Environmental and Sustainable Development

1 Environmental Polices and Management

2 Climate Change and Carbon Management

3 Water Management

4 Waste Management

5 Air Pollution Management

Environmental and Sustainable Development

1. Environmental policy and management objectives

The company upholds the principle of environmental sustainability, implementing eco-friendly actions and establishing an environmental management policy to mitigate ecological impact and promote the health and well-being of current and future generations.

The environmental management system is built in accordance with the ISO 14001:2015 standard, covering the environmental impact of organizational operations, products, and services. It also integrates EcoVadis environmental assessment indicators to continuously promote energy conservation, carbon reduction, and management improvement.

The management scope includes raw material procurement, manufacturing processes, products, services, and waste disposal, ensuring compliance with regulations and minimizing environmental risks. In 2024, all facilities complied with local regulations, with no environmental violations reported.

Environmental policy

1. Implement environmental management and comply with regulatory requirements.
2. Promote energy conservation and waste reduction to prevent environmental pollution.
3. Strengthen safety and health and protect the environment.
4. Committed to continuous improvement and creating a quality environment.

Eris's short, medium and long-term performance and goals for energy conservation, carbon reduction, waste reduction and green energy since 2021

Category	2021	2022	2023	2024	2025 Short distance	2030 Medium distance	2040 Long distance	Category
Save electricity (kwh/KK)	13.063	11.751	12.741	12.796	12.668 (Reduce 1%)	11.800 (Reduce 10%)	10.500 (Reduce 20%)	
Save water (tonne/piece)	0.380	0.340	0.380	0.183	0.181 (Reduce 1%)	0.165 (Reduce 10%)	0.146 (Reduce 20%)	
Waste reduction (tonne/KK)	0.036	0.002	0.006	0.0083	0.0082 (Reduce 1%)	0.0079 (Reduce 5%)	0.0075 (Reduce 10%)	
Green energy (degree/year)	0	0	0	0	0	1,063,950 (Usage amount5%)	2,127,900 (Usage amount10%)	

Note: In June 2024, the subsidiary YeaShin Technology completed the acquisition of the Keelung Branch of Luxembourg-based Diodes International Co., Ltd. (YS-Keelung), which officially became part of the Eris Group's operations. To comply with the Financial Supervisory Commission's requirement for consolidated subsidiaries to complete inventory checks by 2027, company management has decided to initiate a group-wide organizational greenhouse gas inventory in 2025. (The verification has already been completed by the third-party DNV verification agency, and a reasonable assurance statement has been obtained see page 101.) 2024 will serve as the base year, and the company will begin improvement efforts for group carbon emissions accordingly.

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2. Climate change risks and carbon management

Climate change and global warming are challenges that the global community must face squarely. Physical risks such as floods, droughts, heavy rains, rising sea levels, and wildfires caused by extreme climate will pose serious threats to human life and property in the foreseeable future. Climate change has inevitably impacted human daily life and Economic activity. As a corporate citizen, Eris continues to improve climate resilience through risk analysis, controlling greenhouse gas emissions and taking specific actions to face the challenges of future climate issues and strive to move towards a low-carbon and sustainable home. At the same time, Eris responded to the international carbon reduction trend and referred to the "Task Force on Climate-related Financial Disclosure (TCFD)" issued by the Financial Stability Board (FSB) as an enterprise facing As for the framework of climate change issue management and information disclosure, the management mechanism, response measures and implementation status are further explained below.

2.1 TCFD disclosure structure and Eris management practices

Governance	● In order to deepen climate governance, Eris uses the board of directors as the highest supervisory unit on climate issues, coordinating the overall climate strategy and supervising the implementation of climate-related risk management and key performance by senior managers. Every year, through comprehensive assessment and analysis of various risk scenarios, including climate, we develop response and adaptation strategies to ensure that climate issues are included in the perspective of senior management and managed prudently. ● The corporate governance director serves as the convener, and the members are composed of heads and representatives of various departments and business units. Its execution work is that the sustainable group working group is responsible for promoting company policies and related work plans, developing adaptation strategies and action plans, and regularly reporting implementation results to the Board of Directors.
Strategy	● The company defines the short term as the next 3 years, the medium term as the next 10 years, and the long term as the next 10 years or more. ● Analyze the impact and contribution of climate change risks and opportunities to operations based on the TCFD framework. ● Conduct climate risk analysis based on different scenarios and conduct physical scenario assessment based on the RCP8.5 high carbon emission scenario of the AR5 assessment report released by the IPCC.
Risk Management	● Identify the policies, regulations, market and technological changes, goodwill and substantive risks that may arise under different scenarios and conduct risk and opportunity analysis respectively. ● Relevant departments participate in discussions to plan adjustments and mitigation strategies for major risks and report the overall assessment results to the Risk Management Committee and the Board of Directors. ● In the future, the supplier code of conduct will be revised to add requirements for disclosure of carbon inventory information.
Metrics and Goals	● We have established management indicators for assessing climate-related risks and opportunities, including water consumption, greenhouse gas emissions, and the proportion of renewable energy used. ● We have organized a boundary-based carbon inventory, with 2024 as the base year, to begin improving the Group's carbon emissions. Going forward, we will expand the inventory to categories three through six annually to provide comprehensive carbon emissions information. ● We have established key climate targets and KPIs for greenhouse gas, renewable energy, and water reduction through 2030.

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2.2 Climate change risk assessment and management

2.2.1 Climate Risk Assessment Management Process

In terms of process, the company refers to the TCFD framework to identify climate change risks and opportunities, and develops response measures and target plans, hoping to reduce the impact of climate change risks on corporate operations. For climate risk identification and assessment, the Sustainability Integration Working Group and the Environmental Security and Supply Chain Group refer to the TCFD climate-related financial disclosure recommendations and draw up a list of climate change risk topics through meeting discussions and one-on-one interviews. Then set the future climate scenario conditions, analyze the relevant risks faced by the future test through risk identification, conduct a qualitative or quantitative analysis of potential medium and high-risk projects, evaluate the degree of impact these risks may have on the financial aspect, and then Draw a climate change risk matrix based on "impact/correlation degree" and "possibility of occurrence/time" to complete the significance assessment analysis. For major climate risk issues, after evaluating existing climate adaptation measures, new response measures and adaptation plans will be proposed to address deficiencies for continuous improvement.

2.2.2 Climate scenario setting and impact analysis

In order to clarify the short, medium and long-term risks that climate change may cause, the company will conduct the second climate change risk assessment in 2023 with reference to the climate risk categories recommended by TCFD. Through setting future climate scenarios, the company will further analyze the possible risks that the company's future operations may face. related risks.

1) Transformation risk: The company refers to the International Energy Agency (IEA WEO 2021) report and sets the future basic scenario as "global temperature rise of 1.5℃", with a time scale of 2030, and then evaluates the risks it may face under future climate scenarios based on the attributes of each risk event.
2) Physical risks: In order to cope with the most serious climate disaster that may occur in the future, refer to the RCP8.5 high carbon emission scenario of the AR5 assessment report released by the "Intergovernmental Panel Climate Change (IPCC)". Through the collection of disaster potential maps and related research data published by the National Disaster Prevention and Technology Center, three climate disaster scenarios such as "flooding", "drought" and "high temperature" were set, and based on the climate disaster "Probability of Occurrence", "Potential Scale" and "Possible Occurrence Situations in the Factory" to assess the physical risks that may be faced under future climate scenarios.





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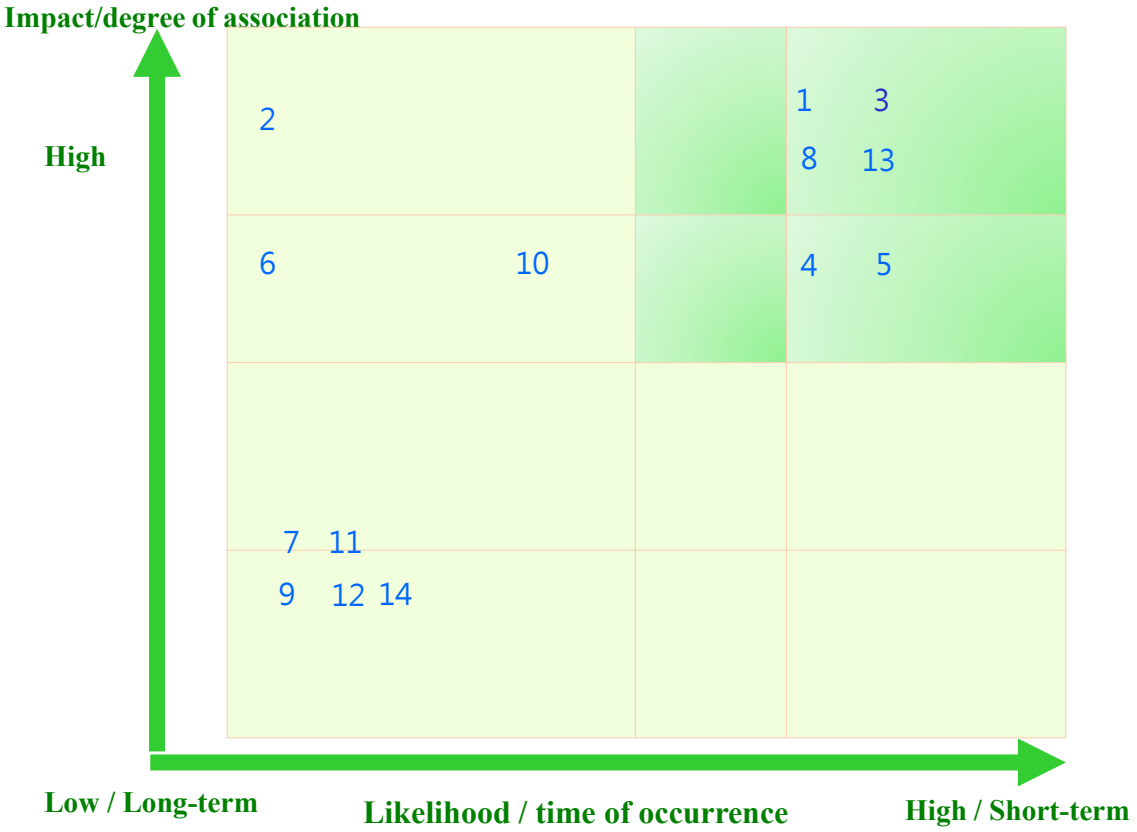
2.2 Climate change risk assessment and management

2.2.3 Climate change major risk matrix

This assessment focused on 5 major risks from 14 climate risks. Among them, transformation risks include: "carbon fee collection", "renewable energy proportion requirements" and "low-carbon technology transformation"; the physical risk is "the impact of unstable water supply" "Influence on production" and "Increase in electricity prices resulting in increase in electricity costs", and identify opportunities for expansion of climate change from risks, formulate adjustment strategies and goals, and hope to reduce the negative impact that climate change may have on corporate operations. The identification results and countermeasures are described on the following page.

Category		Risk Items
Transfor-mation risk	Policies and regulations	1.☆ Carbon fee collection 2. Carbon emission control 3.☆ Renewable energy proportion requirements 4. Increased corporate climate-related information disclosure requirements
	Goodwill	5. Customer demand for continuous verification will increase in the future
	Technology	6. The popularity of electric vehicles increases 7. Global demand for energy storage rises 8.☆ Low carbon technology transition
	Market	9. Fossil fuel prices rise 10. Changes in demand for copper foil 11. Renewable energy demand and price changes
Physical risks	Immediacy	12. Drought - unreliable water supply impacts production 13. ☆ High temperature - Rising electricity prices lead to higher electricity costs 14. High temperature - Unstable power supply affects raw materials that need to be stored at low temperatures



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2.3 Climate change risks, opportunities and potential financial impacts

Category	climate change risks	Risk occurrence time	Impact	Countermeasures
Policy regulations	Carbon fee collection	Short term	• When carbon emissions exceed the collection threshold, carbon fees or other external taxes will be levied, which will increase the company's operating costs.	1) Continue to track the status and trends of legal amendments and assess possible impacts. Response strategies have been formulated to ensure that the company's operations comply with relevant legal requirements. 2) Understand carbon emissions through greenhouse gas inventory as a basis for evaluating energy-saving and carbon-reducing action plans. 3) Promote energy conservation and carbon reduction measures and replace energy-consuming equipment to improve energy efficiency. 4) We will continue to evaluate whether the rooftops in the factory are suitable for installing solar power generation equipment, and strive to increase the proportion of renewable energy use. 5) Develop and apply existing technologies in low-power, high-efficiency energy-saving products to comply with future market development trends. 6) Look for alternative sources of raw materials to mitigate the impact of rising costs. 7) Develop contingency guidelines for a continuous operations plan to facilitate the activation of a continuous operation mechanism when an emergency occurs to reduce the possibility of operational interruption and losses. 8) Gradually establish a green supply chain.
	Renewable energy proportion requirements	Short term	• Building renewable energy and hydrogen energy equipment, purchasing renewable energy certificates or paying fees will increase operating costs.	
Technology	Low carbon technology transition	Short、Mid.、Long Term	• In order to achieve emission control targets, energy conservation and carbon reduction are required, such as the replacement of energy-consuming equipment or the purchase of carbon reduction equipment, which will increase operating costs. • Failure to keep pace with the times may affect customers' willingness to cooperate in the future.	
Immediate	High temperature - Rising electricity prices lead to higher electricity costs	Short、Mid.、Long Term	• Rising temperatures have increased the demand for electricity in factories, resulting in higher electricity costs. • The rise in international fuel costs has led to an increase in electricity prices, which will increase the cost of electricity purchase.	
Category	Opportunities for climate change expansion		Impact	
Energy source	Expand the use of renewable energy		✓ Setting up renewable energy equipment can reduce the need for purchased electricity and reduce the cost of purchased electricity. ✓ The use of renewable energy increases the diversity of electricity sources and reduces the risk of increased electricity costs caused by rising international fuel prices.	
Toughness (resource efficiency)	Improve energy efficiency		✓ Improving energy efficiency can reduce greenhouse gas output and enhance the market competitiveness of the company's products. ✓ Replacing old, energy-consuming equipment can reduce electricity costs. ✓ Reducing greenhouse gas emissions reduces operating costs due to carbon fees.	
Market	Obtained sustainability-related management system certification		✓ In line with customers' expectations for sustainable development (ESG) and satisfying customer needs, we can create good cooperative relationships and win cooperation opportunities with potential new customers.	

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2.4 Mitigation and Adaptation to Climate Change

2.4.1 Greenhouse Gas Inventory

Greenhouse gas reduction is the main method to mitigate climate change and global warming, and greenhouse gas inventory can be used as a basis for evaluation and continuous improvement of reduction plans. In order to review the effectiveness of greenhouse gas emissions and energy reduction measures, Eris will conduct an independent inventory of greenhouse gas emissions statistics for the first time in 2021, regularly track and control the implementation of measures, and review specific results. The scope 1, 2 and 3 of Eris's greenhouse gas emissions are classified according to the greenhouse gas inventory work of the Environmental Protection Agency of the Executive Yuan:

- Category 1 refers to the direct emissions from each factory. The sources include fuel combustion used by stationary emission sources (for example: diesel used in emergency generators), fuel combustion used by mobile emission sources (for example: used by official vehicles, trucks and forklifts). Diesel), or other activities and fugitive emission sources (such as fire-fighting equipment, septic tanks and refrigerant spills). The types of greenhouse gas emissions are carbon dioxide, methane, nitrous oxide and hydrofluorocarbons.
- Category 2 is indirect emissions between purchased electricity, and the main greenhouse gas emissions are carbon dioxide.
- Category 3 is other indirect emissions, which refers to other indirect emissions caused by emissions from sources that are not owned or controlled (for example, due to leasing, outsourcing, employee commuting, etc..

Eris conducted its own inventory in 2022 and 2023, and outsourced the results of its Scope 1, Scope 2, and Scope 3 greenhouse gas inventory in 2024. The results are summarized in the following table:

Year	2022		2023		2024	
Inventory classification category items	Emissions	Density	Emissions	Density	Emissions	Density
scope 1 (tonne)	70.360	0.0323	55.010	0.0316	35.8636	0.0135
scope 2 (tonne)	11,268.750	5.1763	9,818.740	5.6450	8,578.0099	3.2291
scope 3 (tonne)	5.810	0.0027	5.810	0.0033	12,733.0764	4.7932
Annual total carbon emissions (tonne)	11,339.110	5.2113	9,873.750	5.6799	8,613.873	3.2425
Diode output (kk)	1,884.000	-	1,560.000	-	1,413.000	-
Product unit carbon emissions (tonne/KK)	6.022	-	6.333	-	6.061	-
Output value(million NT$)	2,177.617	-	1,739.368	-	2,656.509	-

In line with the Financial Supervisory Commission's requirement for consolidated subsidiaries to complete greenhouse gas inventories by 2027, Eris will launch its group-wide inventory in 2025. As the initial voluntary inventory did not fully cover all boundaries and organizational processes, the company has engaged the National Taiwan University of Science and Technology to conduct a more comprehensive inventory. This initiative will apply the latest international standards and scientific methodologies to ensure results meet the principles of completeness, relevance, consistency, transparency, and accuracy. Using 2024 as the base year, Eris has also established a Greenhouse Gas Inventory Operating Procedure and will target carbon emission hotspots across its sites to drive environmental protection, energy efficiency, and sustainable development.

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2.4 Climate change mitigation and adaptation

2.4.2 Energy management

Climate change poses an increasing threat to the environment, human survival and national security. In response to the global response to net-zero emissions, the government has formulated legal requirements and provided incentive programs to encourage enterprises to transform their energy sources and promote energy conservation policies to align with the international trend of green supply chains. Eris had manufacturing production lines in Taiwan, and the main energy used is mostly production equipment and factory facilities. In order to implement energy conservation and carbon reduction, Eris starts from three aspects, including: (1) Implementing replacement of high-efficiency equipment in the factory to improve energy Utilization rate; (2) Establish an energy management system and do a good job in monitoring and management; (3) Implement active energy conservation, starting from carbon reduction life measures, and implement energy conservation and carbon reduction into the company's daily operations to achieve the most efficient use of energy. state.

Equipment aspect	Systems aspect	Administrative aspect
• Inventory of energy-consuming equipment • Implement equipment inspection and maintenance • Eliminate energy-consuming equipment and replace them with high-efficiency equipment	• Build energy management system • Implement monitoring and verification • Leverage data to provide recommendations for optimal equipment operation	• Develop energy saving plans • Promote and promote the implementation of specific actions

2.4.3 In the administrative office area

Implement the following energy-saving solutions:

1. Elevator lobby: After get off work, all lights in the elevator lobby must be turned off.
2. In the corridors, library areas, leisure areas, etc. of the conference room, only necessary lighting lights are left during breaks, and other redundant lights are turned off first.
3. Energy-saving settings and night shutdown of computers and business machines. We also strengthen the publicity to encourage colleagues to turn off their personal computers and screens when they are off work, and fulfill their citizen's obligation to live an environmentally friendly and carbon-reducing life.
4. Promote colleagues to turn off lights to reduce energy consumption.
5. Use video conferencing systems to reduce carbon emissions and energy consumption caused by cross-factory transportation.

Environmental and Sustainable Development

2.4 Climate change mitigation and adaptation

2.4.4 In factory area

Saving energy not only helps reduce carbon emissions and the pollution sources caused by production to the environment but also reduces the company's costs. Eris is committed to investing in energy-saving operations in the factory, improving equipment efficiency through various improvements, and establishing energy management The system uses the analysis of power usage to adjust power consumption and actively reduce unnecessary energy losses in operations. Since 2020, the power consumption of Eris's production unit products has been decreasing year by year, effectively reducing energy use, achieving energy conservation and carbon conservation, and fully protecting Responsible for the environment and move towards green production.

Item	2021	2022	2023	2024
Electricity consumption (thousand kwh/year)	21,279	22,139	19,876	18,081
Diode output (kk)	1,629.00	1,884.00	1,560.00	1,413.00
Electricity consumption per unit product (kwh/KK)	13.06	11.75	12.74	12.80

Promoting Energy Conservation and Carbon Reduction Enhancing Production Efficiency

Year	key environmental issues	Items	Save power (kWh/ year)		Carbon savings (ton / CO2e)	
2022	Save power	Factory lighting replaced with LED lamps	12,693	kWh	6.4607	tCO2e
		Establish standard procedures for ice water machine control	374,503	kWh	190.6220	tCO2e
		Establish standard procedures for dryer control	1,130	kWh	0.5752	tCO2e
		800RT cooling water tower construction	234,753	kWh	119.4893	tCO2e
	Waste Reduction	Establish standard procedures for ice water machine control	224,780	KG	112.3900	tCO2e
Total carbon reduction for the year 2022					429.5372	tCO2e
2023	Save power	Wastewater Treatment Control Standard Procedure	98,024	kWh	49.8944	tCO2e
		The construction of a 500RT magnetic levitation chiller	578,160	kWh	294.2834	tCO2e
	Waste Reduction	Recovery and reuse of discarded carrier tapes	4,263	KG	2.1315	tCO2e
	Water Reduction	Condensate recovery and reuse	2,880	tonne	0.4493	tCO2e
Total carbon reduction for the year 2023					346.7586	tCO2e
2024	Save power	The construction of a 500RT magnetic levitation chiller	830,125	kWh	422.5336	tCO2e
		Operation efficiency of variable frequency air compressor	114,379	kWh	58.2189	tCO2e
	Waste Reduction	Waste Wood Recycling	7,665	KG	3.8325	tCO2e
		Recovery and reuse of discarded carrier tapes	140,600	KG	70.3000	tCO2e
	Water Reduction	Condensate recovery and reuse	1,335	tonne	0.2083	tCO2e
Total carbon reduction for the year 2024					555.0933	tCO2e
Total carbon reduction					1,331.3891	tCO2e

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2023 Energy Saving Project

To enhance energy efficiency, our company applied for the "Energy Performance Guarantee Demonstration Promotion Subsidy Program" promoted by the Ministry of Economic Affairs in 2023. This program aims to improve energy usage within the facility, with a commitment to achieve a reduction of at least 23.7% in energy consumption during the project period. We received a subsidy of NT$4,134,585.

Electricity consumption before and after improvements, energy savings, and energy saving rates

Improvement items	Description of Pre-Improvement Conditions	Description of Improvement Measures	Energy Savings Benefit Assessment
Air conditioning temperature controller	Currently, our factory and office primarily use air handling units and small cooling fans to meet indoor air conditioning needs. The indoor environment is maintained at a temperature of approximately 20–25°C, leading to high energy consumption from the air conditioning systems. Therefore, we plan to implement improvements to more effectively manage and reduce air conditioning energy consumption.	● After installation, it is a device that can provide indoor temperature control for a region or space: the measurement method is to add an air conditioning temperature controller to the air conditioning area, and use the temperature controller to manage and control the temperature of the air conditioning area to 26±1°C to maintain the optimal room temperature management, indirectly achieving the results of energy conservation and carbon reduction.	After installing the air conditioning temperature controller, conduct appropriate temperature management of the air conditioning area to maintain optimal temperature. According to the reference literature, raising the air conditioner temperature by 1°C can save approximately 1.5%~3.0% of energy. The energy saving rate of this project is estimated to be approximately 5.0%.
Enhancing the energy efficiency of the chiller system	Currently, our air conditioning system comprises three 300RT spiral chillers (including one backup unit), with an average efficiency rating of 0.78 kW/RT. The chilled water outlet temperature is set at 7°C, with a chilled water inlet/outlet temperature of 12°C/7°C, and the cooling water inlet/outlet temperature is 30°C/35°C. Due to the low efficiency of the current system, the energy consumption is higher than desirable, prompting us to plan for improvements.	● Replace one high-efficiency magnetic levitation centrifugal ice-water main unit 500RT×2, replacing the original spiral ice-water main unit 300RT×2 units. The expected average efficiency is 0.59kW/RT. It also has functions such as frequency conversion and stepless energy loading and unloading. The communication module can be connected to the central air-conditioning monitoring system planned to be expanded in this project to collect the relevant operating values of the ice water host and effectively manage the energy consumption of the air conditioner, so as to reduce the power consumption of the equipment and the demand for electricity, and effectively manage the energy consumption of the air conditioner able situation.	Replace equipment with frequency conversion and stepless energy loading and unloading functions, and collect data through the monitoring system to effectively manage energy consumption. By dividing the estimated energy savings by the energy consumption before improvements, the estimated energy saving rate of the project plan can be 24% to 30%.
Improving the energy efficiency of the air compressor	Currently, our air compressor system consists of four 100HP/10.6CMM compressors, with a supply pressure set at 8 kgf/cm². There is a 5 kW adsorption dryer installed at the backend, and the average efficiency is 8.89 kW/CMM. Due to the low efficiency, energy consumption is higher than desired, prompting us to plan for improvements.	● Replacement of a high-efficiency variable frequency screw air compressor 100HP × 1, with an expected efficiency of up to 7.06kW/CMM. It also has frequency conversion loading and unloading functions, and can be connected to the monitoring system planned to be expanded through the communication module to collect data. Relevant operating values of the air compressor and effective management of air conditioning energy consumption to reduce equipment power consumption and electricity demand, and effectively manage the energy consumption of the air compressor.	Replace equipment with frequency conversion and stepless energy loading and unloading functions, and collect data through the monitoring system to effectively manage energy consumption. By dividing the estimated energy savings by the energy consumption before improvements, the estimated energy saving rate of the project can be 15~20%.

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3. Water management

Water is an important natural resource for sustaining human activities and balancing ecology. Due to the pressure on water demand caused by global climate change and population growth, how to cope with the dilemma of water scarcity will be an important issue for future corporate operations. Eris upholds the spirit of environmental sustainability and uses 100% tap water and rainwater as water resources. There is no concern about geological subsidence caused by pumping groundwater. We strive to increase water resource utilization and wastewater recycling rates to reduce water usage.

3.1 Use of Water Resource

The company's water resources management policy is to implement water-saving measures to reduce water consumption per unit of product output and increase wastewater recovery rate. To achieve this goal, we design water-saving processes, recycle and reuse water resources, and combine them with high-efficiency water management to effectively reduce water consumption. Its management policy is explained as follows:

Management policy	Execution direction
Save facility water	1. Install water-saving devices on faucets or adjust water output to reduce water waste. 2. Strengthen maintenance of the air conditioning system circulation pipeline (water tower/drainage system). 3. Domestic sewage system, pipeline damage and leakage, comprehensive configuration of open pipe engineering. 4. If the cooling water tower is not shut down, clean the internal filter regularly.
Save production water	1. Setup a top-floor water tower water purification system: remove calcium and magnesium ions from the water to purify the water and extend the life and cleaning cycle of the air compressor coolers in the entire plant. 2. A water tower soft water system was added to purify the water quality of the water tower and extend the cleaning cycle of each condensation equipment. 3. The waterproof engineering configuration of the ultrapure water area allows every drop of water to be fully utilized.

Cooling water recovery system

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3.2 Wastewater Treatment and Resource Recycling

In 2021, Eris launched a wafer dicing wastewater recycling project, striving to save significant water costs annually. Through the water recycling system, production water from the production lines (primarily for water-intensive processes) is recycled and reprocessed to meet specific internal water recycling standards. This reduces the supply of raw water and significantly reduces water resources. As shown in the table below, from 2021 to 2024, unit water consumption (tons) decreased from 0.380 to 0.183, and unit wastewater output (tons/wafer) decreased from 0.315 to 0.102. (In 2024, through the consolidation of plant processes, wafer manufacturing operations were moved to the Yashin-Keelung plant.) Saving tap water and reducing wastewater consumption simultaneously reduces overall carbon emissions. The following is a comparative analysis of the relevant projects from 2021 to 2024:

Items / Year	2021	2022	2023	2024
Tap water (tonne)	113,408	101,170	81,306	50,377
Wastewater (tonne)	93,299	90,135	67,612	28,069
Wafer output (pieces)	296,506	295,137	211,564	274,609
Unit water consumption (tonne)	0.380	0.340	0.380	0.183
Unit wastewater output (tonne / piece)	0.315	0.305	0.319	0.102
Annual total carbon emissions (tonne)	**18.260**	**16.290**	**12.684**	**7.859**

Promote water-saving initiatives and sustainable use of resources.

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4. Waste management

Eris Technology's waste management focuses on waste reduction during the manufacturing process, then reuse, and finally treatment or disposal. In order to effectively clean up waste, improve environmental sanitation, and achieve resource utilization, stabilization, and harmlessness of waste, the company strictly abides by various waste-related laws and regulations and thoroughly implements the waste management system. Our main waste comes from packaging materials for incoming components. The classification of waste and individual treatment measures are explained as follows:

Items	Implementation
General garbage	For example, domestic waste in the office: The general affairs department will send personnel to collect it and place it in a storage location specified by the building management committee, and the building management committee will outsource the processing.
Specific garbage	Such as vinyl waste, etc.: After being piled up to a certain amount in a specific area of the park according to regulations, the manufacturer will be notified for recycling.
Containers, empty barrels	For example, empty tubes of tin paste, empty barrels of solvents such as propane bromide and IPA are stacked in a specific area of the warehouse in accordance with regulations. After a certain amount is reached, the manufacturer is notified for recycling.
Recyclable waste	Material personnel are responsible for consulting resource recyclers for processing scraps, while R&D personnel are responsible for consulting resource recyclers for mechanical processing scrap metal. Waste paper boxes, iron cans, aluminum cans, glass cans, metal hardware, dry batteries, waste 3C, fluorescent tubes, PET bottles, aluminum foil packages, gas cans, pesticide cans, PVC cans, etc. are classified and recycled according to the park.
Hazardous industrial waste	If the laboratory waste liquid, waste oil, etc. reaches a certain amount, the relevant units or general affairs personnel will find qualified manufacturers to deal with it.
Outsourcing waste removal operations	Records of outsourced waste disposal must be kept for at least three years for future reference.

Promote recycling initiatives to reduce environmental pollution.

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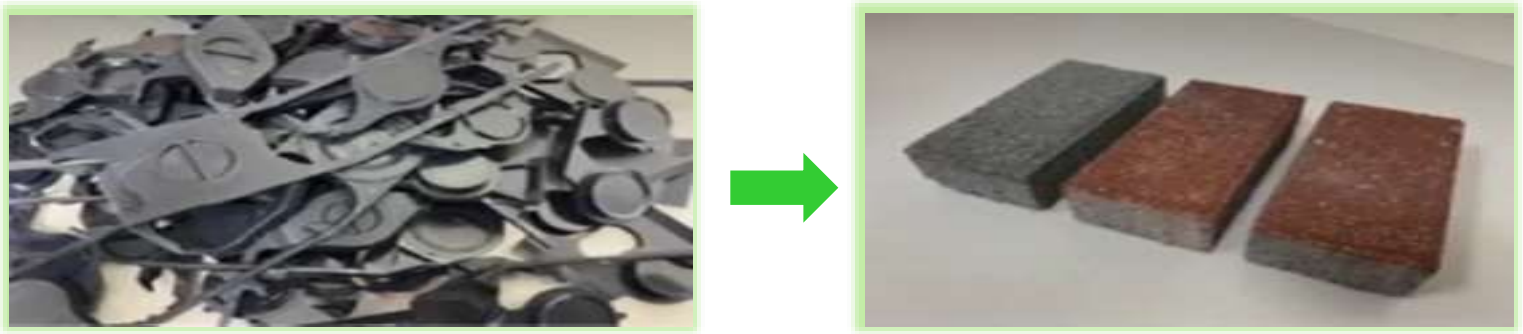
4.1 Waste film glue recycling

Eris is committed to selecting the most environmentally friendly production raw materials and avoiding secondary pollution. Therefore, we cooperate with Taiwan Cement to reuse the waste laminating glue produced from waste. The silica in the laminating glue can replace concrete. Based on the characteristics of some of the granular materials, we develop environmentally friendly bricks that can absorb moisture and convert waste into resources for recycling. The illustration is as follows:



4.2 Waste treatment and reuse in factory areas

The waste produced by the manufacturing process in Eris's factory is cleared and processed by qualified contractors. During the removal process, the removal route is confirmed through the GPS real-time tracking system.

Item / Year	2021	2022	2023	2024
Waste disposal volume (tons)	58.556	4.128	9.013	11.704
Amount of hazardous waste (tons)	1.66	2.56	2.38	3.79
Amount of waste reused (tons)	120.760	224.780	177.010	149.215
Total amount of waste (tons)	179.316	228.908	186.023	160.919
Waste recycling rate (%)	67%	98%	95%	93%
Diode output (kk)	1,627	1,884	1,560	1,413
Amount of waste per unit product (ton/KK)	0.0360	0.0022	0.0058	0.0082

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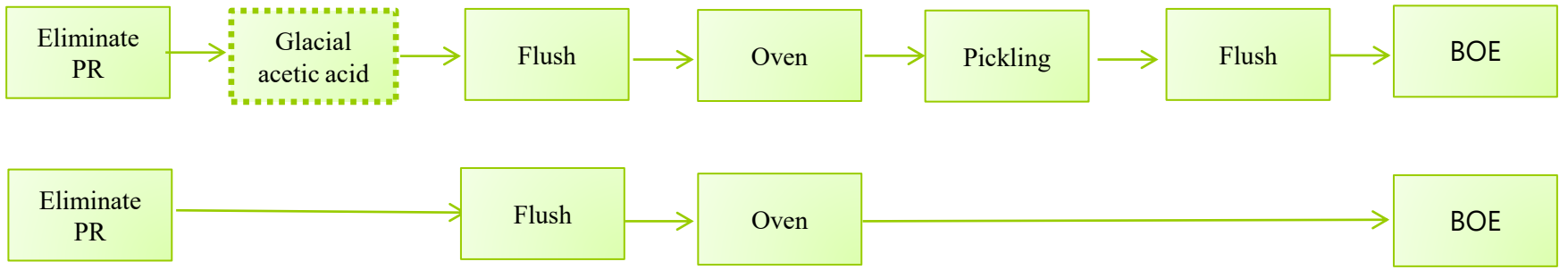
5. Air pollution management

Eris Technology's air pollution prevention strategy first focuses on rationalizing the process to reduce pollutants entering the waste, and secondly uses high-efficiency equipment to treat the pollutants in the waste. The final content of pollutants discharged into the atmosphere must be lower than or comply with government regulations. .In order to reduce the impact of exhaust gas emissions on the environment, the exhaust gas containing pollutants is sent to the central dust collection tower or activated carbon tower for treatment according to different attributes. The processing capabilities of the company's air pollution prevention equipment all comply with the "stationary pollution source air pollution" Relevant provisions of "Pollution Control and Emission Standards for Semiconductor Manufacturing Industry". Moreover, Eris is promoting an air pollutant reduction project to modify the product manufacturing process to remove glacial acetic acid used in the wafer manufacturing process, thereby reducing air pollution emissions. The treatment measures are explained as follows:

Active carbon tower

Dust collector tower



Schematic diagram of manufacturing process changes (pollutant reduction)

Appendix

1-1 Recent two years' greenhouse gas inventory and assurance status of the company.

1-1-1 Greenhouse Gas Inventory Information

Describe the greenhouse gas emissions for the past three years, including the total emissions (tCO2e), intensity (tCO2e / NT$ million), and the scope of data coverage.

Years	2022		2023		2024	
Inventory classification category items	Emissions	Density	Emissions	Density	Emissions	Density
Scope 1 (tCO2e)	70.360	0.0323	55.010	0.0316	35.8636	0.0135
Scope 2 (tCO2e)	11,268.750	5.1763	9,818.740	5.6450	8,578.0099	3.2291
Scope 3 (tCO2e)	5.810	0.0027	5.810	0.0033	12,733.0764	4.7932
Annual total carbon emissions (tCO2e)	11,344.920	5.2113	9,873.750	5.6799	8,613.873	3.2425
Diode output (KK)	1,884.000	-	1,560.000	-	1,413.000	-
Product unit carbon emissions (tCO2e/KK)	6.022	-	6.333	-	6.061	-

Note: Our company's greenhouse gas inventory organizational boundary is based on the operational control approach. The emission data for the past three years is as stated above. For detailed data and explanations, please refer to "6.2.4.1 Greenhouse Gas Inventory."

1-1-2 Greenhouse Gas Reduction Targets, Strategies, and Specific Action Plans

Describe the assurance status for the most recent three years, including the scope of assurance, assurance organization, assurance standards, and assurance opinions.

Please see the following page for the third-party verification statement for our greenhouse gas inventory.

Note 1: This should be carried out in accordance with the timeline specified in Article 4, Section 1, Subsection 3 of the operational guidelines.

Note 2: The assurance organization must comply with the relevant regulations set by the Taiwan Stock Exchange and the Securities and Futures Institute regarding sustainable report assurance organizations.

Note 3: The disclosure content can refer to the best practice examples available on the Taiwan Stock Exchange Corporate Governance Center website.

Appendix

1-2 Greenhouse Gas Reduction Targets, Strategies, and Specific Action Plans

Describe the baseline year for greenhouse gas reductions and its data, reduction targets, strategies, specific action plans, and the status of achieving the reduction targets.

Year	Environmental issue	Item	Target savings		Actual savings		Targeted carbon reduction		Actual carbon reduction		Achievement rate
2022	Saving energy	Factory lighting replaced with LED lamps	13,000	kWh	12,693	kWh	6.6000	tCO2e	6.4607	tCO2e	97.60%
		Establish standard procedures for ice water machine control	400,000	kWh	374,503	kWh	203.6000	tCO2e	190.6220	tCO2e	93.60%
		Establish standard procedures for dryer control	1,200	kWh	1,130	kWh	0.6000	tCO2e	0.5752	tCO2e	94.20%
		800RT cooling water tower construction	230,000	kWh	234,753	kWh	117.1000	tCO2e	119.4893	tCO2e	102.10%
	Reducing waste	Recycling of waste molding rubber	240,000	KG	224,780	KG	120.0000	tCO2e	112.3900	tCO2e	93.70%
Total carbon reduction for the year 2022									429.5372	tCO2e	95.9%
2023	Saving energy	Wastewater treatment control standard procedure	100,000	kWh	98,024	kWh	50.9000	tCO2e	49.8944	tCO2e	98.00%
		The construction of a 500RT magnetic levitation chiller	570,000	kWh	578,160	kWh	290.1000	tCO2e	294.2834	tCO2e	101.40%
	Reducing waste	Recovery and reuse of discarded carrier tapes	4,500	KG	4,263	KG	2.3000	tCO2e	2.1315	tCO2e	94.70%
	Saving water	Condensate recovery and reuse	2,800	tonne	2,880	tonne	0.4000	tCO2e	0.4493	tCO2e	102.90%
Total carbon reduction for the year 2023									346.7586	tCO2e	100.90%
2024	Saving energy	Wastewater treatment control standard procedure	840,000	kWh	830,125	kWh	427.6000	tCO2e	422.5336	tCO2e	98.8%
		The construction of a 500RT magnetic levitation chiller	120,000	kWh	114,379	kWh	61.1000	tCO2e	58.2189	tCO2e	95.3%
	Reducing waste	Waste wood recycling	8000	KG	7665	KG	4.000	tCO2e	3.8325	tCO2e	95.8%
		Recovery and reuse of discarded carrier tapes	141000	KG	140,600	KG	70.5000	tCO2e	70.3000	tCO2e	99.7%
	Saving water	Condensate recovery and reuse	1400	tonne	1335	tonne	0.2000	tCO2e	0.2083	tCO2e	95.4%
Total carbon reduction for the year 2024									555.0933	tCO2e	98.5%
Total carbon reduction									1,331.3891	tCO2e	98.3%

Note 1: The schedule shall be handled in accordance with the provisions set forth in Article 10, Paragraph 2 of these guidelines.
Note 2: The base year should be the year in which the consolidated financial report boundary is completed. For example, according to the order stipulated in Article 10, Paragraph 2 of these guidelines, companies with a capital of over NT$10 billion should complete the inventory of the consolidated financial report for the year 2024 by the year 2025.
Note 3: The disclosure content can refer to the best practice reference examples on the Taiwan Stock Exchange Corporate Governance Center website.

Appendix

DNV

Independent Verification Opinion

Verification Opinion No.: C782326-2024-AG-TWN-DNV
Issued Place and Date: Taipei, 18 August, 2025

This is to verify initiate reporting of Greenhouse Gas Inventory Management Report (2024) of

Eris Technology Corporation

Scope of Verification
DNV Business Assurance (DNV) has been commissioned by Eris Technology Corporation (hereafter "the Organization") to perform a verification of the greenhouse gas statements of Greenhouse Gas Inventory Management Report (2024) (hereafter the "Inventory Report") in Taiwan, R.O.C. with respect to the sites listed as below.

Site	Address
Eris Technology Corporation	6F., No.17, Lane. 155, Sec. 3, Beishen Rd., Shenkeng Dist., New Taipei City 222, Taiwan
Yea Shin Technology Co., Ltd.	No. 28-1, Wuxun St., Anle Dist., Keelung City 204, Taiwan
SeCoS Corporation	8F., No.33, Ln. 155, Sec. 3, Beishen Rd., Shenkeng Dist., New Taipei City 222, Taiwan

The Reporting Boundary for the verification including direct GHG emissions and removals and indirect GHG emissions from imported energy. The further descriptions for the Reporting Boundary listed in Appendix A.

Verification Criteria and GHG Programme
The verification was performed on the basis of Financial Supervisory Commission Sustainable Development Roadmap Scheme and ISO 14064-1:2018, CNS 14064-1:2021 as well as criteria given to provide for consistent GHG emission identification, calculation, monitoring and reporting. The verification was conducted in accordance with ISO 14066:2023, ISO 14065:2020, ISO14064-3:2019.

Verification Opinion
It is DNV's opinion that the Inventory Report (2024), which was published on August 05, 2025 (Ver. 1.4), is free from material discrepancies in accordance with the verification criteria identified as stated above. The opinion is decided based on the following approaches.

- For the Direct (Category 1) GHG emissions and Indirect GHG emissions from imported energy (Category 2), the reliability of the information within the Inventory Report (2024) was verified with reasonable level of assurance.

GHG Verifier :
Jia Hong Jesse Wu

Jam Chen

For the issuing office:
DNV Business Assurance Co., Ltd.

Management Representative

DNV

Supplement to Verification Opinion

Process and Methodology
The reviews of the Inventory Report and relevant documents, and the subsequent follow-up interviews have provided DNV with sufficient evidence to determine the fulfilment of stated criteria.

Quantification of Greenhouse Gas Emission
The Inventory Report covering the period 1st January, 2024 to 31st December, 2024, it is DNV's opinion that GHG emissions and removals identified within the Reporting Boundary has been included in the Inventory Report as claimed in accordance with the verification criteria identified as stated above, and results in quantification of GHG emissions that are real, transparent and measurable.

Organizational Boundary of Verification
☐ Financial Management Control; ☒ Operational Management Control; ☐ Equity Share

GHGs Verified
☒CO2 ☒CH4 ☒N2O ☒HFCS ☒PFCS ☒SF6 ☒NF3

Quantification of Emissions (in tonnes CO2e)
The Global Warming Potential (GWP) defined in IPCC AR6(2.0) (2024/8/7) has been chosen and correctly referred by the Organization.

Category	Eris Technology Corporation	Yea Shin Technology Co., Ltd.	SeCoS Corporation	Total
1: Direct emissions	35.8636	88.7090	6.0588	130.6313
2: Imported energy indirect emissions*	8,578.0099	9,412.3128	84.3377	18,074.6604
3: Indirect GHG emissions from transportation	Non-Significant			
4: Indirect GHG emissions from products used by organization	Non-Significant			
5: Indirect GHG emissions associated with the use of products from the organization	Non-Significant			
Emissions from Category 1 ~ Category 5	8,613.873	9,501.022	90.397	18,205.292

(*The Imported Energy Indirect Emissions was calculated based on 2024 electricity emission factor of 0.474 kg CO2e/kwh, which was announced by Energy Administration, Ministry of Economic Affairs.)

Type of Opinion
☒ unmodified ☐ modified ☐ adverse

The Appendix forms an integral part of this Certificate, which shall be invalid when used without the Appendix.
Lack of fulfilment of conditions as set out in the Verification Agreement may render this Verification invalid. This Verification Opinion is based on the information made available to us and the engagement conditions detailed above. Hence, DNV cannot guarantee the accuracy or correctness of the information. DNV cannot be held liable by any party relying or acting upon this Verification Opinion.
The issuing office : 29Fl., No. 293, Sec. 2, Wenhua Rd., Banqiao District, New Taipei City 220, Taiwan Tel.: +886-2-82537600. https://www.dnv.com/tw/
DNV ZNATW-OP-F50, Rev.14, 2025-03

Eris Technology Corporation

2024 Sustainability Report

http://mops.twse.com.tw/mops/web/index

http://www.eris.com.tw