CHAPTER 4

Environmental Sustainability

Yearly Performance Highlights

- In 2024, the ITRI EMS Air Conditioning Energy Management System was implemented to collect and monitor energy consumption data at plants.
- Going paperless in the workplace environment
- 1,011 LED energy-saving lamps were replaced, with an investment of NT$ 1.5 million.
- Implement office waste recycling actions

4.1 Environment Management Policies

While developing innovative products, ITH also strives to manage the impact of its operations on the environment, anticipating collaboration with peers, suppliers, or other partners to implement energy conservation and carbon reduction strategies.

We have always committed to promoting sustainable environmental development, encouraging all colleagues to conserve energy, reduce carbon emissions, and minimize resource waste. This year, the Company introduced paperless initiatives, procured LED energy-saving light tubes, established an air conditioning system replacement plan, and constructed a power monitoring system, among other environmental management measures.

As an IC design company with only office space and no manufacturing plants, ITH's main energy used is electricity, gasoline (for company cars), tap water, and general waste. Therefore, our primary goal is to reduce operational energy consumption, thereby lowering greenhouse gas emissions and minimizing the impact on climate change.

In 2024, ITH introduced new environmental management measures

01 Paperless Initiatives

02 Procured LED energy-saving light tubes

03 Established an air conditioning system replacement plan

04 Constructed a power monitoring system

Climate Change Response

Policy

Evaluate climate-related opportunities and risks the Company might face by referencing the Task Force on Climate-related Financial Disclosures (TCFD) framework, and formulate climate-related strategies and goals.

Commitment

Reduce resource use and greenhouse gas emissions to minimize the impact on climate change.

Communication Mechanism

Internal

Regular monthly meetings for exchange

External

Sustainable Development Committee

Short- to Medium-term Goals

ITH optimizes and enhances energy efficiency in lighting, air conditioning, and chilled water systems to meet the demands of sustainable development.

- Evaluate the current energy usage situation and seek directions for improvement.
- Evaluate the possibility of equipment and system upgrades based on data.
- Develop an overall energy management strategy, incorporating cost-effectiveness considerations.
- Establish carbon reduction and energy conservation principle goals, gradually moving towards optimized energy use.
- Annually review the effectiveness of energy management and adjust the implementation pace accordingly.

Long-term Goals

We hope to expand the positive impact on the natural environment by exerting influence on stakeholders.

Employees (internal stakeholders)

- Establish sustainable development awareness and continuously promote employee participation in environmental and energy-saving initiatives.
- Strengthen green workplace culture and low-carbon awareness through education, training, and internal communication.
- Provide sustainability-related growth opportunities and encourage employees to participate in the corporate sustainability transition process.

Suppliers (external stakeholders)

- Encourage suppliers to adopt green operational processes and gradually establish a responsible supply chain management mechanism.
- Introduce the principles of supplier sustainability assessment principles to promote joint growth of long-term partners.

2024 Environment Management Goals and Implementation Status

ITH continued to promote energy-saving actions in 2024, implementing energy-saving improvement measures, replacing LED lighting equipment in office areas, and evaluating the replacement of air conditioning or other office space equipment. In the future, the goal is to fully switch to energy-saving equipment while continuously assessing feasibility.

01

Energy management

Environment Performance Goals

In the medium- and long-term plan, it is expected to save 30% of energy consumed by air condition equipment.

02

Water resource management

Environment Performance Goals

Water saving rate of 1%

03

Waste management

Environment Performance Goals

Strengthen waste recycling and classification management

4.2 Climate Change Response

◇ Implementation Overview of the Climate Change Management Framework (TCFD)

Governance

The Board of Directors is the highest governance body for climate change management, and it authorizes the Sustainable Development Committee to be responsible for the identification of climate change risks and opportunities, impact level evaluation, formulation of response strategies, and oversight of the implementation by relevant units.

To ensure the comprehensiveness of the management framework, the Sustainable Development Committee convenes relevant units based on their responsibilities to form working groups, with the Sustainability Office coordinating execution and compilation. The Sustainability Office compiles the results annually and reports to the Chairman at the Sustainable Development Committee to ensure that climate-related issues are incorporated into the management's decision-making mechanisms and continuously supervised.

Strategy

ITH, based on the worst-case scenario related to climate change, assesses the potential financial impact on the Company from both transition risks and physical risks, considering the timeline of impacts (short-, medium-, long-term), affected links in the value chain, and the likelihood of occurrence. The results of the above analysis is incorporated into the strategy resilience evaluation, leading to the formulation of four core strategies: enhancing energy efficiency, developing and designing low-carbon products, supply chain management, and strengthening the group's climate resilience.

Transition risk: Referring to Taiwan's Pathway to Net-Zero Emissions in 2050 and its strategies, a carbon tax is set as a parameter. The analysis simulates the potential impact on the Company's policy and legal, market, technological, reputational, financial, and operational aspects under a carbon tax scenario of NT$300 per tonnes.

Physical risk: Referring to SSP5-8.5, using the maximum daily high temperature TXx and the change in the total number of days per year with daily rainfall exceeding 200 millimeters as parameters, the future climate conditions of the locations of operating sites are simulated to serve as physical risk parameters.

Risk Management

The Company manages climate change-related risks and opportunities based on the existing overall risk management framework and with reference to the TCFD framework, incorporating climate change risks into the operational decision-making process.

To enhance professionalism, external experts were engaged during the initial phase to provide assistance. The Sustainability Office convened relevant departments to form a promotion team, identifying physical risks and transition risks through workshops, and assessing their materiality based on the likelihood of occurrence and potential financial impact, serving as a basis for subsequent strategy and goal adjustments.

This assessment initially evaluated acute and chronic physical risks, as well as transition risks related to policies and regulations, technology, market, and reputation. Each unit is responsible for risk identification and formulation of response measures within its operational scope, which were then consolidated by the Sustainability Office and submitted to the Sustainable Development Committee for review The process combines internal discussions and external expert advice to evaluate the potential impact of climate change on operations.

The Sustainable Development Committee reviews the risk evaluation results biennially and adjusts response measures according to internal and external circumstances to ensure the effectiveness and appropriateness of risk response strategies. Through systematized processes and cross-departmental cooperation mechanisms, we have initially established risk identification and response capabilities. Moving forward, governance and operations will be continuously strengthened to enhance the maturity of climate risk management.

Indicators and Targets

In response to the evaluated risks and opportunities, the Company has outlined the following key action directions, with each unit developing specific indicators and phased goals. The Sustainable Development Committee regularly confirms the implementation status to ensure the implementation of the strategy:

I. Improve energy efficiency: Replace high-energy-consuming equipment, improve energy efficiency, and reduce energy consumption.

II. Development and design of low-carbon products: In response to the low-carbon transition trend, the R&D unit is engaging in the development of low-carbon products, actively reducing the carbon emissions of products.

III. Supply chain management: Leverage corporate influence to encourage suppliers to consider social, economic, and environmental impacts.

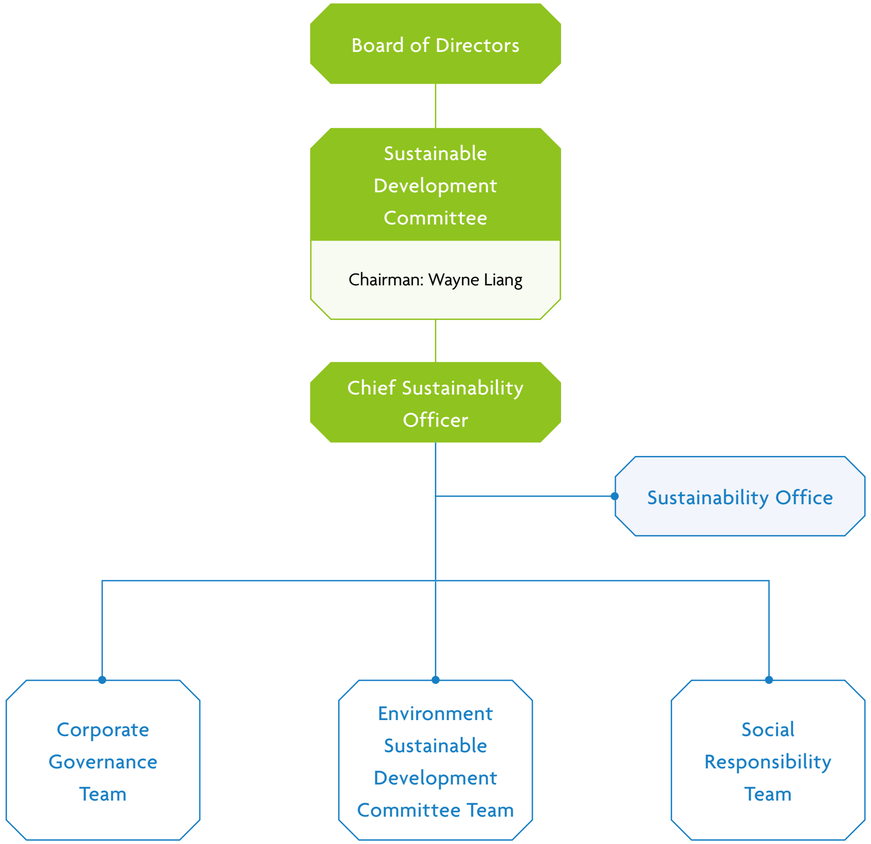
IV. Strengthen the Group's climate resilience: Understand the impacts of climate change and establish an uninterrupted power backup mechanism.

Subsequently, action plans will be continuously adjusted based on implementation status.

Climate Governance Framework

The Board of Directors authorized the establishment of the Sustainable Development Committee, which is chaired by the Chairman. The Committee includes a Chief Sustainability Officer and a Sustainability Office, responsible for integrating core operational resources to manage the company's ESG performance and for setting sustainable strategic directions and project implementation. The committee comprises working groups for corporate governance, environmental sustainability, and social responsibility, responsible for formulating goals and implementation plans for important cross-departmental sustainability topics.

The Sustainable Development Committee is the dedicated unit for TCFD, responsible for managing climate-related risks and opportunities, and regularly evaluating the effectiveness of strategy implementation. It reports the implementation results of climate risk management to the Board of Directors annually.



Strategies and Goals

The Company closely monitors global climate change trends and international response directions, incorporating this topic into the material topics of corporate sustainability. We continuously conduct analysis and management, with the key points of strategy implementation outlined as follows:

01 Improve energy efficiency

Replace high-energy-consuming equipment, improve energy efficiency, and reduce energy consumption.

02 Development and design of low-carbon products

In response to the low-carbon transition trend, the R&D unit is engaging in the development of low-carbon products, actively reducing the carbon emissions of products.

03 Supply Chain Management

Leverage corporate influence to encourage suppliers to consider social, economic, and environmental impacts.

04 Strengthen the Group's climate resilience

Understand the impacts of climate change and establish an uninterrupted power backup mechanism.

Improve energy efficiency

Strategy

- In 2026, electricity consumption will decrease by 15% compared to 2025.
- Plan to fully implement LED lighting in the new Tainan office.
- Confirm the virtual workstation requirements every five years and replace outdated servers.
- Annually assess the compatibility, stability, and suitability of the virtualization platform.

Future Goals

Development and design of low-carbon products

- In 2025, we optimized the design architecture to reduce overall power consumption.
- A shared driver IC development platform for FHD and QHD panels will be completed in 2025.

Supply chain management

- Completion of key supplier corporate social responsibility risk assessments in 2026.
- Conduct quarterly supplier evaluation.
- Conduct an annual supplier audit and guidance.

Strengthen the Group's climate resilience

- Insurance policies for relevant disasters are maintained on a regular basis.
- Monthly assessments are conducted on server criticality, allowable downtime (SLA), and expected load to ensure that the UPS wattage and amperage capacity can meet server power consumption needs.
- Select and implement appropriate UPS systems to prevent equipment failure caused by short-term power dips.
- Conduct irregular UPS switchover tests to ensure seamless operation.
- Set up monitoring tools to continuously track UPS power levels and operation status.

Identification Process of Climate Risks and Opportunities

The Company's Sustainable Development Committee is responsible for collecting information on climate change and energy-related risks and opportunities, and conducts reviews every two years. Considering transition risks (policy and legal/market/technology/company reputation) and physical risks (chronic and acute), a risk evaluation is conducted for potential events, including the degree of financial impacts, the impact timeline (short, medium, long-term), affected parties in the value chain, and the likelihood of risks.

When devising opportunity scenarios, we consider resource efficiency, energy sources, products and services, markets, and adaptability. Opportunity evaluation is conducted for potential events, including the degree of financial impacts, the timeline of impacts (short, medium, long-term), affected parties in the value chain, and the likelihood of opportunities.

01 Establish the Working Group

Establish working groups based on job responsibilities, including members from the R&D Center, Operation Center, Business Development Center, and Finance & Administration Center to ensure the comprehensiveness of climate change management.

02 Establish a Risk Evaluation Process

Determine evaluation frequency and boundaries, set risk levels and their responses and control processes.

03 Identification Risks and Opportunities

Members from each department consider transition risks and physical risks, drafting an initial evaluation through workshops. Based on the risk evaluation process, they determine the impact levels of risks and opportunities using the financial impact level and likelihood.

04 Produce the Risk Matrix

Integrate the risk and opportunity resultss into the risk matrix to produce the risk matrix diagram.

05 Discussion on Climate Change Strategy

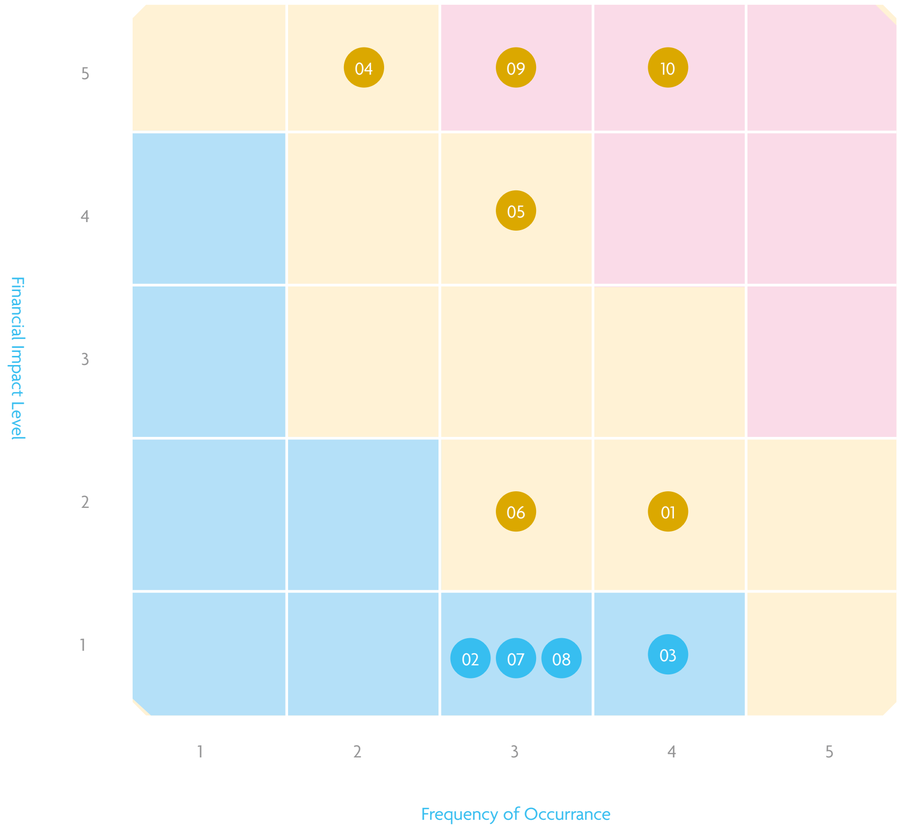
Establish a climate change strategy, short-, medium-, and long-term goals, and indicators.

Evaluation of Risks and Opportunities

The Company uses the financial impact level and frequency of occurrance to determine the impact levels of risks and opportunities based on identified risks and opportunities. A score of less than 5 indicates low risk/opportunity, a score of 5-14 indicates moderate risk/opportunity, and a score of 15-25 indicates high risk/opportunity.

Methods for Measuring Risks and Opportunities	Financial impact level and frequency of occurrence
Category of Risks and Opportunities	Transition risks: Policy and legal, market, technology, company reputation Physical risks: Chronic and acute Opportunities: Resource efficiency, energy sources, products and services, market, and adaptability
Risk/Opportunity Level	High, Moderate, Low
Scenario Analysis	Transition risk: A carbon tax of NT$300 per tonne Physical risk: SSP5-8.5 scenario, warming +3.0-3.6° C scenario
Frequency of Occurrence	Frequent: Within 1 year (excluding 1 year) Likely: 1-2 years Possible: 3-5 years Unlikely: 6-9 years Highly unlikely: over 10 years
Risk Level	< 5 points: Low Risk/Opportunity 5-14 points: Moderate Risk/Opportunity 15-25 points: High Risk/Opportunity

Climate Risk and Opportunity Matrix



Moderate to High Risk/Opportunity Level

1. Changes in domestic and international policies and legal regulations.
4. Innovation and technology development
5. Increase in negative feedbacks from stakeholders
6. Increase in frequency of extreme weather events
9. Increase in demand for low-power consumption products
10. The application of driver ICs in new energy vehicles is growing rapidly

Low Risk/Opportunity Level

2. National goal of net zero by 2050
3. Taiwan Stock Exchange's regulatory requirements
7. Rising global average temperatures
8. Unstable power supply

Types of Risks/Opportunities		Overview of Risks/Opportunities	Value Chain Segments Affected	Timeframe of Impact	Possibility	Potential Financial Impact	Risk/ Opportunity Level
Transition risk	Policy and legal	Changes in Domestic and International Policies and Legal Regulations The international promotion of carbon taxes and carbon border adjustment mechanisms, along with the domestic government's imposition of carbon fees, is increasing the operating costs of the supply chain, which may lead to the costs being passed on and causing an increase in the Company's procurement expenses.	Direct operations, customers, supply chain	3-5 years	Likely	Low	Moderate
		National Goal of Net Zero by 2050 In response to the country's future commitment towards the net-zero goal, the power structure will increase low-carbon and renewable energy, which may lead to electricity price hikes in the future, resulting in increased production costs.	Direct operations	3-5 years	Possibility	Extremely low	Low
		Regulatory Requirements by the Taiwan Stock Exchange In response to the FSC's "Sustainable Development Roadmap for TWSE-/TPEx-Listed Companies," the Company must also commission a consulting firm to assist with greenhouse gas guidance and annually request a third-party organization for verification; otherwise, the Company will be subject fines.	Direct operations	Within 1 year	Likely	Extremely low	Low
	Technology and science	Innovation and Technology Development If new products fail to meet customer specifications for energy consumption in next-generation low-carbon products, this will result in declining revenue for the product line and potentially render development costs unrecoverable.	Direct operations, customers	4-10 years	Unlikely	Extremely high	Moderate
	Reputation	Increased Negative Stakeholder Feedback Customers in the value chain periodically conduct stakeholder material topic investigations, fill out social responsibility questionnaires, and sign the vendor code of conduct, requiring management of greenhouse gases and carbon footprint. If relevant indicators and actions are not incorporated into operational considerations, it may affect customer order demand, leading to decreased revenue for the product.	Direct operations, customers	3-5 years	Possibility	Low	Moderate

Types of Risks/Opportunities		Overview of Risks/Opportunities	Value Chain Segments Affected	Timeframe of Impact	Possibility	Potential Financial Impact	Risk/ Opportunity Level
Physical risk	Acute	Increased Frequency of Extreme Climate Events The supply chain is affected by extreme climate such as typhoons and flooding, impacting the plants, equipment operation and safety, leading to operational disruptions.	Direct operations, supply chain	3-5 years	Possibility	Low	Moderate
	Chronic	Rising Global Average Temperatures Climate change will life future average temperature, leading to increased electricity usage for chillers and air conditioners as heat load rises.	Direct operations	3-5 years	Possibility	Extremely low	Low
	Chronic	Unstable Power Supply The Company's servers are currently centralized in Hsinchu. If the government's energy policy leads to unstable power supply, and power rationing measures cause regional power outages, servers will not be operational.	Direct operations	3-5 years	Possibility	Extremely low	Low
Opportunity	Products and services	Increased Demand for Low-Power Consumption Products The Company's IC products are manufactured using advanced processes at wafer foundries, and optimized through the R&D team's design, effectively reducing the power consumption of IC products. This advantage is leveraged to expand into consumer markets such as the notebook market.	Direct operations, customers	4~10 years	Possibility	Extremely high	High
		Rapid Growth in Application of Driver ICs in New Energy Vehicles The global goal of net zero emissions by 2050 has driven countries to formulate carbon reduction policies, such as banning the sale of fuel vehicles and subsidizing electric vehicles, accelerating the development and adoption of electric vehicle technology. The Company is actively developing display and touch integration ICs (TDDI) for the automotive market, which helps simplify circuit design and shorten development time. For customers, it simplifies the supply chain structure and makes procurement more convenient, which helps increasing customer order demand.	Direct operations, customers	4~10 years	Likely	Extremely high	High

◇ Climate Risk Scenario Analysis

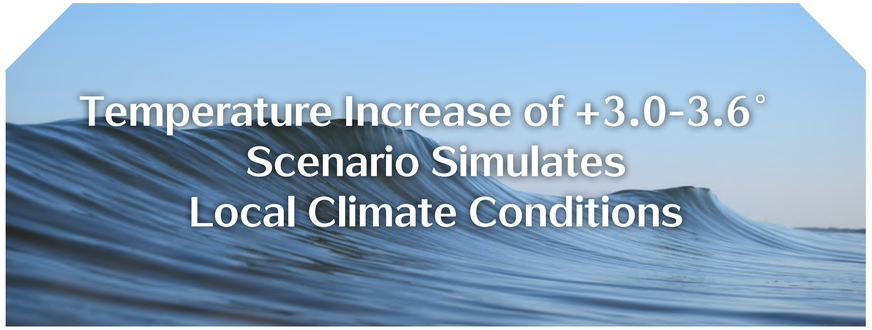
Based on TCFD guidelines, the Company utilizes the worst-case scenario faced by both transition and physical types of risks, incorporating analysis results into strategy resilience evaluation.

Transition risk: Referring to Taiwan's Pathway to Net-Zero Emissions in 2050 and its strategies, a carbon tax is set as a parameter. The analysis examines the impact on the Company's policy and legal, market, technology, reputation, financial, and operational aspects under a carbon tax scenario of NT$300 per tonnes.

Physical risk scenarios refer to SSP5 - 8.5, using the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP) and the National Science and Technology Center for Disaster Reduction, collecting the maximum daily high temperature (TXx) and the change in the total number of days per year with daily rainfall exceeding 200 millimeters as parameters to simulate the future climate conditions of the locations where operating sites are situated.

Evaluation Factors	Operating Region	Observation Base Period 1995-2014	2041-2060 Estimated Maximum Change
Maximum daily temperature TXx	Hsinchu	31.6°C	2.5°C
	Taipei	35.2°C	2.4°C
	Tainan	34.8°C	2.5°C
Average change in the total number of days per year with daily rainfall exceeding 200 millimeters	Hsinchu	0.8 天	0.5 天
	Taipei	0.8 天	0.9 天
	Tainan	0.9 天	1.3 天

Note: SSP emission scenarios: Depending on future socio-economic assumptions, emissions reduction level, aerosol pollutants and other factors resulting in different GHG emission levels can be simply divided into the following four representative scenarios from low to extremely high GHG emissions: SSP1-2.6 (low emissions), SSP2-4.5 (moderate emissions), SSP3-7.0 (high emissions), SSP5-8.5 (extremely high emissions).



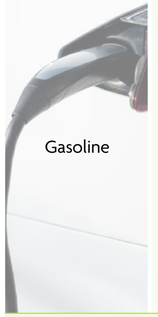
Evaluation Factors \ Operating Region	Hsinchu	Taipei	Tainan
Sea level rise	Not affected	Affected	Affected
Areas below the tidal line (at risk of flooding)	Not affected	Not affected	Not affected
Areas below the 2050 flood level	Not affected	Not affected	Not affected
Average drought duration	4 months	4 months	4 months

In addition, the physical risk scenario refers to a temperature increase of +3.0-3.6° C, using parameters collected by Climate Central and Carbon Brief such as sea level rise, areas below the tidal line (flood risk areas), areas below the 2050 flood level, and average drought duration to simulate the future climate conditions at operating locations.

4.3 Energy Management

In the IC design industry chain, ITH focuses on design, while wafer fabrication, assembly, and testing are done by external professional foundries. The Company's main energy usage is for office buildings and residential needs, with electricity being the largest component. The Company commits to continuously implementing energy-saving and carbon reduction solutions in the future. Current plans focus on energy-saving measures for air conditioning systems and chilled water pipelines, with the expectation of increasing the percentage of electricity savings in air conditioning systems to 30%. We will continue to utilize the EMS system for effective energy consumption management to improve energy efficiency.

◇ Electricity and Energy Usage of the Business Unit

Types of Energy	Source	Purpose	2022	2023	2024	Unit	Compared to 2023 (%)
 Purchased Electricity	Taiwan Power Company	Plant-wide electricity facilities	2,703,800	2,834,234	2,742,130	kWh	-3.3%
			9,733,680	10,203,242	9,871,668	MJ	
 Gasoline	Taiwan CPC Corporation	Company cars	1,512	1,332	916	Liters	-31.2%
				43,490	29,907	MJ	
Total (Total Energy Consumed)			9,783,047	10,246,732	9,901,575	MJ	-3.4%
Purchased Electricity/Total (Total Energy Consumed)			99.5%	99.6%	99.7%	%	-

Note 1: The conversion for electricity is 1 kWh = 3.6 MJ, and for gasoline is 1 liter = 32.65 MJ.
Note 2: The scope of data disclosure is ITH's headquarters in the Hsinchu Tai Yuen Hi-Tech Industrial Park, excluding other operating sites.

Performance of Energy Conservation and Carbon Reduction Projects

In 2024, the Company implemented the "Office Lighting Energy-Saving Improvement Plan," replacing the 1,011 original traditional T5 grille lamps, and fully introduced LED recessed panel lights, achieving the goal of 100% LED lighting equipment in office areas. The project invested a total of NT$1,550,000, which not only improved lighting quality and extended equipment life, but also resulted in significant energy-saving effects.

According to the 2024 electricity consumption data, the annual electricity usage of LED lighting equipment was 180,342 kWh, significantly reduced from 469,799 kWh before the replacement in 2022. The proportion of lighting electricity in the overall energy consumption also decreased from 17.4% in 2022 to 6.4%, demonstrating a tangible energy saving rate of 5.3%. The implementation of this project effectively improved energy efficiency and reduced indirect carbon emissions, marking an important milestone for the Company in moving towards low-carbon operations.

Project Name

Office lighting energy-saving improvement plan

In 2024,

1,011

T5 fixtures were replaced, achieving the goal of full adoption of LED energy-saving lighting.

Cost Invested

NT$1,550,000

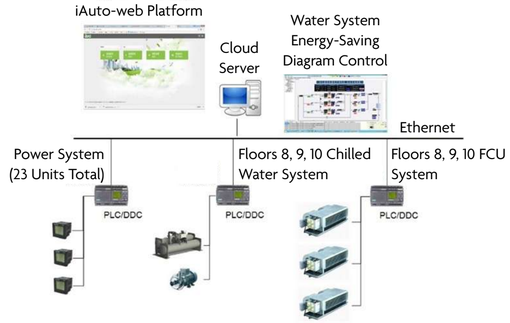
Year	Lighting specifications	Percentage	Electricity Usage	Total (kWh)	Lighting/ Total Energy Consumption	Energy-saving Benefits
2022	Traditional T5 grille lamps	100%	469,799	469,799	17.4%	0%
	LED recessed panel light	0%	0			
2023	Traditional T5 grille lamps	52.5%	246,576	332,265	11.7%	5.7%
	LED recessed panel light	47.5%	85,689			
2024	Traditional T5 grille lamps	0%	0	180,342	6.4%	5.3%
	LED recessed panel light	100%	180,342			

Energy Management Platform Construction for 2023-2024 Load Energy Consumption Database Establishment

Existing Air Conditioning Architecture

Server | PLC | Temperature Setting

Optimization of Air Conditioning Architecture



4.4 Greenhouse Gas Management

In the future, ITH will conduct a greenhouse gas emissions inventory within its operational scope and actively promote various energy conservation and carbon reduction solutions based on inventory results. This aims to minimize the impact on the earth's environment, continuously improve overall environmental performance indicators, and subsequently become a leader in sustainable development.

∵ Greenhouse Gas Inventory Method ∵

Organizational Boundary

Establish the organizational boundary content in accordance with the ISO 14064-1 standard and the EPA Greenhouse Gas Inventory Guidelines.

Type of Inventory

According to the greenhouse gases defined by ISO 14064-1, the inventory items include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), nitrogen trifluoride (NF_3), etc.

Inventory Timeline

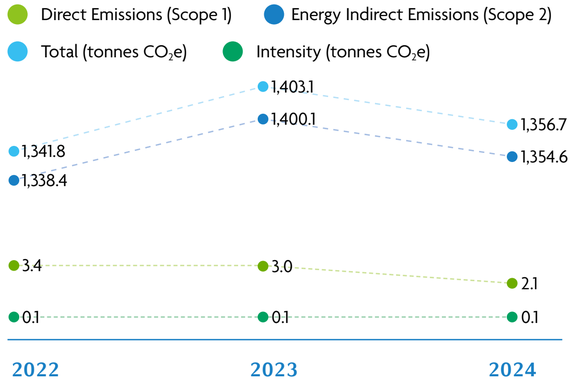
Starting from 2025, we consult external experts to conduct the greenhouse gas inventory for the headquarters.

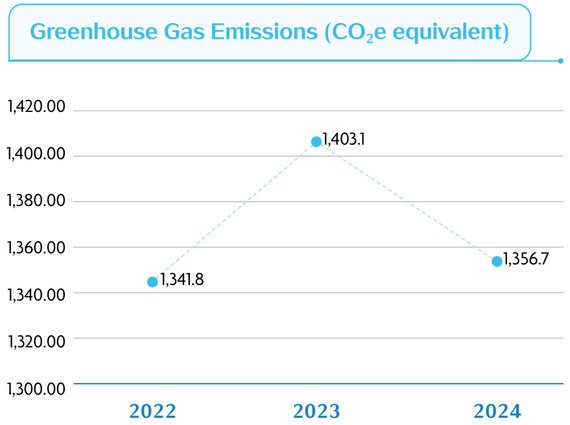
Calculation Method

According to the "Greenhouse Gas Emissions Inventory Guidelines" published by the EPA, we set the organizational boundary before conducting a greenhouse gas inventory, determine the scope of inventory, and identify emission sources, focusing primarily on direct emissions and emissions from purchased electricity.

We will collect annual usage data from various emission sources, such as purchase receipts for gas and natural gas, annual refrigerant refilling amounts, as well as electricity bills, and use carbon inventory estimation tools to calculate greenhouse gas emissions.

Greenhouse Gas Emissions





Note 1: The carbon emission factor for electricity in this table is calculated with reference to the annual carbon emission factors for electricity promulgated by the Bureau of Energy, Ministry of Economic Affairs; the carbon emission factor for oil is referenced from the Greenhouse Gas Emission Factor Management Table announced by the Environmental Protection Administration, calculated as 2.2631 kg per liter CO_2e of gasoline. Only carbon dioxide emissions are calculated, excluding methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, nitrogen trifluoride, and other greenhouse gases.

Note 2: Referencing the IPCC Fourth Assessment Report (2007), carbon dioxide was calculated using a GWP value of 1.

Carbon Reduction Plan

ITH has not yet conducted third-party verification of greenhouse gas inventory. In the future, verification will be completed in accordance with the timeline stipulated by the competent authority or earlier if needed, to enhance the transparency and credibility of information disclosure. To establish specific and feasible carbon reduction goals, the Company has commissioned a consulting firm to assist in conducting greenhouse gas inventory for each operating location, and is continuously planning verification operations to enhance the credibility of carbon emission data.

We plan to use 2025 as the baseline year to evaluate the replacement of major carbon-emitting equipment, implement an Energy Management System (EMS), upgrade air conditioning systems, and promote employee energy-saving initiatives. The goal is to reduce Scope 2 greenhouse gas emissions by 15% compared to the baseline year by 2030. In the future, strategies and carbon reduction goals will be adjusted on a rolling basis based on the completeness and accuracy of the inventory data to continually advance low-carbon operations.

Goal

Reduce Scope 2 greenhouse gas emissions by 15% compared to the baseline year by 2030.

4.5 Waste Management

Waste generated from ITH's operational activities is general municipal waste. Employees are encouraged to conduct waste sorting and recycling. The importance of waste recycling classification is continuously promoted to strengthen employees' awareness of waste recycling and reuse, thereby implementing waste management.

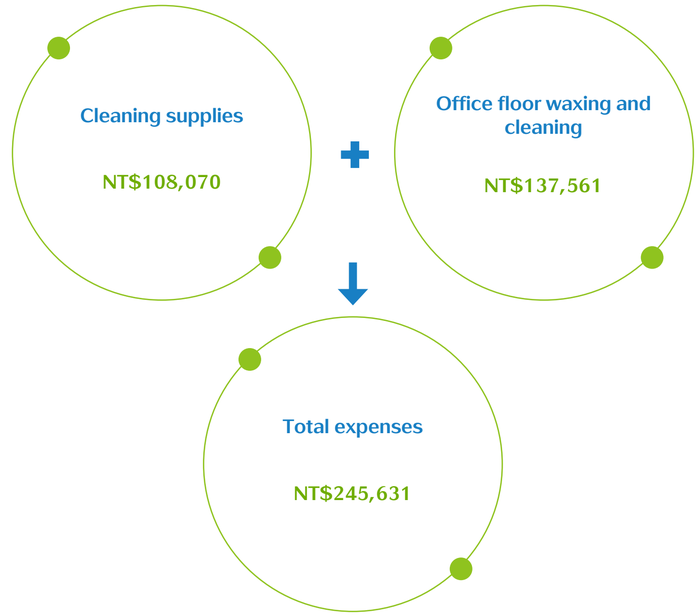
To achieve green operations, the Company is currently gradually going paperless. Internal systems are used for billing changes and signatures to minimize paper waste, implementing a policy to reduce paper usage. We also enhance the implementation of resource recycling management, limiting the use of paper products to the greatest extent possible without affecting operations. This aligns with international sustainable trends, fulfilling our responsibility and obligations as a corporate citizen and contributing to sustainable development.

Three-Year Waste Disposal Volume

Yearly Waste Statistics			2022		2023		2024	
Category	Types of Waste	Treatment Method	Processing Volume (tonnes)	%	Processing Volume (tonnes)	%	Processing Volume (tonnes)	%
General waste	Municipal waste	Incineration	6.2	60.6%	11.6	63.7%	11.9	63.1%
	Waste paper, waste iron, waste aluminum containers, waste lighting sources	Resource recycling	2.4	23.5%	3	16.5%	3.5	18.5%
	E-waste	Classification and recycling	0.1	1%	0.5	2.7%	0.2	1.1%
Industrial waste	Discarded electronic components	Outsourced treatment	1.5	14.5%	2.1	11.6%	3.1	16.5%
	Scrap and defective products			0.4%	1	5.5%	0.1	0.8%
Total			10.2	100%	18.2	100%	18.9	100%

Note 1: The scope of general waste data includes only the Hsinchu Tai Yuen headquarters.

Environmental Expenditures



4.6 Water Resource Management

The water resources for ITH primarily come from third-party suppliers, and most of the water is used in the public areas of the Tai Yuen Technology Park, which has water-saving mechanisms. These include rainwater harvesting for plant irrigation within the park, installation of dosing devices in cooling towers to reduce cleaning frequency, and the installation of water-saving devices throughout the park to prevent water wastage. The total water withdrawal in 2024 came in at 14.24 million liters. To enhance water resource use efficiency and reduce waste, we promoted the importance of reducing water waste through emails to colleagues, reinforcing the concept of water conservation among staff.

Total water withdrawal in 2024 was

14.6 million liters

∵ Two-Year Water Usage Data ∵

Year		2023	2024
Water Withdrawal (Unit: Megaliters)			
From third-party water supply	Tap water	6.61	6.88
	Others (air conditioning, shared public water)	6.99	7.36
Total water withdrawal		13.6	14.24
Water Discharge (Unit: Megaliters)			
Total water discharge		13.6	14.24
Water Consumption (Unit: Megaliters)			
Total water consumption (Total water withdrawal - Total water discharge)		0	0

Note 1: The scope of data disclosure includes only the Hsinchu Tai Yuen headquarters.