the Corporate Governance Implementation Team, the Environmental Sustainability Implementation Team, the Social Engagement Implementation Team, and the Sustainability Information Disclosure Team. The three implementation teams are mainly responsible for developing internal management policies related to governance, environmental, and social aspects to achieve Giga Computing's sustainability goals. Additionally, members from these implementation teams form the Sustainability Information Disclosure Team, responsible for the annual collection and consolidation of data/information to implement sustainability information management. In the future, we will regularly review our climate risk response planning and implementation results, monitor the achievement of climate response goals and actions at various sites, and have the General Manager regularly report on climate risk management policies and progress to the Board of Directors to strengthen the governance framework.

Secretariat's Office

Giga Computing's "Sustainability Promotion Team" includes a dedicated Secretariat, responsible for coordinating the Company's sustainability affairs and serving as the communication channel with external parties. The team also assists in coordinating the three implementation teams for corporate governance, environmental sustainability, and social engagement, to ensure cross-departmental communication and collaboration, and to timely disclose sustainability-related information.

Sustainable Governance Framework



5.1.2 Climate Risk Management

To help the Company understand current key climate opportunities and risks, in 2023, the Sustainability Promotion Team compiled sustainability reports from peers and CDP climate questionnaires on risk and opportunity issues. The team convened the major implementation teams and assessed the degree of impact and likelihood of various climate issues to identify the key climate risks and opportunities for the Company through questionnaires. As there were no significant changes in environmental trends compared to last year, we continued to apply the identification results from 2023, reported the findings to the Sustainability Promotion Team, and had the relevant units formulate response strategies and management measures to refine the overall risk management process. In the future, we will continue to conduct annual identification of key climate risks and opportunities to respond to global development trends.

Collecting Issues

- Issues in the sustainability report of peers
- Peer CDP questionnaires
- International trends

Identify Risks and Opportunities

- Questionnaires were distributed, and members of the implementation team under the Sustainability Promotion Team gave scores on the risk and opportunity issues.

Formulate Countermeasures

- Inventory the current response situation of each operational site, and formulate management measures according to the risk opportunities of each site.

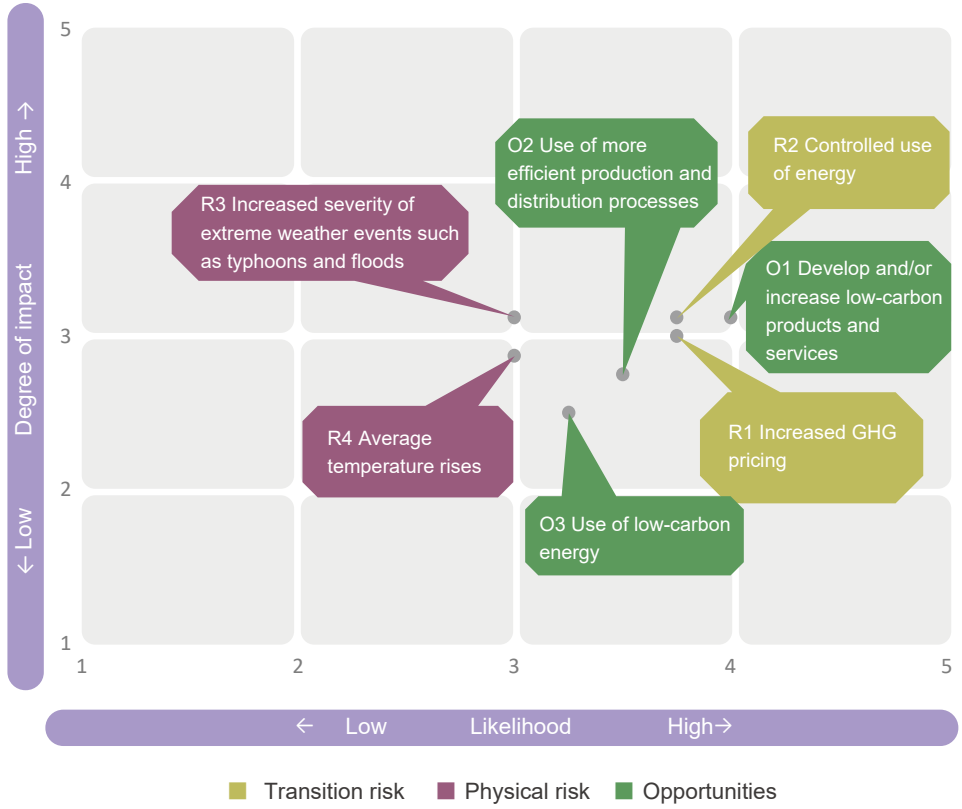
Tracking and Managing

- The Sustainability Promotion Team will track whether relevant units continue to implement or optimize management measures every year.

5.1.3 Response Strategies for Climate Change

To formulate the Company's key climate change strategies, it is essential first to identify the key climate risks and opportunities for the year. In 2024, Giga Computing continued the work of the Sustainability Promotion Team from 2023 by following TCFD guidelines, peer reports, and international trends to gather information on Giga Computing's specific climate issues. Through discussions with various units about the actual challenges and responses, seven key climate risks and opportunities were identified, including two transition risks, two physical risks, and three climate opportunities. The identification results for climate risks and opportunities are listed below, along with an analysis of each issue's occurrence timeline, current status, and response strategies.

Climate Risks and Opportunities Identification Matrix



Key Climate Risk, Opportunity Issues and Response Strategies

Aspect	Issue	Impact Period	Climate-related Risks and Opportunities Status	Response Strategies and Management Measures
Transition risk	R1 Increased GHG pricing	Short-term (within 3 years)	In 2025, Taiwan's "Climate Change Response Act" will impose carbon fees on domestic entities with annual carbon emissions exceeding 25,000 tons. Although Giga Computing is not among the first batch of regulated enterprises, the Company still needs to consider this risk due to the possibility of future regulations expanding to include additional companies.	1. We conduct annual evaluations of our aging equipment and allocate a budget for replacement. This process aims to progressively enhance the energy efficiency of the Company's equipment. 2. Implement the Company's annual routine carbon inventory system; starting in 2024, conduct voluntary GHG inventories annually for Giga Computing HQ and GIGAIPC in accordance with ISO 14064-1, with external verification to be completed by 2027. 3. After completing the voluntary GHG inventory in 2024, we evaluate Category 4 as the major source of carbon emissions. In 2025, we will plan to implement a supply chain carbon reduction evaluation. 4. The office air conditioning and lighting will be set to turn off automatically, reducing electricity waste during periods of inactivity.
Transition risk	R2 Controlled use of energy	Short-term (within 3 years)	The Ministry of Economic Affairs in Taiwan has set a target for renewable energy to account for 20% of the energy mix by 2025. Energy transformation policies will lead to fluctuations in electricity prices, and the requirements for businesses to adopt renewable energy will also increase.	Cooperate with GIGABYTE Group to evaluate the introduction of renewable energy.
Physical risk	R3 Increased severity of extreme weather events such as typhoons and floods	Mid-term (3 to 5 years)	The supply chain of Giga Computing covers the world. As extreme weather worsens, each location around the world is exposed to different climate risks. In the past, Chinese manufacturers have faced extreme heat that led to plants suspending operations. Plants in the lower reaches of the Yangtze River have been flooded due to torrential rains, causing damage to equipment and affecting supply. For U.S. manufacturers, the supply chain was unable to supply raw materials as scheduled due to hurricanes, resulting in delays in delivery. Climate disasters such as this have increased the Company's risk of operational disruptions and might materially impact the Company's finances.	1. Establish a supply chain raw material backup plan to avoid supply chain disruptions, and gradually diversify supply from suppliers to reduce the response cost of a single supplier due to climate factors. 2. Increase the proportion of local suppliers to reduce the risk of extreme weather affecting transportation. 3. Purchased UPS systems to ensure continuous power supply and prevent impacts on equipment from sudden regional power reductions.
Physical risk	R4 Average temperature rises	Long-term (5 to 10 years)	1. Rising temperatures can easily trigger fires, cause equipment to malfunction due to inadequate heat dissipation, raise cooling water temperatures, increase the energy demand of cooling equipment, and may even result in employee heatstroke and other health hazards. 2. Climate change may cause raw material price fluctuations, resulting in increased costs.	1. Promote the use of energy-saving equipment, such as replacing lighting with LEDs, and upgrading to more energy-efficient water dispensers and air conditioning systems. 2. Increase the supplier assistance plan, evaluate the comprehensive intelligence of processes, and improve energy efficiency. 3. Regularly conduct risk assessments to determine the factors that may cause fires, and formulate corresponding risk management measures, such as strengthening fire prevention facilities and training employees on fire prevention. 4. Raise employee awareness of high temperatures, strengthen the maintenance and use of indoor air conditioning systems, provide appropriate rest and hydration areas to reduce the risk of heatstroke, arrange reasonable working schedules and rest intervals, and enhance employee health knowledge training.
Opportunity	O1 Develop and/or increase low-carbon products and services	Short-term (within 3 years)	As the market shifts towards supporting low-carbon, high-efficiency products, enterprises are developing low-carbon products and creating circular economy business models to align with international trends and open new markets and business opportunities.	1. Evaluate the introduction of low-energy, high-efficiency supply chain products, such as power supplies with higher energy conversion efficiency. 2. Evaluate the availability of DLC and immersion cooling systems.
Opportunity	O2 Use of more efficient production and distribution processes	Mid-term (3 to 5 years)	As extreme weather events become more severe and frequent, global natural resources are increasingly scarce, with acquisition costs and difficulties rising. Recycling and reuse help reduce operational costs and improve the efficiency of raw material usage.	1. An assessment of the feasibility of introducing recycled materials is planned for 2025. 2. Increase the supplier assistance plan, optimize supplier processes, and increase the proportion of scrap recycling. 3. Evaluate increasing the use of recycled paper pulp in carton packaging materials (currently, the recycled paper pulp usage rate in carton packaging is over 80%).

Aspects	Issue	Impact period	Climate-related risks and opportunities status	Response Strategies and Management Measures
Opportunity	O3 Use of low-carbon energy	Short-term (within 3 years)	As countries tighten regulations on total carbon emissions and import carbon tariffs, failure to adopt energy-saving and carbon-reduction measures may lead to decreased competitiveness of the Company's products in exports and increase additional carbon costs for sales. On the other hand, if the company actively invests in low-carbon energy and energy-saving solutions, it can reduce costs associated with carbon emissions. Additionally, facilities with lower-carbon emissions may potentially benefit from surplus carbon credits, leading to potential gains.	Actively explore the availability of green energy at each operational site and collaborate with the GIGABYTE Group to evaluate the use of renewable energy, with the goal of significantly increasing the proportion of low-carbon energy used.

5.1.4 Metrics and Targets

Since Giga Computing is currently conducting a self-initiated GHG inventory, it has not yet been able to set specific reduction targets. However, to proactively address the impacts of climate change, we have established goals in areas such as carbon reduction, renewable energy usage, climate adaptation, and supply chain management. These goals are under continuous review and implementation. Additionally, the Sustainability Promotion Team monitors the annual progress of each site, making rolling adjustments to climate targets to ensure their effectiveness and suitability are reassessed each year. The climate-related goals set by Giga Computing and the status of achievement are as follows:

Target Type	Target Description	Target Scope	Achievement Status
Short-term Goals			
Carbon reduction targets	Complete the 2024 voluntary GHG inventory by 2025	Giga Computing HQ + GIGAIPC	Achieved
	Evaluate the implementation of SBTi project in 2025	Consolidated Entity	In progress
Responding to climate change	No instances where extreme weather conditions have caused supply chain disruptions leading to a suspension of shipments	Consolidated Entity	Achieved
Supply chain carbon management	Convene 1 supplier conference in 2025	Consolidated Entity	In progress
	Suppliers accounting for 20% of total procurement expenditures complete GHG inventories in 2025	Consolidated Entity	In progress
Mid- and Long-term Goals			
Carbon reduction targets	Cooperate with GIGABYTE Group to set carbon reduction goals in 2027	Consolidated Entity	In progress
	Complete ISO 14064-1 verification by 2027	Giga Computing HQ + GIGAIPC	In progress
Renewable energy target	Cooperate with GIGABYTE Group to evaluate the introduction of renewable energy	Giga Computing HQ	Under discussion
Supply chain carbon management	Convene 1 supplier conference annually and incorporate carbon reduction targets into evaluation items	Consolidated Entity	In progress
	Suppliers accounting for 80% of total procurement expenditures complete GHG inventories in 2030	Consolidated Entity	In progress

5.2 Energy and GHG Management

Item	Content
Policies, Commitments, and Importance	Energy management is closely linked to GHG emissions, a key factor influencing global warming. In recent years, many countries have implemented carbon tax regulations on product imports, and Taiwan is set to start collecting carbon fees in 2026. Giga Computing fully recognizes the importance of energy and carbon management. Therefore, in 2024, we conducted a voluntary GHG inventory following the ISO 14064-1:2018 standard. Moving forward, we are committed to performing regular annual inventories and gradually increasing the share of renewable energy to address the additional costs imposed by future carbon-related regulations.
Responsible Unit	R&D Center
Action Plan	1. Cooperate with the parent company to complete GIGABYTE's annual CDP climate questionnaire. 2. Routine annual carbon inventory operations will be newly implemented across all sites, with plans to introduce third-party verification processes in the future. 3. Each site has set short-, mid-, and long-term reduction targets based on its current GHG emissions inventory.
2024 Performance	1. According to ISO 14064-1, voluntarily completed a GHG inventory with boundaries covering Giga Computing HQ and GIGAIPC. 2. Giga Compuitng, along with GIGABYTE, achieved a B rating on the 2024 CDP Climate Questionnaire. 3. Introduce power monitoring equipment at Giga Computing HQ. 4. The carbon intensity of Scope 1 and Scope 2 decreased by 59.65% in 2024 compared with the previous year.
Grievance Mechanism	Each year, each site submits its annual GHG inventory results to GIGABYTE. The Group tracks progress toward carbon reduction targets, identifies reasons for any unmet targets, and adjusts the targets on a rolling basis to achieve low-carbon operations.

5.2.1 Energy management

With the conclusion of COP29 highlighting global setbacks in carbon reduction, governments and businesses worldwide are intensifying their efforts in carbon management and reduction regulations. As a member of the global community, Giga Computing is committed to minimizing the environmental impact of its operations. Therefore, we prioritize carbon reduction and energy efficiency as key management objectives.

To strengthen internal energy and GHG management, Giga Computing has established energy management plans for its operating sites in accordance with GIGABYTE Group policy; in addition, to lay the foundation for carbon reduction, in 2024, we voluntarily completed the GHG inventory for Giga Computing HQ and GIGAIPC for categories 1 through 6 in accordance with ISO 14064-1, and established routine internal audits and a carbon inventory management system, with external third-party verification or assurance to be obtained annually starting in 2027 to improve data quality. Giga Computing has responded to the Taiwan government's 2050 net-zero carbon emissions goal with actual actions, and actively demonstrated its determination to reduce carbon emissions to customers and stakeholders.

5.2.2 Energy Usage Overview

Giga Computing's primary products are servers; therefore, its main energy consumption comes from purchased electricity for laboratory equipment and air conditioning, accounting for approximately 99.90% of total energy consumption. The remainder is gasoline for company vehicles, accounting for approximately 0.10% of total energy consumption. In 2024, Giga Computing's total energy consumption was 20,443.98 GJ. Total energy consumption showed a slight increase compared to the previous year; however, due to the significant revenue growth in 2024, energy intensity decreased accordingly.

Total Energy Consumption Over the Years

	Activity Type	Energy Type	Unit	2023		2024	
				Energy Consumption	Proportion (%)	Energy Consumption	Proportion (%)
Non-renewable fuels	Company vehicles	Gasoline	Liters	1,936	0.36	617.71	0.10
			GJ	63.88		19.67	
Purchased energy	Process equipment, air conditioners	Purchased gray electricity	kWh	4,905,016	99.64	5,673,419.77	99.90
			GJ	17,658.06		20,424.31	
Gross calorific value of energy consumption (GJ)				17,721.94	100.00	20,443.98	100.00
Intensity (GJ/per million revenue)				0.36		0.15	

Note 1: The statistical scope of energy consumption data covers: Giga Computing HQ, GIGAIPC.
Note 2: Calorific value of gasoline in 2023 = 7,800 kcal/L, calorific value of electricity = 860 kcal/kWh; calorific value of gasoline in 2024 = 7,609 kcal/L, calorific value of electricity = 860 kcal/kWh, and the coefficients are from the energy product unit calorific value table of the Bureau of Energy, Ministry of Economic Affairs.
Note 3: The denominator of the intensity is the annual total revenue in NTD million.
Note 4: Giga Computing did not use renewable energy in 2024, and will introduce renewable energy in line with GIGABYTE Group's assessment.

5.2.3 GHG Management

In 2025, following the ISO 14064-1:2018 GHG inventory standard, Giga Computing completed its voluntary GHG inventory. The total GHG emissions for 2024 were 785,529.4346 tons of CO_2e. Of these, Category 4 and 5 were the largest contributions, mainly from purchased materials and the use of sold products, accounting for 99.65% of the annual GHG emissions. In 2024, Scope 3 emissions increased by 69.8% due to a significant rise in product manufacturing and shipment volumes compared with 2023, primarily attributable to GPU servers. However, the carbon intensity of Scope 1 and Scope 2 emissions decreased by 59.65% compared with the previous year.

Categories 3 to 5 are difficult to control because they involve upstream and downstream partners. In the future, we will, through routine carbon inventories, understand the organization's GHG emissions status and, based on the results, formulate short-, mid-, and long-term emission reduction targets. At the same time, we plan to launch the SBTi project in the second half of 2025 to contribute to global carbon reduction efforts.

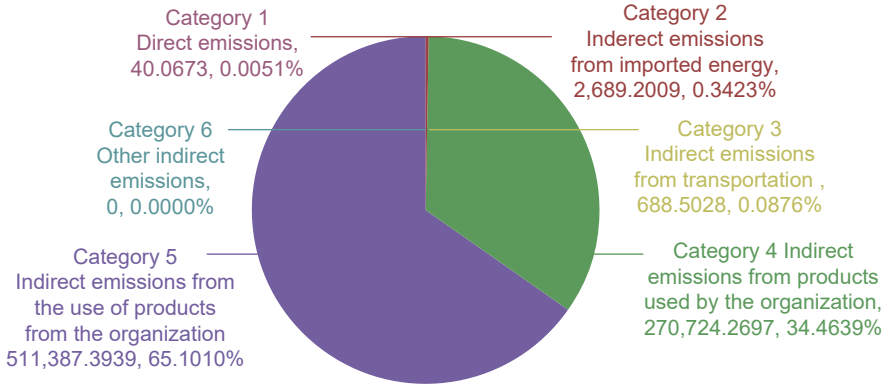
GHG Emissions Volume and Intensity

2023				
Unit	Metric Tons of CO_2e	Proportion (%)	Total (metric tons of CO_2e)	Intensity
Category 1 Direct emissions	42.5710	0.0092	2,465.6488	0.0508
Category 2 Indirect emissions from imported energy	2,423.0778	0.5228		
Category 3 Indirect emissions from transportation	471.9570	0.1018	461,000.3274	-
Category 4 Indirect emissions from products used by the organization	149,307.9103	32.2155		
Category 5 Indirect emissions from the use of products from the organization	311,220.4601	67.1507		
Category 6 Other indirect emissions	0	0		
Total volume			463,465.9762	-

2024				
Unit	Metric Tons of CO_2e	Proportion (%)	Total (metric tons of CO_2e)	Intensity
Category 1 Direct emissions	40.0673	0.0051	2,729.2682	0.0205
Category 2 Indirect emissions from imported energy	2,689.2009	0.3423		
Category 3 Indirect emissions from transportation	688.5028	0.0876	782,800.1664	-
Category 4 Indirect emissions from products used by the organization	270,724.2697	34.4639		
Category 5 Indirect emissions from the use of products from the organization	511,387.3939	65.1010		
Category 6 Other indirect emissions	0	0		
Total volume			785,529.4346	-

Note 1: GHG inventory boundary: Giga Computing HQ, GIGAIPC.
Note 2: Inventory Methodology: Giga Computing complies with ISO 14064-1:2018 GHG inventory standard, and voluntarily completed the 2023-2024 GHG inventory operation.
Note 3: Scope of GHG inventory: Carbon dioxide (CO_2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorinated chemicals (PFCs), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3), a total of 7 GHGs.
Note 4: The GHG inventory uses the operational control approach for assessment.
Note 5: Category 6 was not disclosed as it did not meet the material threshold.
Note 6: GHG coefficient reference: Ministry of Environment's GHG Emission Factor Management Table version 6.0.4, academic papers, similar products, or data from Simarpro or the Ministry of Environment.
Note 7: Emission intensity = (total carbon dioxide equivalent of Category 1 + Category 2 emissions) / annual revenue per million NTD.

Proportion of GHG Emissions in 2024



5.3 Water Resource Management

5.3.1 Water Resource Risk Assessment

With the intensification of extreme weather in recent years, uneven global rainfall distribution has become the norm. The frequency and severity of heavy rains, droughts, and floods have progressively broken past records. This not only affects the general water supply but also increases the instability of supply chains and the risk of operational disruptions for businesses. Water resource risk management has become a crucial issue that cannot be overlooked in corporate operations.

To assess whether Giga Computing's operating sites face water risks, in 2024 we used the World Resources Institute's Aqueduct Water Risk Atlas online tool to analyze water withdrawal pressure at each site. The results indicate that Giga Computing HQ and GIGAIPC are located in areas of medium to low water resource pressure, while the U.S. subsidiary is located in an area of high water resource pressure. Since the U.S. subsidiary does not engage in production or manufacturing and primarily uses water for domestic purposes, it will not impose significant impact on local water use. In the future, we will continue to monitor and assess water resource stress at each site to prevent Giga Computing's water usage from causing potential impacts on local residents and ecosystems.

5.3.2 Water Intake, Consumption, and Discharge

Giga Computing's water source are from third-party water suppliers, with the primary use for domestic purposes. In 2024, the total water intake was 16.84 million liters. Because water use information for certain GIGAIPC's sites is handled together by the leased buildings, data collection is difficult; therefore, the scope of water use data for this year does not include certain GIGAIPC's operational sites.

Water Use Category	Intake/ Discharge Destination Classification	2023 (Million liters)	2024 (Million liters)
Water intake	From rainwater recycling, rivers, lakes	0	0
	From groundwater	0	0
	Water supplied from water companies, municipal water supply, and wastewater treatment plants	13.42	16.84
	Total water intake	13.42	16.84
Water discharge	Discharged into rivers, glaciers, lakes, swamps	0	0
	Discharged into groundwater	0	0
	Discharged to the wastewater treatment plant for treatment	10.74	13.47
	Total water discharge	10.74	13.47
Water consumption	Total water consumption	2.68	3.37
Water intake intensity (million liters/million revenue)		0.0003	0.0001

Note 1: The data in this table covers Giga Computing HQ, the U.S. subsidiary, and certain GIGAIPC operational sites.
Note 2: Information restated: This table corrects the 2023 water usage data.

5.3.3 Wastewater Discharge Management

Giga Computing primarily focuses on product R&D and does not have factory registration. Therefore, the main emissions are general domestic wastewater, which is discharged into the underground sewer system in accordance with local regulations, without impacting the surrounding environmental ecology of the operational sites.

5.3.4 Water Resource Management or Reduction Actions

Since Giga Computing specializes in product R&D, there is no plant business registration. Both the basic plant facilities and domestic water supply are sourced from tap water, and the offices, in cooperation with GIGABYTE HQ, implements the "Reduction 333 Plan," aiming to reduce water use by 3% annually and establishes relevant policies to achieve water conservation. For example, installing water-saving faucets and constructing a rainwater harvesting system on the HQ building's rooftop (G-HOME GIGABYTE Sustainable Ecological Rooftop) can cover 50% of annual irrigation water needs.

Adoption of sensor faucets with water-saving labels

Rainwater harvesting system installed on the roof of the headquarters building (G-HOME GIGABYTE Sustainable Ecological Rooftop)

5.4 Waste Management

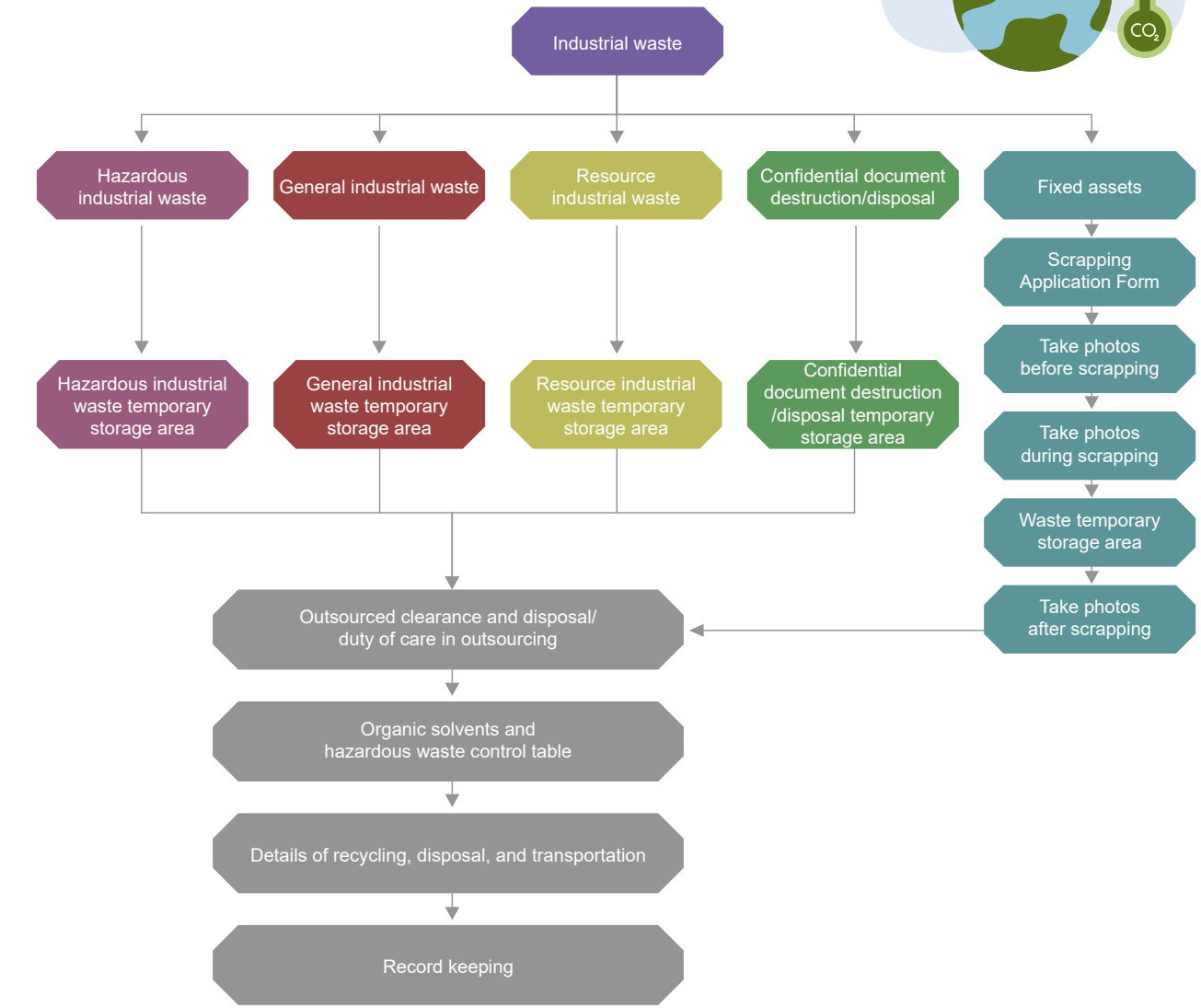
5.4.1 Waste Management System

The main waste generated at Giga Computing HQ consists of general waste produced by employees' daily activities. Industrial waste primarily comprises electronic waste, with a small amount of hazardous waste. To prevent negative impacts on neighboring communities and ecosystems from its waste, Giga Computing HQ follows waste management and disposal measures in accordance with the ISO 14001 Environmental Management System, in collaboration with GIGABYTE. This includes adhering to the Group's "Waste Disposal Operations Guidelines." All waste is handled and disposed of by qualified third-party waste management service providers.

Each year, the Group's environmental, safety, and health personnel audit waste removal contractors, and designate a specialist to inspect waste storage areas at least once each quarter, recording the results in the industrial waste storage inspection form. Furthermore, before contracting with new waste removal, treatment, and recycling agencies, the dedicated unit sends personnel to evaluate their operational management. After contracts are signed, evaluations are conducted at least once every six months, and GPS tracking of waste removal vehicles' routes is used to ensure that all waste is properly disposed of.

In 2024, no incidents of illegal dumping or violations by waste handlers were found at Giga Computing HQ. We will continue to manage waste properly to maintain a zero-violation goal.

Industrial Waste Management Flowchart



5.4.2 Waste Generation

In 2024, the total waste volume at Giga Computing HQ was 115.97 metric tons. Because data for GIGAIPC and the U.S. subsidiary are difficult to collect, the scope of waste data for this year includes only Giga Computing HQ. In the future, we will continue to monitor trends in waste generation and progressively increase the rate of resource recycling and reuse to minimize the impact of our operations on the external environment.

Waste Generated				
Year	2023		2024	
	Disposal Volume (metric tons)	Proportion (%)	Disposal Volume (metric tons)	Proportion (%)
Non-hazardous waste	44.11	98.44%	114.11	98.40%
Hazardous waste	0.70	1.56%	1.86	1.60%
Total amount of waste	44.81	100%	115.97	100%
Waste intensity (tons/million revenue)	0.0009		0.0009	

Note 1: General industrial waste includes domestic waste generated by employees in their daily lives.
Note 2: The data in this table covers only Giga Computing HQ.

Total Waste Volume Categorized by Direct Disposal and Diverted Disposal

Waste Category	Hazardous Waste		Non-hazardous Waste		Total Disposal Volume	
	Disposal Volume (tons)	Proportion (%)	Disposal Volume (tons)	Proportion (%)	Disposal Volume (tons)	Proportion (%)
Diverted disposal (Reuse, recycling)	1.86	100%	12.01	10.53%	13.87	11.96%
Direct disposal (Incineration, landfill)	0	0%	102.10	89.47%	102.10	88.04%
Total volume	1.86	100%	114.11	100%	115.97	100%

Note 1: The data in this table covers only Giga Computing HQ.

Final Disposal Methods of Non-hazardous Waste in 2024 by Type

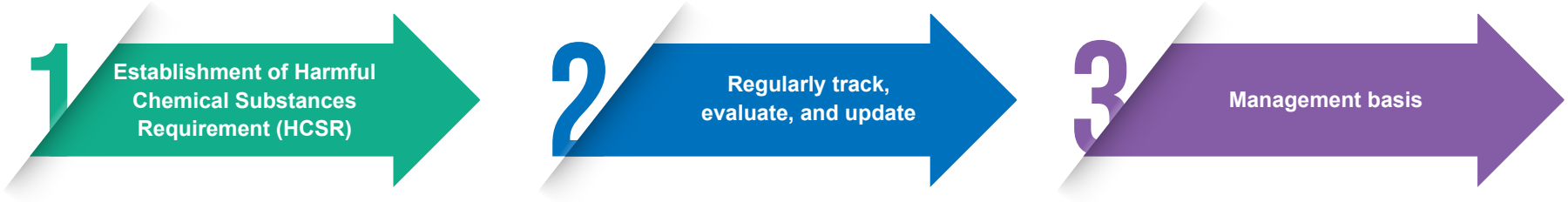
Waste Type	Waste Generated (tons)	Outsourcing to a Third Party	
		Waste Disposal Volume (tons)	Disposal Method
General waste (domestic waste)	102.10	102.10	Incineration (non-energy recovery)
Paper	5.30	5.30	Recycled
Paper container	5.31	5.31	Recycled
Plastic	0.41	0.41	Recycled
Iron and aluminum cans	0.21	0.21	Recycled
Glass	0.11	0.11	Recycled
Plastic bottles (PET Bottles)	0.66	0.66	Recycled
Total Amount of Waste	Total Amount of Off-site Treatment		Proportion %
114.11	114.11		100.00%

Note 1: The data in this table covers only Giga Computing HQ.

5.5 Responsible Production and Circular Economy

5.5.1 Control of Hazardous Substances

Giga Computing, considering the potential negative environmental impacts of its products, has established a Harmful Chemical Substances Requirement (HCSR) based on current international hazardous substance regulations, including the EU RoHS, REACH, Battery, Packaging, Persistent Organic Pollutants (POPs), the U.S. Toxic Substances Control Act (TSCA), the Toxics in Packaging Clearinghouse (TPCH), and customer hazardous substance standards. The HCSR categorizes controlled substances into Level A (immediately banned substances), Level B (substances expected to be banned), and Level C (potentially harmful substances that may be banned in the future). All components and products of Giga Computing must comply with this requirement for hazardous substances management. We also continuously monitor the development trends of international environmental regulations and the progress of customer standards, regularly assessing and updating our regulations.



In addition to adhering strictly to hazardous substance control during product design and material selection, we also manage hazardous substances in components through our self-developed Green Supply Chain Management (GSCM) system. This enhances the environmental friendliness of our products, ensures the health and safety of customers during product use and reduces health risks to waste disposal personnel at the end of the product's lifecycle.

As of the end of 2024, Giga Computing has not received any complaints related to product violations of hazardous substance regulations causing harm to personnel health or environmental damage. Giga Computing ensures the rigor of hazardous substance control process by undergoing external audits conducted by a third-party certification body for the IECQ QC080000:2017 hazardous substance process management system and has obtained certification.

5.5.2 Circular Economy Product Design

With the rapid pace of technological advancement in the electronics industry, electronic waste has become one of the fastest-growing waste streams globally. In response, Giga Computing is committed to reducing waste and aims to promote a circular economy as a long-term goal. This includes considering the product lifecycle impact during product design and developing products that are easy to recycle and reuse. At the same time, we leverage the professional repair technology and experience of our sister company, BYTE International Co., Ltd., which is also a subsidiary of GIGABYTE, to extend the product lifecycle and reduce the generation of electronic waste. In 2024, Giga Computing sent 22,637 products for repair, and the completion rate reached 100%.

Product Repairs and Returns Status in 2024

Product Repair		Taiwan	China (including Hong Kong and Macao)	Asia Region (excluding China, Hong Kong, Macao and Taiwan)	North America Region	Europe Region	Total
Giga Computing HQ	Number of repairs (pieces)	5,369	1,624	1,885	0	6,519	19,639
	Quantity returned (pieces)	5,369	1,624	1,885	0	6,519	19,639
U.S. subsidiary	Number of repairs (pieces)	0	0	0	4,242	0	4,242
	Quantity returned (pieces)	0	0	0	4,242	0	4,242
GIGAIPC	Number of repairs (pieces)	1,161	611	178	569	479	2,998
	Quantity returned (pieces)	1,161	611	178	569	479	2,998
Total	Number of repairs (pieces)	6,530	2,235	2,063	4,811	6,998	22,637
	Quantity returned (pieces)	6,530	2,235	2,063	4,811	6,998	22,637

5.5.3 Eco-Friendly Packaging and Packaging Material Reduction

In addition to promoting product recycling and reuse, Giga Computing also focuses on waste reduction through packaging reduction initiatives. We continuously work on minimizing packaging, increasing the use of recyclable materials, and striving to reduce packaging material usage and subsequent waste while maintaining adequate protection functionality. In 2024, a total of 420.75 metric tons of packaging materials were used, of which recyclable materials accounted for 79.69% of the total packaging materials. In the future, Giga Computing will continue to use recyclable packaging materials and focus on the packaging reduction plan of the GIGABYTE Group, aiming to achieve the common goal of eliminating single-use packaging by 2030.

Recyclable Rate of Packaging Materials in 2024

Type of Packaging Material	Annual Total Weight Purchased (tons)	Percentage of Recyclable Packaging Materials (%)
Paper	335.31	79.69%
Plastic	85.44	
Total	420.75	

Note 1: Recyclable rate = paper / (paper + plastic)