

5. Measures in Response to Climate Changes

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Davicom recognizes the potential impacts of climate change on its operating environment and has progressively advanced relevant management practices, with a particular focus on greenhouse gas (GHG) emissions inventories, energy conservation initiatives, and regulatory compliance. Through cross-departmental collaboration and resource integration, the Company strengthens its capacity to address climate-related risks while embedding climate considerations into its broader sustainability framework. These efforts are supported by continuous optimization of internal management processes and enhanced information transparency, thereby bolstering organizational resilience and adaptability.

5.1 Climate Action

In response to the challenges of global climate change, Davicom continues to advance climate action and is committed to reducing its environmental impact through concrete measures. Carbon inventory serves as one of the key management practices, enabling the Company to quantify and assess greenhouse gas emissions from various activities, evaluate reduction performance, and use the results as a basis for management. In addition, the Company promotes multiple sustainability strategies to reduce greenhouse gas emissions and fulfill its corporate environmental responsibilities. In 2017, the Company declared its R&D objective of improving energy efficiency in new products by 20%. Using 2021 as the baseline year, Davicom established reduction targets for 2022–2025: maintaining Scope 1 emissions at current levels, reducing Scope 2 emissions by 2% annually, cutting electricity consumption by 2% per year, lowering daily waste generation by 1 kilogram, and increasing packaging recycling and reuse rates by 3% annually. These initiatives are designed to drive comprehensive resource efficiency and enhance climate governance.

5.2 Greenhouse Gas (GHG) Inventory

Material Topic	Significance to the Company	Policy/Commitment	Short-term Goal	Mid- to Long-term Goals	1. Resources Invested / 2. Achievements	Responsible Department / Grievance Mechanism	Evaluation Mechanism / Outcomes
Emissions of greenhouse gases	GHG emissions are a principal driver of climate change and pose significant risks to corporate operations and supply chain stability. Effective carbon management not only supports regulatory compliance but also strengthens the Company's sustainability reputation.	Davicom is committed to conducting greenhouse gas (GHG) inventories in accordance with ISO 14064-1 standards and to progressively advancing carbon reduction initiatives. Through systematic emissions management, the Company seeks to mitigate the environmental impacts arising from its operations.	1. Completion of GHG inventory reports. 2. Establishment of a GHG emissions data management mechanism.	Verification of emissions results.	1. Execution of internal inventories. 2. Completion of the 2024 GHG inventory covering organizational boundaries (Scope 1 and Scope 2).	The Sustainability Task Force : aurora_lo@Davicom.com.tw	Reports inventory progress to the Board of Directors on a quarterly basis.

To proactively respond to global climate risks and increasingly stringent carbon management challenges, Davicom established a GHG Inventory Task Force in 2022. This task force promotes a systematic approach to GHG inventory and management in accordance with ISO 14064-1:2018 standards. Using the Company's geographic boundaries and adopting the principle of operational control to define its organizational scope, Davicom accounts for emissions generated by its Hsinchu headquarters as well as all entities included in its consolidated financial statements, thereby ensuring comprehensive oversight of GHG emissions across operations.

5.2.1 Greenhouse Gas Emissions – Scope 1 and Scope 2

In 2024, Davicom’s direct greenhouse gas (GHG) emissions (Scope 1) totaled 93.7000 tCO₂e, representing 19% of total emissions. The primary sources include refrigerators, water dispensers, and chillers—equipment essential for daily operations and employee needs. While the Company is committed to reducing energy consumption and related emissions, current technological maturity and operational considerations limit the availability of viable alternatives. Davicom will continue to monitor advances in energy-saving technologies and low-carbon applications, evaluating feasibility for future implementation to progressively reduce Scope 1 emissions. Scope 2 emissions, primarily from purchased electricity, amounted to 390.4479 tCO₂e.

GHG Emissions and Emission Intensity – Past Two Years

Category	Unit : tCO ₂ e	
	2023	2024
Scope 1 Emissions	87.7770	93.7000
Scope 2 Emissions	399.8872	390.4479
Total GHG Emissions	487.6642	484.1479
Annual Revenue (NT\$ million)	231.98	145.87
GHG Emission Intensity (Scopes 1 & 2)	2.1022	3.3190

Notes 1 : Conversion factors for direct GHG emissions are based on Version 6.0.4 of the GHG Emission Coefficient Management Table published by the Ministry of Environment.

Notes 2 : Global Warming Potentials (GWP) of various gases are adopted from the IPCC Sixth Assessment Report (AR6).

Notes 3 : Scope 2 emissions for 2024 were calculated using the 2022 electricity emission factor of 0.495 kgCO₂e for January–June and the 2023 factor of 0.494 kgCO₂e for July–December.

Notes 4 : Calculation formula for GHG emission intensity: Total GHG emissions (tCO₂e)/NT\$ million in revenue.

Notes 5 : Scope 1 and Scope 2 include the following gases: CO₂, N₂O, CH₄, HFCs, PFCs, SF₆, and NF₃.

5.2.2 Scope 3 Greenhouse Gas Emissions

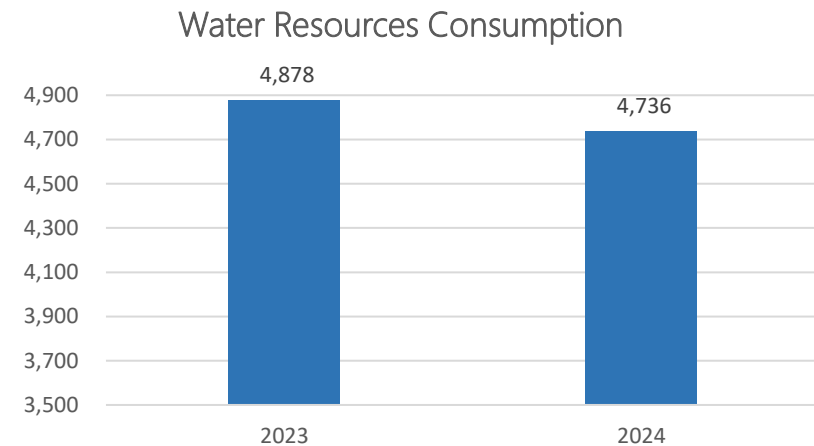
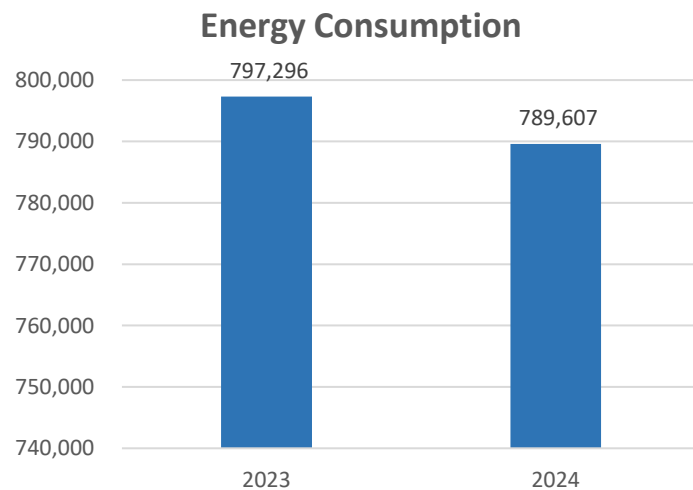
Scope 3 emissions are calculated across five categories: employee commuting, business travel, downstream goods transportation, waste treatment (general and industrial), and downstream leased assets. The GHGs considered include CO₂, N₂O, CH₄, HFCs, PFCs, SF₆, and NF₃.

In 2024, Scope 3 GHG emissions totaled 1,571.1060 tCO₂e.

5.3 Energy and Resource Management

As an IC design services company, Davicom’s energy use is mainly associated with office equipment. All energy consumed is derived from purchased electricity supplied by Taiwan Power Company (Scope 2), accounting for 100% of total energy consumption. Monthly consumption is monitored via independent electricity meters and recorded by the General Affairs Office. The total electricity consumption for 2024 was 789,607 kWh, representing a decrease of 7,689 kWh compared to 797,296 kWh in 2023.

Water usage at Davicom is primarily for employee daily needs—drinking, washing, and sanitation—with no process wastewater generated. The sole water source is the Taiwan Water Corporation, accounting for 100% of consumption. The Company does not operate in water-stressed regions and has no significant impact on water resources. All wastewater is classified as domestic sewage and is legally discharged through the public sewerage system in compliance with Hsinchu Science Park regulatory standards. The total water consumption for 2024 was 4,736 cubic meters, a decrease of 142 cubic meters compared to 4,878 cubic meters in 2023.



Note: Since all water usage is for domestic purposes, water withdrawal equals water discharge, and net water consumption is zero.

5.4 Water and Electricity Consumption, and Daily Management Measures

Energy Conservation and Carbon Reduction Measures

1. Adoption of variable frequency control in the air-conditioning system to improve energy efficiency and operational performance.
2. Optimization of corridor lighting by reducing the number of fixtures to lower energy consumption.
3. Adjustment of indoor air-conditioning temperature upward by one degree Celsius to enhance energy savings.
4. Turning off lights during lunch breaks or when leaving the office to conserve electricity.
5. Implementation of sun-shading and heat-insulation improvements (e.g., insulation films and curtains) in office spaces to reduce solar heat radiation, enhance cooling efficiency, and improve overall energy utilization.
6. Encouragement of employees to use stairs instead of elevators, promoting health while reducing energy consumption.
7. Advocacy for carpooling and eco-friendly transportation (e.g., bicycles) during labor-management meetings, birthday gatherings, and other events.
8. GHG Reduction Planning: Davicom has conducted a feasibility assessment of small-scale solar panel installation. In addition to ensuring elevator operation during power outages, the initiative aims to position the Company as an enterprise with self-owned small-scale renewable power generation capacity.

Water Resource Management

Although the Company's domestic water consumption at each operational site is limited, Davicom continuously promotes water-saving awareness and eco-friendly practices among employees to reduce waste and enhance resource efficiency. Measures include:

Rainwater harvesting and RO (reverse osmosis) treatment for reuse.

Application of treated water for landscape irrigation, thereby improving water resource utilization and contributing to energy efficiency.

5.5 Waste Management

As an IC design company, Davicom is responsible for chip design and sales only, with no manufacturing, packaging, or testing operations. The hazardous waste disclosed in this report does not originate from manufacturing processes but primarily consists of chip samples and defective IC products.

In compliance with environmental regulations, the Company submits monthly reports on waste generation and temporary storage to regulatory authorities, fulfilling its environmental management responsibilities.

For disposal, waste is managed according to generation and accumulation levels. All waste is processed through qualified waste management contractors under formal scrap disposal procedures.

2024 Waste Statistics Table

Unit: Metric Tons

Year/ Item	Hazardous Industrial Waste
2024	0.396

5.6 Carbon Footprint

Material Topic	Significance to the Company	Policy/Commitment	Short-term Goal	Mid- to Long-term Goals	1. Resources Invested / 2. Achievements	Responsible Department / Grievance Mechanism	Evaluation Mechanism / Outcomes
Carbon Footprint	Disclosing the environmental footprint of products helps enhance Davicom's reputation, attract sustainability-minded customers and investors, and foster cooperation within the green supply chain.	Demonstrates the Company's environmental responsibility and strengthens its social image.	In 2024, Davicom focused its resources on evaluating controllable scope carbon emissions, which serves as the foundation for comprehensive disclosure.	Davicom is committed to achieving comprehensive disclosure of the carbon footprint of all products.	1. Resources were primarily focused on inventorying Davicom's controllable scope of carbon emissions. 2. Specific achievements include data collection, analytical reporting, improved transparency, and policy recommendations.	Sustainability Task Force : aurora_lo@Davicom.com.tw	1.. Establish clear carbon emission standards and guidelines. 2. Encourage adoption of green technologies. 3. Promote transparency in disclosure. 4. Strengthen monitoring and regulatory mechanisms.

The product environmental footprint refers to the total environmental impact of a product throughout its life cycle—from production and use to disposal and recycling—including energy and resource consumption, greenhouse gas emissions, water and air pollution, and land use.

As an IC design company, Davicom develops chips that serve as key components in networking devices and digital infrastructure. Since all manufacturing processes (fabrication, packaging, and testing) are outsourced, the environmental footprint of Davicom's products primarily arises from outsourced activities, including raw material extraction, manufacturing, packaging, and transportation.

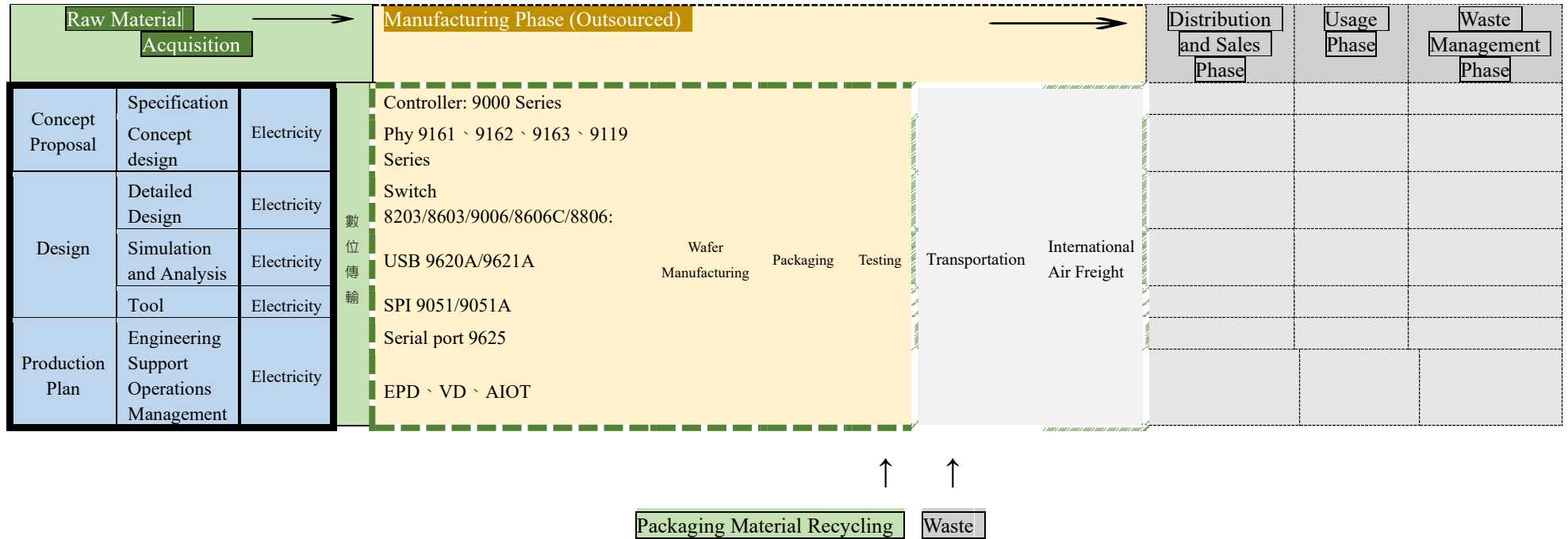
Currently, suppliers (foundries, packaging, and testing providers) have not provided specific and transparent carbon footprint data. Therefore, the Company's disclosure of product carbon footprint is limited to short-term targets, which will serve as the foundation for future comprehensive product-level carbon footprint reporting. Reducing natural resource consumption and actively developing energy-saving products are central to Davicom's sustainability goals. In 2024, Davicom introduced the new SPI to Ethernet MAC Controller DM9051ANX-E2, which demonstrated significant improvements in energy efficiency compared to the previous model DM9051NP-E2. The operating current was reduced from 160mA to 60mA, representing a 62.5% decrease in power consumption, achieved through a design transition from 0.18μm current mode to 0.11μm voltage mode. In addition, the chip die area was reduced by 57.6%, further contributing to resource efficiency.

SPI to Ethernet MAC Controller DM9051ANX-E, compared with the DM9051NP-E2, has an operating current of 60mA vs. 160mA, reducing power consumption by 62.5% (design mode changed from 0.18μm current mode to 0.11μm voltage mode).



Product Carbon Footprint: B2B (Cradle to Gate)

Process Map



Raw Material Acquisition Phase - Utilization of energy and resources

Category	Data on activities	Emission Factor	Carbon emissions (tCO ₂ e)
Power Consumption	789,607 kWh	9.73E-2 kgCO ₂ e	768.29
Water Consumption	4,736 cubic metre	2.33E-1 kgCO ₂ e	1.10
Total			769.29

Cargo distribution

Category	Data on activities	Emission Factor	Carbon emissions (tCO ₂ e)
International air freight	201,420 t/Km	1.16E+0kgCO ₂ e	233.65
Category	Data on activities	Emission Factor	Carbon emissions (tCO ₂ e)
The Transportation of Domestic Processing	7,120.5 t/Km	1.16E+0kgCO ₂ e	8.30

Disposal of wastes

Category	Data on activities	Emission Factor	Carbon emissions (tCO ₂ e)
General waste incineration	23.310Kg	3.40E+2 kgCO ₂ e	7.93
Industrial waste disposal	396Kg	2.90E-1 kgCO ₂ e	0.11
Total			8.04

Recycling and reuse

Category	Data on activities	Emission Factor	Emission reduction (tCO ₂ e)
PPE Recycle (4,061pcs)	271Kg	1.95E+0 kgCO ₂ e	0.53
Cardboard recycling (1,460pcs)	373Kg	1.69E+0 kgCO ₂ e	0.63
Total			1.16

Distribution

Carbon Footprint (tCO ₂ e)		Controller	Phy	Switch	USB	SPI	Serial	EPD、VD、AI SoC
Energy and resources acquisition phase	769.29	153.63	332.70	48.10	69.16	120.70	2.15	42.85
Manufacturing Phase - Waste	8.04	1.61	3.48	0.50	0.72	1.26	0.02	0.45
Distribution and Sales Phase	16.40	3.28	7.09	1.02	1.48	2.57	0.05	0.91
Recycling and reuse	(1.16)	(0.23)	(0.50)	(0.07)	(0.10)	(0.18)	(0.01)	(0.07)
Product Environmental Footprint	792.57	158.29	342.77	49.55	71.26	124.35	2.21	44.14

Note: The product environmental footprint allocation ratio is based on the production quantity of each product type as shown in the table below.

Product	Proportion (%)
Controller 9000	19.97
Phy 9161、9162、9119	43.26
Switch 8203、8603、8606	6.24
USB 9621、9620	8.99
SPI 9051	15.69
Serial port 9625	0.28
EPD、VD、AI SoC	5.57