

2025 TSEC SUSTAINABILITY REPORT

元晶太陽能

The operator's words 02

Editorial Policy 04

Sustainable performance 06

01 Sustainable performance stakeholder agreement 07

1.1 ustainable Development Committee 08
1.2 Identify stakeholders 10
1.3 Stakeholder communication channels and issues of concern 10
1.4 Identify major themes 13
1.5 Sustainable Development Goals 17

02 Regarding Yuanjing 19

2.1 Company Profile 20
2.2 Business Philosophy 22
2.3 Awards and Honors Over the Years and Management System 22
2.4 Participating in external organizations 23

03 Integrity Governance 24

3.1 Corporate Governance 26
3.1.1 Board of Directors 28
3.1.2 Functional Committee 30
3.1.3 Internal audi 32
3.2 Honest business practices 33
3.3 Risk Management 36
3.4 Economic performance 41
3.5 Innovative Research and Development of Green Products 44

04 Green and Sustainable 48

4.1 Climate-related financial disclosures 49
4.2 Energy Management 56
4.3 Greenhouse gas emissions 59
4.4 Water Resources Management 62
4.5 Waste Management 65
4.6 Supply chain sustainability management 68

05 Social care 72

5.1 Labor rights 73
5.2 Safe Workplace 85
5.3 Customer Relationships 90

Appendix 1 GRISustainable Reporting Guidelines Comparison Table 91
Appendix 2 Verification Statement 95
Appendix 3 Perpetual Accounting Standards (SASB) Comparison Table 97
Appendix 4 TCFDDisclosure Project Comparison Table 98
Appendix 5 Sustainability Disclosure Indicators – Optoelectronics Industry 98
Appendix 6 Climate-related news for listed and over-the-counter companies 99

-A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

The operator's words

As the challenges posed by global climate change intensify, achieving net-zero carbon emissions has evolved from a mere initiative into a matter of survival for nations and enterprises alike. Meanwhile, the rapid advancement of AI technology is driving explosive growth in future electricity demand. Balancing this massive demand with the goal of net-zero emissions makes the energy transition a critical issue for the sustainable development of both countries and businesses.

Reflecting on 2025, despite sluggish project deployment and challenges such as land consolidation, grid connection constraints, and global supply chain fluctuations, solar power remains the primary driver of renewable energy development in Taiwan. We welcome the progressive grid connection of large-scale solar projects and the steady advancement of rooftop and agrivoltaic/aquavoltaic initiatives. Looking ahead, as the demand for green energy surges—fueled by international supply chain requirements (such as RE100)—the solar industry is transitioning from a phase of capacity installation to a new era defined by high-efficiency performance and smart operations and maintenance.TSEC As a leading brand in solar module manufacturing and power plant development in Taiwan, we fully recognize the pivotal role we play in the nation's energy transition.

To align with international standards, the Taiwan government is actively advancing various ESG policy initiatives. From the implementation of the "Pathway to Net-Zero Emissions by 2050" and the official launch of the carbon fee system to the Financial Supervisory Commission's intensified promotion of the "Sustainable Development Action Plan for TWSE- and TPEx-listed Companies," it is evident that the nation is employing a dual approach—combining regulations with market mechanisms—to drive corporate green transformation.

In the face of these policy initiatives, TSEC has not merely responded passively but has taken a proactive approach. We firmly believe that meeting—or even exceeding—national ESG standards is not only a matter of corporate responsibility but also a core competitive advantage that strengthens our international competitiveness.

In alignment with national green energy and ESG policies, TSEC has established clear sustainability plans and goals for 2025:

E

Environmental Protection

We are dedicated to advancing the R&D of next-generation, high-conversion-efficiency modules; beyond increasing power generation per unit area, we have implemented low-carbon green manufacturing processes, committed to the year-over-year reduction of Scope 1 and Scope 2 greenhouse gas emissions, and actively optimized water resource and waste recycling management.

S

Environmental Protection

We regard our employees as our most valuable asset and foster a safe, diverse, and inclusive workplace; meanwhile, in developing solar projects, we are committed to mutual prosperity with local communities, actively implementing ecological conservation and community engagement initiatives.

G

Corporate Governance

Strengthen the Board of Directors' oversight of sustainability, enhance the transparency of information disclosure, and fully integrate climate change risks (TCFD) into the company's operational risk management framework.



TSEC Chairman of the Board

廖國榮

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

While solar photovoltaic (PV) energy is a high-quality, clean energy source, its intermittent nature requires us to adopt a broader perspective regarding the power grid. To achieve true sustainability, Yulon Solar's future will extend beyond the solar PV sector; the company is committed to transforming into a "comprehensive green energy solutions provider." Yulon Solar has initiated a diversified energy strategy:

01 Vigorously develop energy storage systems.

Leveraging Yulon's experience in solar project development, we are actively deploying large-scale grid-level and enterprise-grade energy storage systems (ESS). Through the integration of solar power and energy storage, we can not only assist in grid frequency regulation and peak-shaving/ valley-filling but also significantly enhance the stability and utilization efficiency of green energy supplies.





02 Pioneering the field of geothermal power generation

Geothermal energy is a form of baseload green energy capable of providing stable, 24-hour power generation, offering immense development potential for Taiwan—a volcanic island. TSEC plans to commit resources and form alliances with domestic and international technical partners to venture into geothermal exploration and development, thereby compensating for the intermittency associated with solar energy.

Through a strategic "golden triangle" configuration of solar power, energy storage, and geothermal energy, TSEC will be able to provide Taiwan with more stable, diverse, and flexible zero-carbon electricity.

Sustainable operation is not merely a slogan; it is a marathon requiring both perseverance and wisdom. Building upon its solid foundation in the solar photovoltaic sector, Yuanjing is boldly venturing into a diversified future that encompasses geothermal energy and energy storage. We extend our gratitude to all stakeholders for your continued support and trust, and we invite you to join us in working together to create a cleaner, better, and more sustainable Taiwan for the next generation.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

Editorial Policy

To pursue sustainable business operations and enhance information transparency, TSEC Corporation (hereinafter referred to as "TSEC") has published its 2025 Sustainability Report. Through this report, we aim to inform stakeholders of the measures taken and performance achieved—aligned with our sustainability goals—in areas such as establishing integrity-based governance, implementing environmental protection and occupational safety measures, and enhancing employee compensation and benefits. TSEC looks forward to the continued attention and valuable feedback of our stakeholders as we make significant strides on our journey toward corporate sustainability.

ESG Information Disclosure

Economic fundamentals	Group consolidated data
Environmental aspects	Head Office, Hsinchu Plant, Pingtung Plant
social aspect	Head Office, Hsinchu Plant, Pingtung Plant



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

Basis for Preparation and Method of Information Verification

- The structure of this report is based on the Global Reporting Initiative (GRI).(Global Reporting Initiative,hereinafter referred to asGRI)This report has been prepared in accordance with the GRI Stan-dards (2021 edition) and complies with the requirements of the "Regulations Governing the Preparation and Filing of Sustainability Reports by TWSE/TPEx Listed Companies." A GRI Standards content index is provided in the appendix for stakeholder reference, and there have been no restatements of information in this report.
- To enhance the quality of disclosure in this report, TSEC engaged GREAT Certification to conduct a Type 1 moderate assurance verification in accordance with AA1000AS v3. This process confirmed compliance with the GRI Standards (2021 update) and resulted in the issuance of a verification statement, which is included in the report's appendix for reference.

Issuance frequency

This is the fourth ESG report released by Yuanjing. Moving forward, the company will publish a report annually; to enhance the transparency and accessibility of the disclosed information, the full report is available for download on Yuanjing’s official website.

Date of this release	August 2026	Next Issue Date	August 2027



Feedback

Please feel free to contact us if you have any comments or suggestions regarding the content of this report.

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A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

For	22025 Sustainability Performance
Governance/ Economic Aspects	• The company's consolidated revenue was NT$1,825,354 thousand. • Corporate Governance Evaluation Rankings for Listed Companies6%~20% • Won the "Golden Energy Award" for crystalline silicon solar cells and crystalline silicon photovoltaic modules, presented by the Bureau of Energy, Ministry of Economic Affairs. • Customer satisfaction ratings exceed 95%. • The directors completed a total of 60 hours of professional training, while the corporate governance officer completed 12 hours. • No reports of integrity violations by personnel were received; there were no recorded violations of corporate governance regulations; and no material deficiencies were found in internal control operations. No major cybersecurity incidents causing operational disruption occurred, and there were no incidents involving personal data breaches.
Environmental aspects	• Maintain the effective operation of the ISO 14001:2015 environmental management system. • Adopt the ISO 14064-1:2018 greenhouse gas inventory standard and undergo third-party verification. • The Taipei office generated 41.3704 metric tons of CO2e in Scope 1 greenhouse gas emissions and 52.3723 metric tons of CO2e in Scope 2. • The Hsinchu plant generated 1,235.1197 metric tons of CO2e in Scope 1 and 19,895.1105 metric tons of CO2e in Scope 2 (data verified by a third party). The Pingtung plant generated 26.2532 metric tons of CO2e in Scope 1 and 8,422.6452 metric tons of CO2e in Scope 2 (data not yet verified). • There is no record of violations of environmental regulations. • Due to a reduction in production capacity, the Hsinchu Plant's Scope 1 greenhouse gas emissions decreased by 3,805.1397 metric tons of CO2e compared to the previous year, while Scope 2 emissions decreased by 11,202.1736 metric tons of CO2e; the Scope 1 + 2 greenhouse gas emissions intensity (based on production capacity in MW) increased by 80.2% year-over-year, also as a result of the capacity reduction. At the Pingtung Plant, Scope 1 greenhouse gas emissions decreased by 14.1400 metric tons of CO2e and Scope 2 emissions by 5,609.0744 metric tons of CO2e compared to the previous year; the Scope 1 + 2 greenhouse gas emissions intensity (based on production capacity in MW) increased by 34.1% year-over-year, likewise due to the reduction in production capacity. • The total volume of waste generated decreased by 1,499.7 metric tons compared to the previous year; the average rate of general waste processed through commissioned recycling reached 79.3%, while the average rate for hazardous waste reached 99.8%.
social aspect	• To safeguard employees' employment rights, employees are categorized as follows: 1. those under open-ended employment contracts working full-time; and 2. those under fixed-term employment contracts working part-time. • The average salary for non-managerial employees increased by NT$26,000 compared to the previous year (2024), while the median salary • increased by NT$6,000. • Female employees account for 38.8% of the total workforce, while women make up 9.52% of all managerial positions. • 90.76%The employee is under 50 years of age. • The retention rate for employees returning from parental leave is 100%. • The average training hours per employee reached 232.5 hours. • There were no employee fatalities resulting from occupational injuries, nor were there any fatalities or recordable cases of occupational illness. • No record of violating labor laws or regulations. •



01

1.1 Sustainable Development Committee
1.2 Identify stakeholders
1.3 Stakeholder Communication Channels and Key Issues of Concern
1.4 Identifying major themes
1.5 Sustainable Development Goals

Sustainable performance stakeholder agreement

A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
  - 1.1 Sustainability Committee
  - 1.2 Stakeholder Identification
  - 1.3 Stakeholder Communication Channels and Key Issues
  - 1.4 Materiality Assessment
  - 1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

01 Sustainable performance stakeholder agreement

Stakeholder and Material Topic Identification Process

step1
Understand the organizational context

By referencing sustainability-related industry standards and examining organizational operations, business relationships, and the stakeholder identification process, gain an understanding of the organization's overall profile and associated impacts.

step2
Identify actual and potential impacts.

Based on the organization's overall profile, relevant impact information, and issues of concern to stakeholders, 17 sustainability-related topics were selected.

step 3
Assess the significance of the impact.

Conduct a materiality analysis based on scores for "stakeholder impact" and "economic, environmental, and social impact" derived from surveys and voting by internal and external stakeholders.

step 4
Prioritize the reporting order based on the most significant impacts.

Prioritize identified issues of concern, assess their materiality in consultation with experts and in alignment with industry-specific sustainability standards, and ultimately select eight material topics.

1.1 Sustainable Development Committee

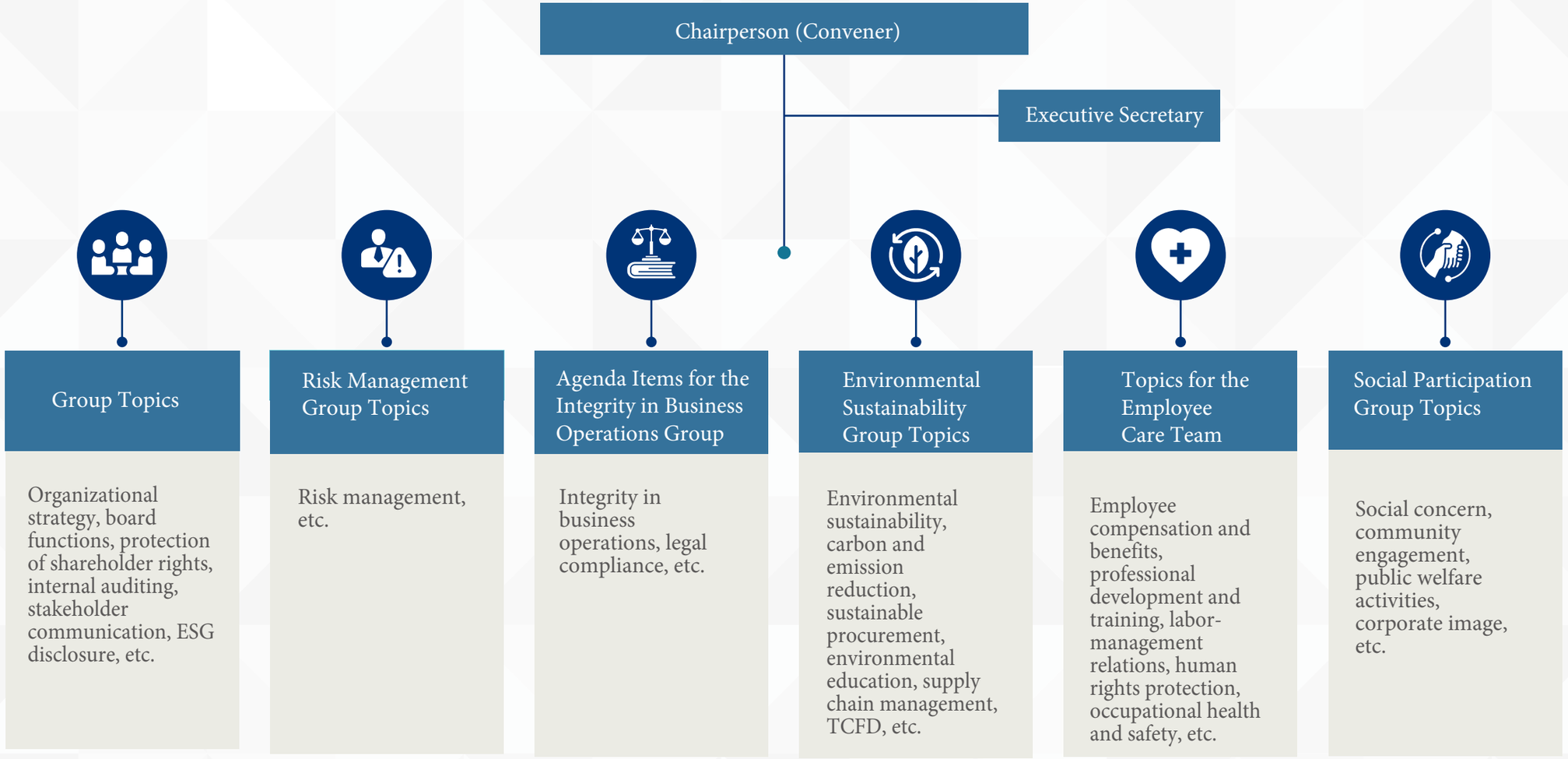
The Board of Directors of Yuanjing has adopted the "Code of Practice for Sustainable Development" and established a Sustainable Development Committee (hereinafter referred to as the "ESG Committee"). The ESG Committee is composed of at least three members appointed by the Board, with independent directors constituting at least half of the membership; one member is selected to serve as the Chairperson and convener. The ESG Committee formulates sustainable development policies, oversees their internal promotion and implementation, and progressively integrates the concept of sustainable operations into Yuanjing's corporate culture.

To address the various dimensions of sustainable development—including Environmental, Social, and Governance (ESG) factors—the ESG Committee has established specialized working groups. Relevant departments gather stakeholder feedback on key issues such as business integrity, economic performance, corporate governance, risk management, supplier management, and labor and human rights. Out of respect for stakeholder interests, a dedicated stakeholder section has been created on the company's website to appropriately address their concerns regarding significant sustainability topics. Moving forward, Yuangin plans to report its ESG performance to the Board of Directors annually, thereby strengthening the Board's engagement with and oversight of the company's ESG initiatives.

Please refer to the "Code of Practice for Sustainable Development" of SEC at the following link on the official website.：https://www.tsecpv.com/important-internal-regulations/

A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
  - 1.1 Sustainability Committee
  - 1.2 Stakeholder Identification
  - 1.3 Stakeholder Communication Channels and Key Issues
  - 1.4 Materiality Assessment
  - 1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

Stakeholder and Material Topic Identification Process



A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
  - 1.1 Sustainability Committee
  - 1.2 Stakeholder Identificatio
  - 1.3 Stakeholder Communication Channels and Key Issues
  - 1.4 Materiality Assessment
  - 1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

1.2 Identify stakeholders



Stakeholders are groups that either influence TSEC or are affected by it. Relevant departments first conducted a preliminary screening of stakeholder categories encountered through routine business operations. Subsequently, based on factors such as the frequency of interaction, the degree of mutual impact, and the level of mutual importance, and following internal discussions and a review of industry practices, six key stakeholder categories were identified as significant to TSEC: shareholders, customers, employees, suppliers, government agencies, and banks.

1.3 Stakeholder Communication Channels and Key Issues of Concern

TSEC Given the diverse nature of key stakeholder groups, their areas of interest regarding Yuanjing vary significantly. Yuanjing's various departments proactively engage in ongoing, constructive dialogue with stakeholders through multiple channels, ensuring they remain timely informed about the company's operational status. Simultaneously, the company identifies and promptly addresses stakeholder requirements and expectations, reporting on these engagement activities to the Board of Directors on an annual basis.

TSEC Various departments collected issues of concern raised by key stakeholders during routine business interactions. The ESG Committee consolidated this information and—referencing the GRI Sustainability Reporting Standards (2021) and ESG reports from industry peers—identified 17 sustainability topics spanning economic, environmental, and social dimensions. This process ensures that the sustainability information disclosed by TSEC meets the requirements for completeness and diversity set forth by the GRI Standards.

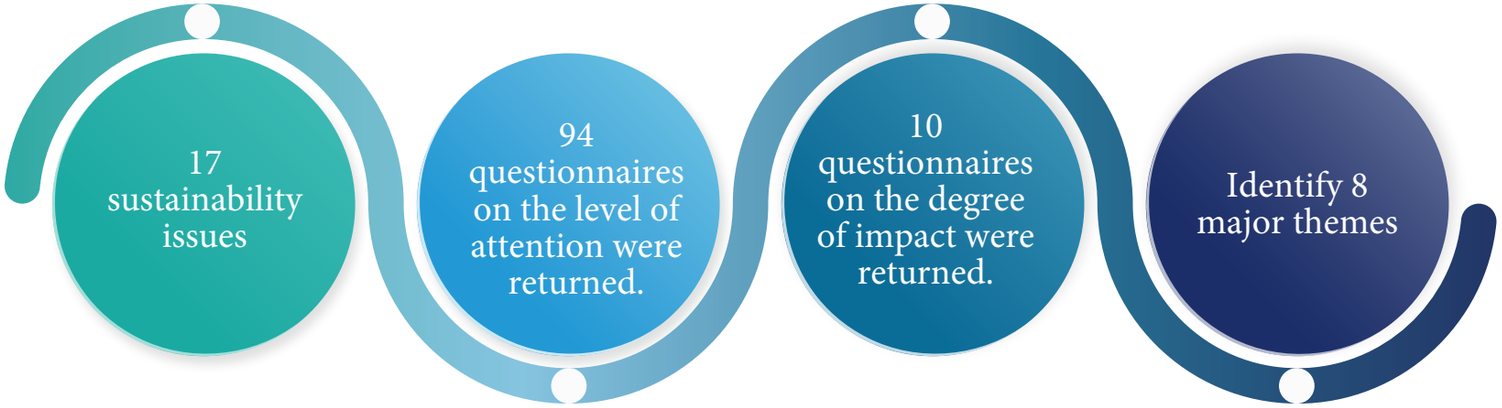
A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
1.1 Sustainability Committee
- 1.2 Stakeholder Identificatio
- 1.3 Stakeholder Communication Channels and Key Issues
1.4 Materiality Assessment
1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

Key stakeholders	Importance to the company	Priority issues of concern	Communication channels, response methods, and communication	2025 Communication Achievements
staff	Employees are an indispensable foundation for the company's operations. The company is committed to providing a workplace environment that promotes the physical and mental health and diverse development of its employees, so that they can work without any worries.	• Labor relations and working conditions; • Occupational safety and Health; compensation and benefits; • Education, training and development.	• Hold labor-management meetings (quarterly) • Hold employee welfare committee meetings (quarterly) • Organize health lectures (irregularly) • Employee health checkups (statutory periodicity) • Employee education and training (irregularly) • Employee mailbox (instantaneous) Employee grievance hotline (instantaneous)	• A total of 12 labor-management meetings were held this year. • Five meetings of the Employee Welfare Committee were held this year. • Health check-ups were conducted for 443 employees this year. During the annual Occupational Safety, Health, and Environmental Protection Month. • Activities such as weight-loss programs and blood pressure screenings were organized for employees. • Eight employee health seminars were held this year. Factory-wide fire safety training was conducted this year, involving 1,169 participants in fire-extinguishing drills and 1,255 participants in evacuation drills. • A total of 119 employee education and training sessions were held this year, with 1,509 cumulative participants.
client	Customers are the main source of the company's revenue. The company regards product quality, safety and after-sales service as its highest commitment to customers. Maintaining high customer satisfaction with the company will help the company continue to strive for customer recognition.	• Customer Relationship Management • Product Quality and Safety • Information Security and Personal Data Protection • Green Product Design • Supply Chain Management • Environmental Protection •	• Customer visits or factory audits (irregular); • Customer satisfaction surveys (annually); • Company customer service team (on-demand); Company website (on-demand).	• This year, there were a total of 11 customer audits at our factory (4 at the Hsinchu factory and 7 at the Pingtung factory). • A total of 26 customer complaints were handled this year. • Satisfaction surveys were conducted with 20 module customers this year.
Shareholders /Investors	Shareholders are the investors in the company. The company shall protect the rights and interests of shareholders, treat all shareholders fairly, and ensure that shareholders have the right to be fully informed, participate in and make decisions on major matters of the company.	• Corporate Governance • Operating Performance • Financial Information • Sustainability Strategy • Risk Management	• Shareholders' Meeting (Annual) • Legal Representative Meeting (At least once a year) • Annual Report (Annual) • Financial Report (Quarterly) • Investor Relations Section on Company Website (Real-time) • Public Information Observation Station (Real-time; Stock Code: 6443)	• The annual shareholders' meeting was held on May 23. • A corporate briefing was held on December 5. • A total of 30 important announcements in Chinese and English were issued this year.

A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
  - 1.1 Sustainability Committee
  - 1.2 Stakeholder Identificatio
  - 1.3 Stakeholder Communication Channels and Key Issues
  - 1.4 Materiality Assessment
  - 1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

Key stakeholders	mportance to the company	Priority issues of concern	Communication channels, response methods, and communication	2025Communication Achievements
Suppliers and contractors	The company maintains long-term positive interactions with its supply partners. Our products and services rely on a stable supply of raw materials and components from numerous suppliers. In addition, leveraging the company's influence in the industry, we work with our supply partners to prevent environmental pollution and violations of labor rights.	• Supply chain management, product quality and safety, raw material management, integrity and legal compliance, and green product design.	• Exchange and discussion of market information through visits and mutual visits (irregular) • Review reports or meetings (irregular) • Supplier audits (irregular)	• A total of 48 suppliers were audited this year (28 at the Hsinchu plant and 20 at the Pingtung plant). Six contractor agreement meetings were held this year (3 at the Hsinchu plant and 3 at the Pingtung plant).
government agencies	Government agencies supervise and audit companies' compliance with various laws and regulations.	• Regulatory compliance; Occupational safety and health; Employee diversity and equality; Corporate governance; Employment relations	• Participate in seminars, workshops, and evaluations organized by the competent authority. (Irregular) • Official correspondence and visits. • (Irregular) Update information on the company website and public information observation station. • (Irregular) Undergo evaluations by government agencies. (Annual)	• Cooperate with the regulatory authorities' procedures for revising regulations and participate in relevant briefings held by relevant units, and cooperate with the regulatory authorities' supervision and explanations. • The company's governance assessment for 2025 was Level 2 (6%~20%). 2025 regulatory authorities' on-site inspection records: Hsinchu Factory: 5 environmental inspections, 3 occupational safety inspections, and 1 fire safety inspection. Pingtung Factory: 21 environmental inspections, 3 occupational safety inspections, and 1 fire safety inspection.
bank	Provide financial assistance to Yuanjing, focusing primarily on Yuanjing's financial performance and sustainability.	• Operational performance; Sustainability policy; Risk management; Corporate governance	• Shareholders' Meeting (Annual) • Annual Report (Annual) • Financial Report (Quarterly) • Credit Rating • Investor Briefing (At least once a year) • Updates to the company website and public information observation platform (irregularly) • Speaker System (Real-time)	• Cooperate with the regulatory authorities' procedures for revising regulations and participate in relevant briefings held by relevant units, and cooperate with the regulatory authorities' supervision and explanations. The company's governance assessment for 2025 was Level 2 (6%~20%). 2025 regulatory authorities' on-site inspection records:

1.4 Identifying major themes



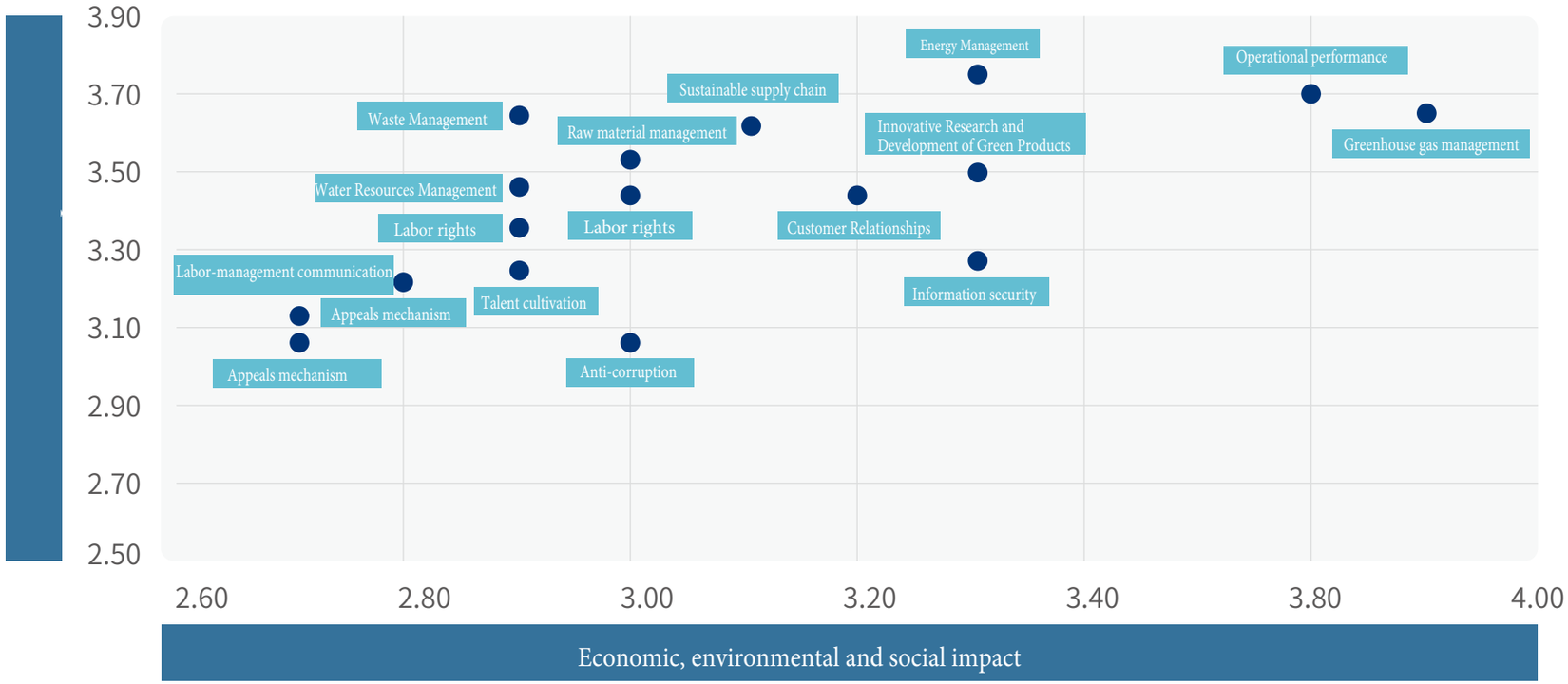
Oriented	Sustainability issues
Environmental aspects	Supplier management, raw material management, energy management, carbon emissions, water resource management, waste management
social aspects	Compensation and benefits, labor relations, occupational safety, talent development, labor rights, and customer relations.
Economic aspects	Economic performance, corporate governance, legal compliance, grievance mechanisms, integrity in business operations, risk management, green products, customer service, and protection of trade secrets.

In 2024, Yuanjing's ESG Committee identified 17 sustainability issues. An online questionnaire was distributed to key stakeholders, with 94 valid responses collected. This yielded scores on stakeholders' level of concern for each sustainability issue. An additional online questionnaire was distributed to 10 company executives, who rated the impact of each sustainability issue on Yuanjing. These scores were then combined to create a major theme matrix. Following discussion by the ESG Committee, 2 to 4 major themes were selected from the environmental, social, and economic dimensions. The 8 major themes that Yuanjing was required to prioritize disclosing for the year were energy management, greenhouse gas management, and water resources. Resource management, waste management, occupational safety, customer relations, operational performance, and innovative R&D of green products—the eight major themes identified this year represent both risks and opportunities for the company. Facing an increasingly challenging operating environment, especially while pursuing operational performance, rewarding shareholders and customers, the company cannot sacrifice local living quality and employee health and well-being. Unlawful actions could severely damage the company's hard-earned reputation. Conversely, if the company can turn risks into opportunities and find a balance between economic performance, environmental sustainability, and social well-being, it will continue to grow and thrive, moving towards sustainable operation. Considering no significant changes in company operations in 2025, the major themes, after discussion by the ESG Committee, will continue those reported last year.

A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
  - 1.1 Sustainability Committee
  - 1.2 Stakeholder Identification
  - 1.3 Stakeholder Communication Channels and Key Issues
  - 1.4 Materiality Assessment
  - 1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
  - 1.1 Sustainability Committee
  - 1.2 Stakeholder Identification
  - 1.3 Stakeholder Communication Channels and Key Issues
  - 1.4 Materiality Assessment
  - 1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

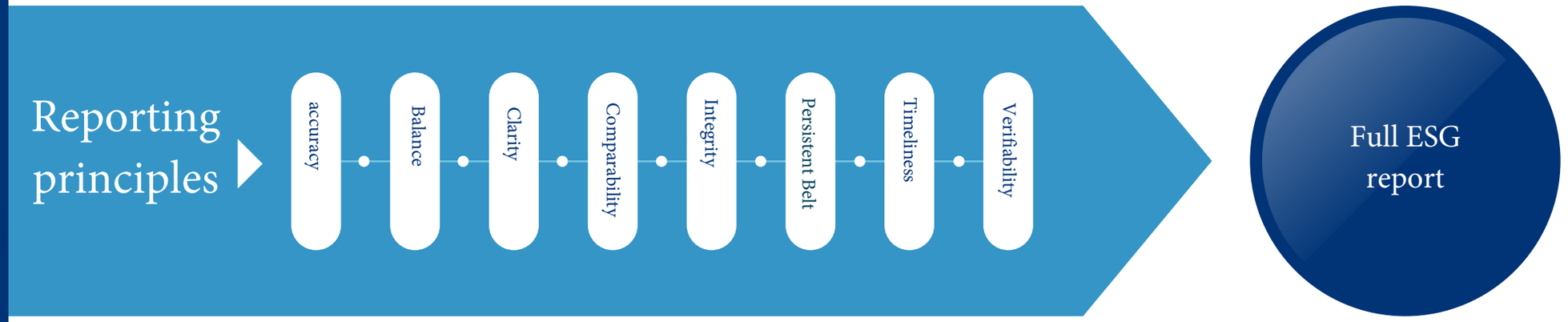
Analysis chart of major issues



ESG Oriented	Major themes (positive impact/negative impact)
Environmental aspects	Energy management (positive), greenhouse gas management (positive), water resource management (positive), waste management (positive)
social aspects	Occupational safety (positive), customer relations (positive)
Governance/Economic Aspects	Operational performance (positive), innovative research and development of green products (positive)

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
1.1 Sustainability Committee
1.2 Stakeholder Identification
1.3 Stakeholder Communicatio Channels and Key Issues
1.4 Materiality Assessment
1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

Principles of Report Writing



Yuanjing adheres to the reporting principles of the GRI guidelines in preparing its ESG reports. Based on the sustainability principle: it transparently discloses how the company takes measures to mitigate or reduce negative impacts in response to the economic, environmental, and social realities of its operating locations and surrounding areas; based on the completeness principle: the information disclosed in the report should adequately reflect the scope of the company's significant economic, environmental, and social impacts; based on the accuracy principle: the information in the report should be sufficiently accurate and detailed to allow stakeholders to assess the company's ESG performance; and based on the balance principle: the information in the report should fairly reflect both positive and negative performance, allowing stakeholders to make informed decisions. The company conducts reasonable assessments of Yuanjing's ESG performance; based on the principle of clarity, the information presented in the reports is easily understood and accessible to stakeholders; based on the principle of comparability, the reports disclose ESG information according to internationally accepted standards, and the disclosure method allows stakeholders to analyze the company's long-term performance; based on the principle of timeliness, the company regularly issues ESG reports, providing timely and important ESG information for stakeholders to make informed decisions; based on the principle of verifiability, the company compiles ESG reports in a manner that allows internal and external personnel to review and ensures the accuracy of information disclosure.



A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
  - 1.1 Sustainability Committee
  - 1.2 Stakeholder Identification
  - 1.3 Stakeholder Communication Channels and Key Issues
  - 1.4 Materiality Assessment
  - 1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

Identify key themes and boundaries

Oriented	Major Themes	The Importance of TSEC	Internal boundary	outer boundary					correspond GRI Guidelines	The report reveals
			company	Investors	supplier	Government agencies	client	bank		
economy	Economic performance	Establishing comprehensive strategies and management practices to improve operational performance and achieve sustained and steady corporate growth is Yuanjing's ongoing goal. This not only enhances the confidence of investors, employees, supply partners, and customers in us, but also creates mutual benefit and prosperity, leading us towards sustainable operation.	●	●	●	●	●	●	201 Economic performance	3.4Operational performance
economy	Innovative Research and Development of Green Products	In recent years, due to the impact of climate change, the global pandemic, and the Russia-Ukraine war, international energy demand has become a focus. Yuanjing is a solar energy-related industry and responds to market demand by continuously providing different products and services to maintain the company's overall competitiveness.	●	●	●				TSEC Custom Theme	3.5Innovative Research and Development of Green Products
environment	Energy Management	Implement energy conservation and carbon reduction measures to reduce unnecessary waste.	●	●	●	●	●	●	302 energy	4.2Energy Management
environment	Greenhouse gas management	With the global trend toward net-zero carbon emissions, Yuanjing not only needs to understand its own carbon emissions situation, but also needs to manage and control emission reduction projects. In addition to meeting the concerns of all stakeholders about carbon emissions, it also needs to fulfill its responsibility for the sustainable development of its business.	●	●	●	●	●	●	305 emission	4.3Greenhouse gas emissions
environment	Water Resources Management	• Effective water resource management reduces waste, thereby lowering water bills. • Good water resource management helps companies maintain operations during water shortages and reduces the risk of • supply disruptions. Proactive water resource management enhances a company's social responsibility image and earns consumer trust.	●		●	●			303 Water and discharged water	4.4Water Resources Management
environment	Waste Management	Waste generated during business operations must be properly disposed of and treated. Improper handling will cause serious environmental pollution problems. In order to pursue sustainable operation, Yuanjing continuously optimizes its processes and recycles resources to achieve a win-win goal of reducing environmental pollution and making efficient use of resources.	●		●	●			306 waste	4.5Waste Management
society	Occupational safety	Employees are the company's most valuable asset, and ensuring their safety and health is Yuanjing's most important fundamental responsibility. To demonstrate its commitment to protecting worker safety and health, Yuanjing has established an occupational safety and health management system to comply with occupational safety and health regulations and other requirements.	●			●	●		403 Occupational safety and health	5.2Safe Workplace
society	Customer Relationships	Establish a service-oriented operating model and optimize service processes to enhance customer trust and create a win-win situation.	●			●	●		TSEC Custom Theme	5.3Customer Relationships

A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
  - 1.1 Sustainability Committee
  - 1.2 Stakeholder Identification
  - 1.3 Stakeholder Communication Channels and Key Issues
  - 1.4 Materiality Assessment
  - 1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

1.5 Sustainable Development Goals

United Nations Sustainable Development Goals (Sustainable Development Goals,SDGs) It is a plan launched by the United Nations in 2015, which proposes 17 Sustainable Development Goals and 169 sub-goals as guiding principles for member states and global businesses to practice sustainable development up to 2030.

TSEC By integrating sustainability goals into the company's business strategy, the company has expanded its thinking from focusing solely on economic performance to include environmental protection and compliance with other regulations, improving employee benefits to retain top talent, eliminating workplace inequalities, mitigating wastewater and greenhouse gas emissions, and inviting suppliers to work together to improve the environment and workplace conditions. Looking ahead, Yuanjing is committed to making greater contributions to sustainability goals and fulfilling its corporate social responsibility.

SDGs	Detailed Targets	TXEC Response
	1.4 Ensure that all men and women, especially the poor and disadvantaged, have equal rights and access to economic resources.	• We offer competitive salaries and benefits that are better than legal and competitive in the market, allowing employees to work with dignity and improve their personal and family economic standards. We adjust employee salaries appropriately based on company profitability to enhance employee • loyalty.
	4.5 Ensure that all men and women, especially the poor and disadvantaged, have equal rights and access to economic resources. 4.7 We advocate for sustainable development of education, sustainable lifestyles, human rights, gender equality, and peaceful non-violence.	• Provide job skills training for employees with different job roles to ensure that every colleague has the opportunity to receive professional training. • Plan courses on sustainability, workplace equality, and labor rights, and encourage colleague participation.
	5.1 Eliminate all forms of discrimination against women. 5.4 Cognize and value women's family care through social protection policies.	• Gender is not a factor in employee recruitment, performance evaluation, or promotion. • Employees, regardless of gender, are entitled to apply for parental leave.
	6.3 Improve water quality, reduce pollution, eliminate garbage dumping, reduce the release of toxic chemicals and hazardous materials, and reduce the proportion of untreated wastewater.	• The quality of the discharged water is regularly tested, and the results for the past three years have met the requirements of local regulations for discharged water.

A Word from the Management
Editorial Policy
Sustainable Performance
- 01 Stakeholder Engagement
1 1 Sustainability Committee
1 2 Stakeholder Identification
1.3 Stakeholder Communicati Channels and Key Issues
1.4 Materiality Assessment
- 1.5 Sustainability Goals
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
appendix

SDGs	Detailed Targets	TXEC Response
8 體面工作與經濟成長	8.4 IImprove energy use and productivity. 8.5 Achieve full and productive employment, providing good jobs for all men and women, including young people and people with disabilities, and ensuring equal pay for equal work. 8.7 Ban child labor and eliminate oppressed workers. 8.8 Protect workers' rights and promote safe working conditions, especially for women and workers performing hazardous work.	• Energy savings over the past three years amounted to 2341 kWh. • Gender is not a factor in employee recruitment, performance evaluation, or promotion. • Employee salaries are adjusted appropriately based on company profitability to enhance employee loyalty. Labor rights are respected, including the prohibition of child labor and any form of workplace discrimination. • The job duties of mothers are appropriately adjusted in accordance with the law to reduce their workload and provide them with substantial protection. • An occupational safety and health management system is implemented to effectively improve employee workplace safety.
9 產業、創新與基礎設施	9.4 Upgrade infrastructure, transform industries and businesses to enable sustainable development, improve energy efficiency, and significantly adopt clean and environmentally friendly technologies and industrial processes. 9.5 Encourage innovation, increase the number of R&D personnel, and increase R&D spending.	• Energy savings over the past three years amounted to 2,341 kilowatt-hours. • The number of R&D team members has been increasing year by year.
10 減少國內及國家間不平等	10.2 Promote socioeconomic and political integration, regardless of age, gender, disability, religion, economic status, or other identity. 10.3 Ensure equal opportunities and reduce inequality, including eliminating discriminatory practices. Encourage innovation, increase the number of R&D personnel, and increase R&D spending.	• The company's recruitment, evaluation, and promotion mechanisms do not consider employees' physiological or psychological differences as criteria. • There are employee whistleblowing channels and a comprehensive whistleblowing process to protect whistleblowers.
12 永續的消費與生產模式	12.5 Significantly reduce waste generation through prevention, reduction, recycling, and reuse.	• Continuously improve production processes to reduce waste generation.
16 和平、正義與健全的司法	16.6 Develop effective, accountable, and transparent systems at all levels. 16.7 Ensure that decision-making at all levels responds to public opinion and is inclusive, participatory, and representative.	• Strengthen corporate governance by ensuring employees comply with all company regulations through internal controls, and establish independent whistleblowing channels and a comprehensive whistleblowing process. • Through stakeholder communication, understand their requirements and expectations of the company, and report to the board of directors regularly.



02

2.1 Company Introduction

2.2 Business Philosophy

2.3 Awards and Honors and Management System

2.4 Participation in External Organizations

About TSEC

02 About TSEC

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
2.1 Company Profile
2.2 Business Philosophy
2.3 Awards and Management Systems
2.4 External Organization Participation
03 Integrity-based Governa
04 Green Sustainability
05 Social Care
appendix

2.1 Company Introduction

Founded in June 2010, TSEC boasts the largest and most automated advanced factory in Taiwan. Adhering to the ultra-high quality of "Made in Taiwan," all products undergo rigorous testing and comply with strict RoHS and SVHC standards. TSEC has not only won numerous domestic and international professional certifications but also received recognition and praise from the government every year, making it the most awarded solar photovoltaic manufacturer in Taiwan.

In addition to focusing on the research, development, production and sales of solar cells and modules, we also provide integrated system services for power plant construction and long-term maintenance. With many years of experience in Taiwan, we have extensive experience in power plant development, and our outstanding achievements are found throughout the island. For example, the largest privately owned power plant in Taiwan - Chiayi Yizhu Power Plant (70MW), the largest state-owned power plant in Taiwan - Tainan Qigu Yantian Power Plant (150MW), and the largest water power plant in Taiwan - Changhua Coastal Industrial Park Lunwei East District Power Plant (181MW) all use safe and durable TSEC solar modules.

As a leading company in Taiwan's solar energy industry, we are committed to fulfilling our corporate social responsibility, actively promoting the coexistence of solar energy and the natural environment, pursuing sustainable development of the planet, and striving to sell "Made in Taiwan" solar energy products to the world.

註 For information on Yuanjing's important history, please refer to the 2025 Annual Report of Shareholders / II, Company Profile / II, Company History.

Company Name	TSEC
Industry	Optoelectronics
Headquarters Location	8th Floor, No. 225, Section 3, Beixin Road, Xindian
Ownership Forms and Legal Nature	Joint-stock limited company (stock code:6443)
Capital Amount (Unit: NT$1,000)	NT$5,386,914 (Thousand Yuan)
Equity Structure	Domestic legal entities accounted for 7.15%, domestic individuals for 81.78%,
Consolidated (individual) revenue for the current year (Unit: NT$1,000)	Solar module sales: $1,703,845,000; Solar cell sales: $72,897,000; Other sales: $48,612,000; Total: $1,825,354,000
Number of employees	Approximately 715 employees
Operating locations	Hsinchu Plant: No. 85, Guangfu North Road, Hukou Township, Hsinchu County Pingtung Plant: No. 335-12, Daxi Road, Pingtung City, Pingtung County
Main products/services	olar cell and module sales, construction and maintenance of solar photovoltaic plants.
Output of major products (unit: million Watts)	Annual solar cell production capacity: 1.5GW; Annual solar module production capacity: 1.5GW.
Sales proportion of main products	Solar module sales: 93.35%; Solar cell sales: 3.99%; Other: 2.66%; Total: 100%
Revenue proportion of each region	Asia (99.98%); Other (0.02%)

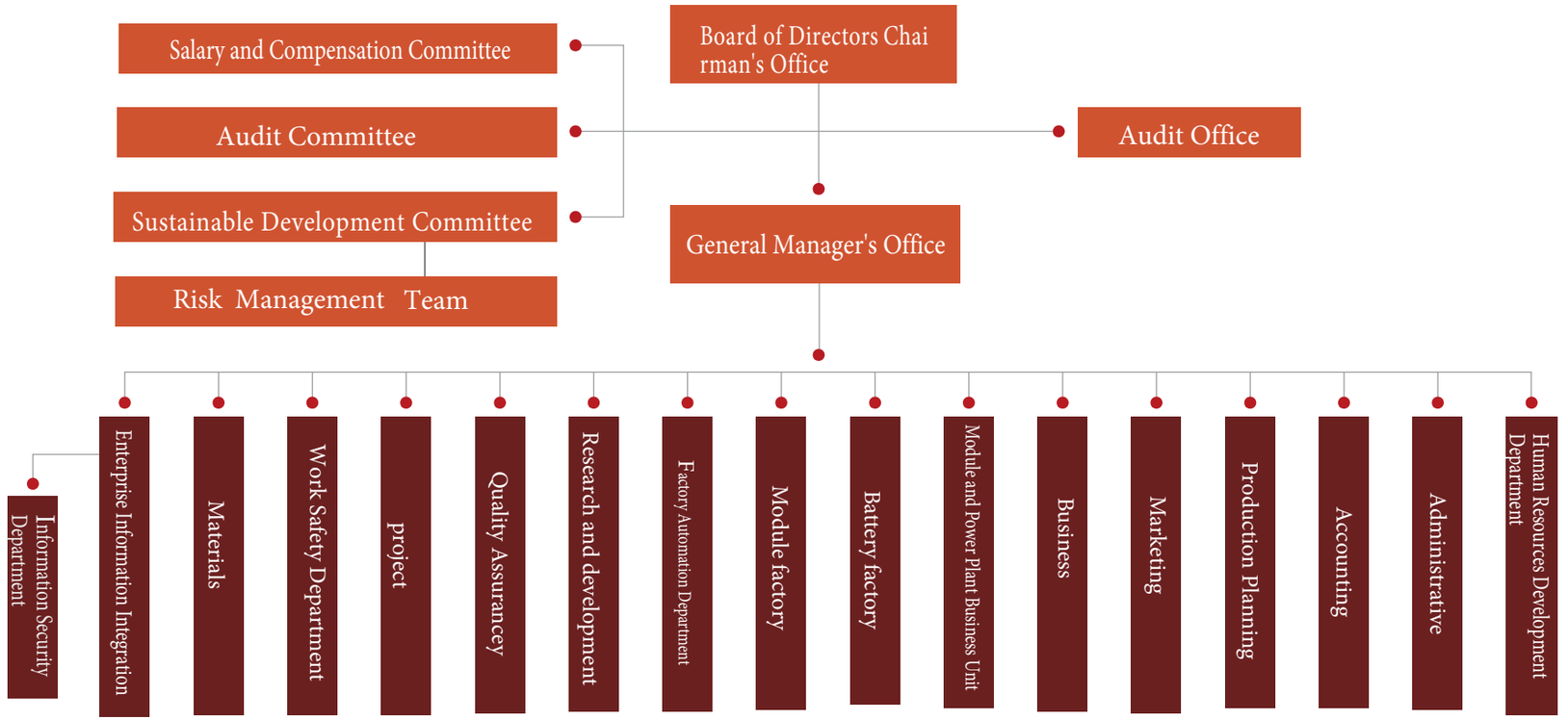
註 Data is compiled up to the end of 2025.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
2.1 Company Profile
2.2 Business Philosophy
2.3 Awards and Management Systems
2.4 External Organization Participation
03 Integrity-based Governa
04 Green Sustainability
05 Social Care
appendix

TSEC's position in the upstream, midstream, and downstream of the overall industry chain.

Upstream		Midstream		Downstream
Polysiliocn	Wafer	Cell	Module	System

TSEC Organizational Chart



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
2.1 Company Profile
2.2 Business Philosophy
2.3 Awards and Management System
2.4 External Organization Participation
03 Integrity-based Governa
04 Green Sustainability
05 Social Care
appendix

2.2 Business Philosophy

Vision

Committed to becoming a leading manufacturer in Taiwan's clean and green energy industry, we work hand in hand with shareholders, employees, customers and suppliers to create sustainable growth for Yuanjing.

mission

Sustainable operation, sound management, environmentally friendly, and socially prosperous

2.3 Awards and Honors and Management System

TSEC continuously improves and innovates its processes, products, and services, and establishes a high-standard safe and hygienic workplace environment, while also minimizing environmental impact during production. Since 2011, Yuanjing's Hsinchu battery plant has successively undergone ISO 9001 quality management system, ISO 14001 environmental management system, and OHSAS 18001 occupational health and safety management system verification and obtained certifications. The Pingtung module plant also obtained certification in 2018 and continues to undergo annual verification to maintain the validity of its certifications. The aforementioned OHSAS 18001 certification was revised to ISO 45001 verification in 2020, and both the Hsinchu and Pingtung plants have obtained certifications. Furthermore, the Hsinchu plant first underwent ISO 14064-1 organizational greenhouse gas inventory verification in 2012, while the Pingtung plant underwent verification in 2022, and will continue to conduct annual audits in the future.

Management System	ISO 9001:2015	ISO 14001:2015	ISO 45001:2018	ISO 14064-1:2018
Verification agency	Taiwan Rheinland	Taiwan Rheinland	Taiwan Rheinland	Taiwan Rheinland

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
2.1 Company Profile
2 2. Business Philosophy
2.3 Awards and Management System
2.4 External Organization Participation
03 Integrity-based Governance
04 Green Sustainability
05 Social Care



Corporate Governance

The company's corporate governance was ranked in the top 21% to 35% of listed companies in the 9th (2022) annual assessment.

The company's governance was ranked in the top 6% to 20% of listed companies in the 10th (2023) annual assessment, demonstrating further improvement in corporate governance. The company's governance was ranked in the top 6% to 20% of listed companies in the 11th (2024) annual assessment, demonstrating further improvement in corporate governance. The company's governance was ranked in the top 6% to 20% of listed companies in the 12th (2025) annual assessment, demonstrating further improvement in corporate governance.

Innovative products

- Yuanjing Solar has received the Golden Energy Award for Excellent Solar Photovoltaic Products from the Bureau of Energy, Ministry of Economic Affairs for 11 consecutive years (2014-2024).
- Yuanjing's solar photovoltaic modules have obtained the Voluntary Product Verification Certificate (VPC) from the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs. Yuanjing's solar photovoltaic cells have obtained the Made in Taiwan (MIT) Smile Product Verification Certificate issued by the Industrial Development Bureau, Ministry of Economic Affairs. Yuanjing's solar photovoltaic modules have obtained UL Solutions Taiwan product certification.

2.4 Participation in External Organizations

TSEC has received the Golden Energy Award for Excellent Solar Photovoltaic Products from the Bureau of Energy, Ministry of Economic Affairs for 11 consecutive years (2014-2024). TSEC's solar photovoltaic modules have obtained the Voluntary Product Verification Certificate (VPC) from the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs. Yuanjing's solar photovoltaic cells have obtained the "Made in Taiwan (MIT) Smile Product" certification issued by the Industrial Development Bureau, Ministry of Economic Affairs. TSEC's solar photovoltaic modules have obtained UL Solutions Taiwan product certification.

External Association Name	Participation Identity	Committees participated in/projects promoted (optional, can be omitted)
SEMI International Semiconductor Industry Association	Vice Chairman	SEMI Solar Photovoltaic Committee/SEMI Elite Leadership Summit Special Working Group Committee
	Committee	SEMI Solar Photovoltaic Public Policy Initiative Committee/Public Green Energy Communication Task Force
	Committee	SEMI Smart Energy Storage Committee
	Chairman	SEMI Process Technology Forum Special Group
Taiwan Solar Photovoltaic Industry Association	member	
Solar Energy Systems Association	member	



03

3.1 Corporate Governance
3.2 Integrity Management
3.3 Risk Management
3.4 Economic Performance
3.5 Innovation and R&D of Green Products

Integrity Management Officer

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

03 Integrity Management Officer



Sound corporate governance includes a robust board of directors, rigorous internal control systems, and stable financial management. In addition to helping reduce operational risks, it can also enhance the company's competitiveness and create brand value. Building a corporate culture based on integrity and responsibility and adhering to all laws and regulations to implement honest business practices, while a well-functioning corporate governance structure can ensure the sound development of the company's operations and protect the rights and interests of investors and other stakeholders.

TSEC has established a corporate governance system in accordance with Taiwan's Securities and Exchange Act and related regulations. To strengthen the protection of shareholder rights, enhance the functions of the board of directors, respect the rights of stakeholders, and improve information transparency, the board of directors has adopted the "Corporate Governance Practice Code," which establishes a fair, just, and open director selection process and includes measures such as appointing independent directors to strengthen the board's management and oversight functions. The board of directors has also adopted the "Internal Material Information Compilation and Insider Trading Prevention Management Procedures" to prohibit directors, managers, and employees from profiting from information that is not available in the market. In addition, TSEC adheres to the principles of accurate, timely, and fair disclosure, and has established a comprehensive information disclosure system, providing various information related to operations, finance, the board of directors, and shareholders' meetings on the company website and the public information network reporting system to ensure that shareholders can obtain the latest information about the company.

Corporate Governance Practices (File Link) : https://www.tsecpv.com/important-internal-regulations/

3.1 Corporate Governance

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governanc
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

Management Policy

Significance for TSEC	To safeguard shareholder rights and interests, strengthen the structure and operation of the board of directors, enhance information transparency, and implement principles and measures for corporate sustainability.
Policy Direction	Adhering to the "Guidelines for Corporate Governance Practices of Listed Companies" and the TSEC "Guidelines for Corporate Governance Practices" and related regulations, we implement the corporate governance-sustainable development blueprint.
Core Objectives	1 Strengthen board structure and operations 2 Enhance information transparency 3 Fulfill corporate social responsibility 4 Continuously improve corporate governance assessment results
Performance Outcomes	1 Board Diversity and Independence: Female directors comprise 12.5% of the board, independent directors comprise 37.5%, and none of the independent directors have served more than 9 years. The number of board members who are employees of the company, its parent company, subsidiaries, or sister companies is less than or equal to one-third of the total board seats. 2 Board Operations: Seven board meetings were held in 2025, with an average attendance rate of 100%. 3 2025 Board Performance Evaluation: 86.22 points/Excellent. 4 2025 Audit Committee Performance Evaluation: 96.67 points/Good/Good. 5 2025 Compensation and Remuneration Committee Performance Evaluation: 96.14 points/Good/Good. 6 2025 Sustainability Committee Performance Evaluation: 96.08 points/Good/Good. 7 Enhanced Information Transparency: Important information is simultaneously released in English, and information reporting is carried out in accordance with regulations; no penalties for breach of contract have been imposed. One investor conference was held independently in 2025. 8 December 17, 2025: A Nomination Committee was established to enhance the functions of the Board of Directors and strengthen the management mechanism. 9 July 5, 2022: A Sustainability Committee was established to coordinate the formulation of corporate social responsibility, sustainable development direction and goals, and the proposal and implementation of related management policies and concrete implementation plans. 10 August 2019: Liao Weiran, Executive Vice President of the Chairman's Office, was appointed as the Head of Corporate Governance. 11 The 12th (2025) Corporate Governance Assessment result placed the company in the top 6% to 20% of listed companies.
Action Plan	1 Report regularly to the Board of Directors on corporate governance performance and the implementation of various operational and ESG practices. Plan for succession of Board members. 2 Regularly review any amendments or additions to regulations and report relevant information promptly and accurately. 3

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

Management Methods	Resource Input	The board of directors and various functional committees, the establishment of a dedicated corporate governance officer, and the formation of a sustainability committee are all part of this initiative.
	Eeedback Mechanism	Stakeholder Communication Wind https://www.tsecpv.com/interested_parties/)
	Evaluation Mechanism	1 In accordance with the "Board of Directors Performance Evaluation Method," a self-assessment is conducted once a year, and an external evaluation is conducted once every three years. 2 Participation in external corporate governance evaluations is also conducted. 3 Through internal control systems, assess whether the company's operating procedures are reasonable and effective.
Future Planning	2026 Goals	• The company ranked within the top 20% of listed companies based on the corporate governance assessment results. • Information reporting was conducted in accordance with regulations, and no penalties were imposed.

The shareholders' meeting, composed of all shareholders, makes decisions on major company matters, regularly hears reports from the board of directors, and is the company's highest decision-making body. The board of directors is the highest governance body, and all board members fulfill their duties of care as prudent managers. The general manager assists the chairman in planning the company's business strategy and formulating sustainable development strategies. The board of directors reviews financial performance, sustainable strategies, etc., and ensures that the company's operations comply with all laws and regulations. To improve corporate governance and enhance the company's competitiveness, the board of directors has established an audit committee and a compensation committee to ensure the smooth operation of the board. There is also an independent audit office under the board of directors, which regularly conducts audits and reports the audit results to the audit committee and the board of directors.

TSEC prioritizes corporate governance, pursues sustainable growth and integrity in its operations, continuously strengthens its corporate governance structure, upholds transparency, and employs effective internal control systems to protect the rights and interests of stakeholders. In accordance with the "Guidelines for the Establishment of Internal Control Systems by Publicly Listed Companies," TSEC designs and implements its internal control systems based on the overall operational activities of the company, and reviews them regularly to adapt to changes in the internal and external environment, ensuring the continued effectiveness of the design and implementation of its internal control systems. Through a sound management mechanism, TSEC aims to improve operational performance and achieve sustainable business goals.

To strengthen the support provided to directors in performing their duties and enhance board effectiveness, the board resolved in August 2019 to appoint Liao Weiran, Executive Vice President of the Chairman's Office, as the Corporate Governance Officer. He is responsible for assisting directors in performing their duties, providing necessary information and arranging further education, handling matters related to board meetings and shareholders' meetings in accordance with the law, assisting the company in complying with relevant resolutions of the board and shareholders' meetings, and maintaining investor relations. The Corporate Governance Officer is required to complete 12 hours of professional courses related to corporate governance in 2025. The 12th Corporate Governance Assessment results in 2025 show that TSEC ranks among the top 6% to 20% of listed companies, indicating that under the leadership of the Corporate Governance Officer, Yuanjing's corporate governance is operating effectively and well in all aspects. In the future, the company will continue to strive to improve the overall synergy of corporate governance and strengthen stakeholders' trust in TSEC.

Meanwhile, the company's financial statements are regularly audited and certified by accounting firms. All legally required information disclosures are completed accurately and promptly, with designated personnel responsible for external disclosure. A spokesperson system has also been established to ensure the timely and appropriate disclosure of all material information for shareholders and stakeholders to reference regarding the company's financial and operational matters.

Looking ahead, strengthening board operations, enhancing transparency, and gradually integrating sustainable governance strategies into the corporate governance structure are TSEC's ongoing goals.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governanc
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

3.1.1 Board of Directors

The Board of Directors plans the company's business strategy and is responsible to shareholders and other stakeholders. Directors faithfully execute business operations and exercise the duty of good manager, exercising their powers prudently. Except for matters that, according to law or the Articles of Association, should be decided by the Board of Directors, the execution of company business and the operation and arrangement of various governance systems should be decided by the Board of Directors. TSEC's Articles of Association stipulate that the election of directors adopts a candidate nomination system, with regular re-elections. Furthermore, in accordance with the "Code of Corporate Governance Practices," the number of directors who also serve as company managers should not exceed one-third of the total number of directors. To strengthen corporate governance and promote the sound development of the Board's composition and structure, a director diversity policy is also encouraged, as it is believed that a diversity approach will help improve the company's overall performance.The selection of board members adheres to the principle of meritocracy, possessing diverse and complementary capabilities across industries. In addition to basic components such as age, gender, and nationality, each member also possesses industry experience (e.g., related fields, business, finance, marketing) and professional skills (legal, accounting, risk management). To strengthen the board's functions and achieve ideal corporate governance goals, Article 22 of TSEC's "Corporate Governance Practices Code" stipulates the overall capabilities that the board should possess, including operational judgment, accounting and financial analysis, business management, crisis management, industry knowledge, international market perspective, leadership, and decision-making abilities. TSEC directors possess both industry expertise and extensive practical experience, and are well-versed in industry trends. The board currently has 8 directors (including 3 independent directors), with a term of 3 years. Board meetings are held at least quarterly as required by law, and a total of 7 board meetings were held in 2025, with an average attendance rate of 100%.

1 For details regarding the main qualifications and concurrent positions of TSEC's board members, please refer to the following link on the company's official website.：(https://www.tsecpv.com/ir_01/)

2 For a list of major shareholders, please refer to the company's official website at the following link.：(https://www.tsecpv.com/shareholders-meeting/)

Diversified statistics/annual			2023Year		2024Year		2025Year	
			Number of people	percentage	Number of people	percentage	Number of people	percentage
director	gender	Men	6	75%	7	87.5%	7	87.5%
		woman	2	25%	1	12.5%	1	12.5%
	age	under 50	2	25%	2	25%	3	37.5%
		50～60	1	12.5%	1	12.5%	4	50%
		60above	5	62.5%	5	62.5%	1	12.5%
	Education	graduate School	0	0	0	0	1	12.5
		Junior college	6	75%	7	87.5%	6	75%
		other	2	25%	1	12.5%	1	12.5%

Percentage of female directors = (Number of female directors at the end of the year / Number of directors at the end of the year)*100%

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

To establish a sound board operating system, enhance oversight functions, and ensure the independence of independent directors in performing their duties, Yuanjing's board of directors has adopted the "Rules of Procedure for Board Meetings" to clearly define the scope of responsibilities for independent directors. Directors also uphold a high degree of self-discipline by implementing conflict of interest avoidance. For matters concerning board meetings that have a conflict of interest with themselves or their legal representatives, they must explain the significant details of their conflict of interest at the meeting. If such matters are potentially detrimental to the company's interests, they must not participate in discussions or voting, and must recuse themselves from such discussions and voting, nor may they act as proxies for other directors. Furthermore, to improve the quality of board decision-making, the board has adopted the "Board Performance Evaluation Method." Annual internal evaluations are conducted on the performance of the board, individual directors, and functional committees. Board members conduct self-evaluations using questionnaires distributed by the board's procedural units. Every three years, external professional independent institutions or teams of external experts and scholars conduct evaluations. The results of the board performance evaluations can be used as a reference for future director selection or nomination; the performance evaluation results of individual directors can also be used as a reference for determining their individual remuneration.

"Rules of Procedure for Board Meetings" and "Board Performance Evaluation Methods" : https://www.tsecpv.com/important-internal-regulations/

TSEC's various departments regularly and irregularly interact with stakeholders through routine channels. In cases where there is a potential for significant negative impact between stakeholders and the company, the responsible department will conduct due diligence on various aspects, including finance, company operations, legal compliance, environmental pollution, and violations of employee human rights and health. The results will be reported to the General Manager and Chairman. The Chairman will assess whether the results will significantly harm the company's overall operations and whether to report to the Board of Directors. Finally, the Board of Directors will approve the due diligence report and assign it to the relevant department for implementation. In 2025, no potential significant negative impact events occurred between TSEC and its stakeholders, therefore no reports were submitted to the Board of Directors. This practice makes TSEC's due diligence on stakeholders and the Board of Directors' role in addressing potential significant negative impacts more comprehensive.

To effectively manage risks and increase the willingness of professional talent to serve as directors, TSEC provides liability insurance for directors, allowing them to perform their duties without worry and reducing and mitigating the risk of significant damage to the company and shareholders due to directors' errors or negligence.

Considering the legal compliance and governance issues that directors may face when participating in company operational decisions, TSEC actively encourages and arranges for directors to take relevant professional courses. In the current year, all directors completed a total of 60 hours of training. In the future, the corporate governance director also plans to increase the number of courses related to corporate sustainability for directors. TSEC believes that under the leadership of a board of directors with integrity in governance and rich industry experience, the company's operations will flourish, and it will continue to make great strides on the path of sustainable operation.

註 Public Information Observation Station for Directors' Professional Development - Professional Development Status of Directors and Supervisors

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

3.1.2 Functional Committee

To improve oversight and management, the Board of Directors has established an Audit Committee and a Compensation Committee. Functional committees, except those that are legally required to exercise their powers independently, are responsible to the Board of Directors and submit their proposals to the Board for resolution.

Audit Committee

The Audit Committee assists the Board of Directors in overseeing the company's quality in implementing relevant accounting, auditing, financial reporting processes, and financial controls, and submits its assessment results to the Board for discussion. Yuanjing's Board of Directors has adopted the "Audit Committee Organizational Procedures," establishing an Audit Committee within the Board, composed of three independent directors, one of whom serves as the convener. At least one member must possess accounting or finance expertise. The Audit Committee meets at least once per quarter, and a total of six Audit Committee meetings were held in 2025, with 100% attendance.

The Internal Audit Chief holds a closed-door meeting with all independent directors at least once per quarter to report on the company's internal audit implementation. In the current year, the independent directors and the Audit Chief held a total of six meetings. In addition, the independent directors also held two meetings with the accountants during the year. The accountants reported to the independent directors on the review results of the financial statements and conducted legal briefings and exchanged opinions at the meetings. Overall, communication between the independent directors, the Internal Audit Chief, and the accountants is smooth.

Salary and Compensation Committee

To improve the compensation system for directors and managers and to assess the fairness and reasonableness of their performance in relation to their compensation, TSEC has established a Compensation Committee within the Board of Directors through the "Compensation Committee Organizational Regulations." The committee is composed of at least two independent directors, and currently all three members are independent directors. Two meetings were held during the year, with 100% attendance.

The main powers of the Compensation Committee are to establish and regularly review the systems and standards for the performance and compensation of directors and managers, and to periodically evaluate their compensation. Meanwhile, the Remuneration Committee should comprehensively consider the following principles when conducting evaluations: the company's compensation complies with relevant laws and regulations and is sufficient to attract outstanding talent; the performance evaluation and compensation of directors and managers should refer to the usual standards of the industry, and take into account the time invested by the individual, the responsibilities undertaken, the achievement of personal goals, performance in other positions, the compensation paid by the company to those in equivalent positions in recent years, and the reasonableness of the relationship between individual performance and company operating performance and future risks, based on the achievement of the company's short-term and long-term business goals and the company's financial situation; directors and managers should not be encouraged to engage in behaviors that exceed the company's risk tolerance in pursuit of compensation; the proportion of short-term performance-based compensation for directors and senior managers and the timing of certain variable compensation payments should be determined with consideration of industry characteristics and the nature of the company's business.

In practice, the Compensation Committee adheres to the duty of care of prudent managers, faithfully fulfilling its authority to establish and periodically review policies, systems, standards, and structures for the performance evaluation and compensation of directors and managers, as well as to periodically evaluate and determine the compensation of directors and managers, and submitting its recommendations to the Board of Directors for discussion.

The Articles of Association stipulate that if there is a profit in a given year, no less than 5% should be allocated to employee compensation, to be distributed in stock or cash by resolution of the Board of Directors, and the recipients may include employees of subsidiary companies who meet certain conditions; the company should allocate no more than 5% of the aforementioned profit amount to director compensation by resolution of the Board of Directors. However, if the company has accumulated losses, a reserve should be set aside in advance to cover them, and the remainder should be allocated according to the aforementioned proportion. The distribution of employee compensation and director compensation should be decided by special resolution of the Board of Directors and submitted to the Shareholders' Meeting.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

Incentive system linked to sustainable performance

Currently, TSEC is implementing ESG, linking ESG development goals and performance to the personal compensation of board members and managers. In order to motivate senior managers, outstanding key professionals and all employees to focus on long-term comprehensive performance and achieve sustainable operation, starting from 2025, six major sustainable development strategies and goals will be linked to the short-term and long-term incentive compensation of our general manager and CEO, senior managers and business unit heads.

1. General Manager & CEO: Performance Indicators - Green Economy Performance (30%), Corporate Governance (25%), Integrity Management (20%), Risk Management (15%), Labor Rights (5%), Green Products (5%).
2. Senior Managers: Carbon Reduction and Emission Reduction (50%), Environmental Sustainability (50%). 3. Public Institution Supervisors: TCFD (Climate Change-Related Financial Disclosures) (50%), Environmental Education (50%).



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governanc
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

3.1.3 Internal audit

The purpose of the Company's internal audit function is to assist the Board of Directors and management in identifying deficiencies in the internal control system, evaluating operational effectiveness and efficiency, and providing timely recommendations for improvement. This ensures the continued effective implementation of the internal control system and serves as a basis for its review and revision. In accordance with the "Regulations Governing Establishment of Internal Control Systems by Public Companies," TSEC has established an effective internal control system—taking into account the overall operations of both the Company and its subsidiaries—and continuously reviews and improves it to adapt to changing internal and external environments, thereby ensuring the system's design and execution remain effective. To guarantee that audit personnel perform their duties with impartiality and objectivity, TSEC has established an independent Internal Audit Office under the Board of Directors, staffed by full-time auditors. The "Audit Committee Charter" stipulates that the appointment and dismissal of the Chief Internal Auditor require the consent of the Audit Committee and a resolution by the Board of Directors; furthermore, matters regarding the appointment, dismissal, performance evaluation, and remuneration of internal audit personnel must be submitted to the Board of Directors or approved by the Chairman upon recommendation by the Chief Internal Auditor.

In addition to conducting self-assessments of the internal control system, TSEC's Board of Directors and management review the self-assessment results from various departments and the audit reports from the Audit Office at least annually. The Chief Auditor attends Board meetings to report on audit operations as required and attends Audit Committee meetings at least once a quarter to brief independent directors on the status of internal audit execution and the functioning of internal controls.

Furthermore, the Audit Office annually reviews the internal control self-assessment reports from all company units and subsidiaries. It submits these reports—along with details regarding identified internal control deficiencies and the status of corrective actions for any irregularities—to the Board of Directors and the President; this information serves as the basis for evaluating the overall effectiveness of the internal control system and issuing the Statement on Internal Control Systems. Finally, to strengthen the professional capabilities of audit personnel, TSEC arranges for continuous professional development and participation in internal audit training courses organized by institutions designated by the competent authority, thereby enhancing and maintaining audit quality and execution effectiveness; during the year, audit personnel completed a total of 24 hours of training across two sessions.

Through the continuous monitoring of operational system implementation by auditors, TSEC establishes sound governance practices and risk control mechanisms, thereby fostering a business environment conducive to sustainable development. During the year, the Audit Office conducted 104 audits, achieving a compliance rate of 96.15%; no major non-conformities were identified, and all instances of non-conformity were rectified and closed out within the required timeframes.

Audit Flowchart



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

3.2 Integrity Management

TSEC builds its core corporate values upon a foundation of legal compliance and integrity, conducting business with a commitment to honesty and adherence to the law. To ensure that the philosophy of integrity-based operations is deeply ingrained within the organization, the company places great importance on employee character; the Human Resources department introduces internal integrity policies to new hires upon onboarding to foster an awareness of integrity. Simultaneously, management is required to lead by example, with all directors and senior executives signing a "Statement of Integrity-Based Operations" and strictly adhering to principles of integrity, thereby subtly shaping a corporate culture rooted in honesty. As of 2025, TSEC has recorded no major legal violations in areas such as corporate governance, environmental practices, or social responsibility (a major violation is defined as a single fine exceeding NT$100,000).

Major violations in 2025 : 0

Major violations of the year	Violation of statutory provisions	Details of Major Penalties	Follow-up improvement measures
none	none	none	none

■ TSEC defines a major violation as a single fine exceeding NT$100,000.

Management Policy	
Significance for TESC	Integrity is the foundation of a business; only by maintaining robust management policies and open channels of communication can a company prevent dishonest or improper conduct and achieve steady operational results.
Policy direction	Policies such as the "Code of Integrity," "Integrity Operating Procedures and Guidelines for Conduct," "Code of Ethical Conduct for Directors and Managers," and "Work Rules" have been established to define the responsibilities of employees in their business dealings and to foster a corporate culture of integrity.
Core objective	Short-term : No incidents of corruption occur. Medium- to long-term : Establish a corporate culture of integrity and ensure sound development.
Performance Outcomes	1 No records of violations regarding integrity in business operations were reported in 2025. 2 Directors and senior executives signed the "Statement of Integrity in Business Operations," achieving a 100% signing rate. 3 A total of 774 suppliers—comprising qualified suppliers registered by the materials department and eligible miscellaneous vendors—were asked to sign the "Commitment to Integrity in Transactions"; all 774 signed and returned the document, achieving a 100% completion rate. 4 Educational sessions on "Integrity and Ethical Standards" were organized for new employees, comprising 24 sessions with 29 participants and totaling 6 hours of training; a session on "Integrity in Business Operations" was held for supervisors and personnel in procurement and general affairs, with 88 participants and a total duration of 1 hour. 5 A "micro-course" on integrity in business operations was produced and made available for all employees to access via the company intranet (under the path: Announcements / Human Resources / Education & Training / TSEC). 6 Briefings on regulations—specifically regarding the handling of material internal information and the prevention of insider trading—were conducted for newly appointed director Liu Zhe-liang.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

Management Policy	Action Plan	1 Integrate integrity and ethical values into corporate business strategies and establish anti-fraud measures to ensure integrity in operations, in compliance with applicable laws and regulations. 2 Periodically analyze and assess the risk of unethical conduct within business operations; formulate prevention plans based on these assessments; and establish standard operating procedures and codes of conduct relevant to specific business activities within these plans. 3 Design the internal organizational structure, staffing, and division of responsibilities, implementing mutual oversight and checks-and-balances mechanisms for business activities identified as having a higher risk of unethical conduct; promote training and awareness regarding integrity policies. 4 Establish a whistleblowing system and ensure its effective implementation.
How to manage	Invest resources	1 In the course of business activities, all TSEC personnel shall communicate the company's policy on integrity and relevant regulations to trading partners, and explicitly refuse to provide, promise, solicit, or accept—whether directly or indirectly—any improper benefits in any form or under any pretext. 2 Signing of Integrity Statements and Integrity Undertakings. 3 Supplier audits. 4 Education, training, and policy communication. 5 Whistleblowing system.
	Feedback mechanism	1 Board of Directors 2 Expanded Executive Meeting 3 Whistleblowing Mailbox : 6443@tsecpv.com 4 Point of Contact for Stakeholder Communication (https://www.tsecpv.com/interested_parties/)
	Evaluation mechanism	1 Report regularly to the Board of Directors on the implementation of integrity-based business practices. 2 All directors and senior managers have signed a statement of integrity in business operations. 3 Suppliers are required to sign a letter of commitment to integrity in transactions.
Future Plans	2026 Goal	1 No incidents involving breaches of ethics or integrity have occurred. 2 The completion rate for suppliers signing the Integrity in Transactions Commitment Letter is 100%.

Internally, TSEC has designated the "Integrity-Based Operations Task Force" as the unit responsible for promoting and implementing its integrity policies. The company has formulated—and the Board of Directors has approved—a comprehensive set of regulations and guidelines regarding integrity, including the "Corporate Governance Best-Practice Principles," "Code of Integrity-Based Operations," "Procedures and Guidelines for Integrity-Based Operations," "Code of Ethical Conduct for Directors and Managers," and "Procedures for Handling Material Inside Information and Preventing Insider Trading." These internal integrity policies are disclosed on the company's official website for stakeholder reference, and dedicated contact channels have been established to facilitate stakeholder feedback. Employees with questions regarding these policies may consult the official website or reach out to the Integrity-Based Operations Task Force through various channels, such as email or telephone.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

TSEC has established multiple reporting channels; stakeholders may submit reports via the dedicated stakeholder section of the company's official website or through an external reporting mailbox. Upon receipt, the President assigns designated personnel to conduct an investigation. In principle, whistleblowers are required to identify themselves and provide details regarding the incident—including, but not limited to, the name of the subject, the time and location of the event, the circumstances involved, and supporting evidence; however, investigators may also proceed with an inquiry if an anonymous whistleblower provides specific, substantive evidence. Should an investigator have a conflict of interest—or any relationship that might compromise the handling of the case—with the whistleblower or the subject of the report, they must voluntarily disclose this and recuse themselves, allowing another person to conduct the investigation. The investigation process must be conducted impartially and with strict confidentiality to ensure the whistleblower's identity is not revealed; TSEC pledges to protect whistleblowers from any form of unfair treatment resulting from their report. If the subject of the report holds a managerial position at the level of manager or above, the matter is reported to the independent directors. TSEC received no reports or complaints during the 2025 fiscal year.

In the course of business interactions, TSEC personnel shall explain the company's integrity policy and relevant regulations to counterparties and explicitly refuse to provide, promise, demand, or accept—whether directly or indirectly—any improper benefits in any form or under any pretext. Furthermore, care must be taken to avoid conducting business with agents, suppliers, customers, or other business partners involved in unethical conduct; if a business partner or collaborator is found to have engaged in unethical behavior, TSEC shall evaluate whether to designate them as a party with whom business relations are prohibited, thereby upholding the company's integrity policy. Finally, when entering into contracts with counterparties, TSEC shall fully assess the counterparty's integrity status and incorporate compliance with TSEC's integrity policy into the contractual terms. Contracts should, to the extent possible, include provisions requiring that if either party becomes aware of personnel violating prohibitions against the acceptance of commissions, kickbacks, or other improper benefits, that party must immediately and truthfully disclose the identity of such personnel, the manner and amount (or nature) of the benefit involved, and provide relevant evidence while cooperating with the other party's investigation. Should either party suffer damages as a result of such conduct, it may claim compensation from the other party and deduct the corresponding amount from any contract payments due. In the event that either party engages in unethical conduct during business activities, the other party reserves the right to terminate or rescind the contract unconditionally at any time.

To further embed the concepts of ethics and integrity into employees' daily operations, the Integrity Management Task Force plans to gradually implement online integrity training for staff and arrange for senior executives to communicate the importance of the corporate integrity culture during meetings. Additionally, the unit is responsible for having management verify and evaluate the effectiveness of preventive measures established for integrity management, as well as assessing compliance within relevant business processes, and must report implementation results to the Board of Directors annually. The Internal Audit Office will oversee and audit the company's overall implementation of integrity practices and report to the Board of Directors as necessary.

Multiple reporting channels	Number of cases accepted that year	Processed	Case closed
Company Website: Communication Channel for Stakeholders https://www.tsecpv.com/interested_parties/	0	0	0
External Whistleblowing Mailbox : 6443@tsecpv.com	0	0	0

"Code of Integrity," "Code of Ethical Conduct for Directors and Managers," and "Procedures for Handling Material Non-public Information and Preventing Insider Trading" (see links):

https://www.tsecpv.com/important-internal-regulations/

3.3 Risk Management

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

Management Policy	Significance for TESC	To address the operational and environmental risks facing global enterprises, it is essential to establish risk management mechanisms that enable rapid response, minimize losses, and sustain profitability.
	Policy direction	Anticipate potential major future risks in order to avoid them, proactively deploy countermeasures to mitigate their impact on the company, or secure early business opportunities.
	Core objective	Short-term goal: Conduct regular annual assessments to identify significant risks and formulate strategies to avoid or address them. Medium- to long-term goal: Assess climate change-related risks and develop strategies to mitigate their impact.
	Performance Outcomes	1 Significant operational risks—such as third-country production models, U.S. tax rates, new government policies, the impact of new technologies, price fluctuations, and high inventory levels—have been identified, and the responsible units have proposed mitigation measures to minimize the potential impact of these future risks. 2 The Risk Management Team will report on the implementation of risk management activities for the 2025 fiscal year to the Board of Directors in December.
	Action Plan	1 Each unit assesses risks associated with its operations and, based on the assessment results, establishes priorities for controls and formulates corresponding response measures. 2 The Risk Management Team consolidates the risk assessment results from all units, reviews the effectiveness of controls, and coordinates cross-departmental control activities. 3 The team monitors the implementation of risk management and reports the status to the Sustainability Committee and the Board of Directors.
How to manage	Invest resources	Risk Management Group, Expanded Executive Meeting, Sustainability Committee, Board of Directors.
	Feedback mechanism	1 Various departments designate representatives to participate in the risk management team, providing feedback on risk assessments and improvement measures. 2 Management meetings, the Sustainability Committee, and the Board of Directors also offer suggestions and recommendations for improvement, driving continuous refinement and optimization.
	Evaluation mechanism	1 The extent to which improvement measures have been implemented. 2 For the following year, the risk assessment results for the same risk should show a reduced risk coefficient, or a response mechanism should be established.
Future Plans	2026Goal	It encompasses risks associated with all material topics, including aspects such as corporate governance, sustainable operations, and shared social prosperity, as well as the impacts of climate change.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

TSEC defines various types of risks in alignment with its overall operational strategy and has established a risk management mechanism characterized by early identification, accurate measurement, effective monitoring, and rigorous control. By managing risks within acceptable limits and preventing potential losses, the company continuously refines its best risk management practices in response to changing internal and external environments. These efforts aim to safeguard the interests of employees, shareholders, partners, and customers, enhance corporate value, and achieve optimal resource allocation.

Risk Management Organization



Risk management process

Including:identification of risk categories, risk measurement,risk monitoring,risk reporting and disclosure, risk response, etc.



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

Risk Type

Dimension	Risk Type	Risk Disclosure
Economic Aspects (Including Corporate Governance)	Market risk	• Political and Economic Aspects: Includes risks where factors such as domestic and international politics, economics, and regulatory requirements impact the company's financial position or business operations. • Technology and Industry Aspects: Includes risks where factors such as domestic and international technological and industrial changes impact the company's financial position or business operations. • Financial Aspects: Includes risks of various losses arising from changes in the value of the company's financial assets or liabilities (including both on-balance-sheet and off-balance-sheet items) due to fluctuations in market risk factors (such as interest rates, exchange rates, stock prices, commodity prices, and electricity prices).
	Operational risk	• Operational Aspect: Includes risks impacting the company arising from changes in business models, organizational restructuring, excessive concentration of sales or procurement, product phase-outs, product and service design and quality management, and the management of significant risks associated with commercial contracts. • Financial Aspect: Includes risks impacting the company related to asset valuation, creditworthiness and solvency, liquidity risk, and accounting policies. • Internal Control Aspect: Includes risks related to the company's internal controls. • Intellectual Property Aspect: Includes matters such as patent application and maintenance, and the protection of intellectual property rights. • Supply Chain Aspect: Includes risks impacting the company arising from issues related to supplier quality, pricing, delivery schedules, and corporate social responsibility. • Information Security Aspect: Includes risks impacting the company related to digital information security, compliance with the General Data Protection Regulation (GDPR), and similar matters. • Public Relations Aspect: Includes risks impacting the company related to public relations issues, such as brand management and the shaping and maintenance of corporate image.
	Investment Risk	• Investment-related risks: These include risks impacting the company arising from factors such as excessive concentration of investments, high-risk and high-leverage operations, trading in financial derivatives, and short-term financial investments (subject to market price volatility), as well as risks associated with the operational management and governance of long-term investee companies.
	Legal and compliance risks	• Compliance Aspect: Encompasses risks arising from failure to adhere to relevant regulations—including, but not limited to, labor laws, corporate and securities trading laws, import/export controls, industry codes of conduct, and anti-corruption and anti-monopoly regulations. • Legal Aspect: Encompasses risks arising from failure to comply with various legal requirements, as well as other legal risks that could infringe upon the company's interests.
Environmental aspects	Environmental risk	• Environmental aspects: Risks associated with issues such as greenhouse gas emissions management, carbon credit management, and energy management in response to climate change and natural disasters; as well as risks related to compliance with international and local environmental regulations—such as the management of air, water, waste, toxic substances, and noise emissions, or environmental impact assessment requirements.
social aspect	Operational Hazard Risk	• The scope of operations encompasses risks to the company arising from factors such as occupational health and safety, chemical management, safety protection and emergency response, as well as errors or improper practices related to human management and operations.
	Human Resource Risk	• Human Resources Aspect: Includes risks associated with human rights issues involving employees or suppliers—such as, but not limited to, labor-management relations, child labor, and forced labor—as well as risks related to talent development and management, including recruitment, retention, and talent development mechanisms. • Work Environment Aspect: Includes risks associated with issues regarding safe working environments for employees or suppliers.
Other aspects	Other risks	• Other categories: Refers to risks not covered by the aforementioned categories that could nevertheless result in significant losses for the company—such as long-term emerging risks, major external hazard events, or "tail risks" triggered by extreme events. Furthermore, for any other risks, appropriate risk control and management procedures should be established based on the specific characteristics of the risk and the extent of its potential impact.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

Based on the principle of materiality, TSEC identifies potential risk factors across various dimensions and risk categories. It analyzes and assesses these risks—including the severity of their impact should they materialize—to formulate appropriate response strategies and implement ongoing risk monitoring. The identified material risks and corresponding response strategies are as follows:

dimension	Risk Type	Risk issues	Potential risks	Risk response strategies	Remark
Economic fundamentals	Legal and compliance risks	Honest and trustworthy business operations	• Occurrence of fraud or corruption	• Internal Communication and Training • Establishment and Accessibility of Whistleblowing Channels	
			• Violation of the provisions of laws and regulations	• Internal Communication and Training	
	Operational risk Market risk	Economic performance	• Dumping of overseas mods	• Enhance product quality and after-sales service • Create product differentiation	
			• Disruptions in raw material supply and price fluctuations	• Onboarding new suppliers to diversify risk • Timely tracking and expediting of material procurement • Real-time adjustments to safety stock levels	
			• Exchange rate fluctuations	• Manage currencies for quotations and procurement, and utilize raw material procurement currencies for natural hedging. • Pass on exchange rate impacts to upstream and downstream partners through negotiations on selling prices and costs. • Forecast asset and liability positions and select appropriate financial instruments for hedging.	
			• Inventory Management	• Timely adjustment of production and sales operations • Real-time adjustment of safety stock levels in response to changing conditions	
	Operational risk	Corporate Governance	• Board Operations	• Enhance Board Structure and Operations • Fulfill Corporate Sustainability Responsibilities	
		Risk Management	• No preventive mechanisms or contingency procedures have been formulated for various types of major risks.	• Identification of risk factors and coefficients • Formulation of response strategies • Handling of risks encountered • Implementation of risk monitoring	
social aspect	Environmental risk	Supplier Management	• Establishing a Sustainable Supply Chain	• Implement audits of supplier sustainability.	
	Operational risk	Green products	• Green Product R&D Performance	• Implement R&D project management	

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

dimension	Risk Type	Potential risks	Potential risks	Risk response strategies	Remark
social aspect	Human Resource Risk	Labor and human rights	• Protection of working conditions	• Working Hours: Adjust shifts in accordance with the law to prevent excessive overtime. • Wages and Benefits: Provide fair and reasonable compensation and working conditions.	
			• Non-discrimination, Diversity, and Inclusion	• Prohibition of Discrimination in Any Form • Provide an equal and fair work environment; prohibit discrimination in any form—including on the grounds of race, skin color, religion, nationality, gender, sexual orientation, age, or disability—regarding recruitment, hiring, training, rewards, promotion, termination, retirement, and other conditions of employment.	
			• Right to work	• Fair performance appraisal system	
			• Privacy Rights	• Proper management of personal data and information of stakeholders	
Economic fundamentals	Operational risk	Cybersecurity risks	• Hacker and virus attacks	• Education and Awareness • Campaign for the Implementation of Intrusion Detection Systems	
			• The system is outdated.	• Hardware and Operating System Upgrades	



3.4 Economic Performance

Management Policy	Key Themes	Economic performance
	Importance to Yuanchin	Yuanjing is committed to establishing comprehensive strategies and management practices to enhance operational performance and achieve steady, sustainable corporate growth. These efforts aim to strengthen the confidence of investors, employees, supply partners, and customers, fostering mutual prosperity and paving the way for long-term, sustainable operations.
	Policy Direction	TSEC is committed to achieving its operational goals. Beyond establishing product advantages through differentiation, the company flexibly adjusts supplier collaborations and strictly manages inventory levels to secure a competitive edge in production costs and boost production line utilization, thereby ensuring steady and sustained profitability.
	Core Objectives	Short-term: 1. Expansion of large-sized module production lines. 2. Continued growth in module sales volume, revenue, and profitability. Medium- to long-term: 1. Stable business growth and increased profitability. 2. Maintaining the number one market share in the Taiwan module market.
	Performance Outcomes	1 Consolidated operating revenue for 2025 was RMB 1.825 billion. 2 Consolidated net loss after tax for 2025 was RMB 3.199 billion. 3 Consolidated loss per share for 2025 was RMB 6.24. 4 The TCRI corporate credit rating improved from Level 7 to Level 6.
	Action Plans	1 Accelerate the introduction of differentiated large-format products and enhance production quality and efficiency. 2 Increase capacity utilization rates and lower production costs through economies of scale. 3 Strengthen bargaining power in procurement. 4 Strive for the highest market share in the Taiwan module market and continue expanding into overseas markets.
How to manage	Resource allocation	1 Increase sales of high-margin products. 2 Strengthen supplier management mechanisms. 3 Accelerate time-to-market for new products.
	Feedback mechanism	1 Scheduled and ad-hoc business meetings, production and sales meetings, expanded management meetings, etc. 2 Financial reports audited by accountants. 3 Communication channel for stakeholders. (https://www.tsecpv.com/whistle/)。

How to manage	Evaluation mechanism	1 Market size assessment indicators. 2 Annual plan and budget review meeting. 3 KPI achievement rates by department.
Future Plans	2026 Goal	1 Module sales target: over 280 MW 2 Internal budget target achieved

In alignment with the Executive Yuan's "Green Energy Technology Industry Innovation Promotion Program 2.0"—launched in 2021 to realize energy transition goals and transform Taiwan into a safe, clean, and sustainable smart energy island—TSEC is committed to the four key visions of green energy promotion, industrial development, technological innovation, and green finance. Adhering to government policy guidelines, the company aims to establish Taiwan as an Asia-Pacific green energy hub by focusing on four core pillars: energy conservation, energy generation, energy storage, and system integration. Our strategies involve proactive energy conservation, diversified energy generation, smart energy storage, flexible dispatching, and market development. As Taiwan's leading solar photovoltaic manufacturer, and in response to government policies on green energy and carbon reduction, TSEC remains dedicated to enhancing product quality and implementing lean management. We are pursuing a diversified product development strategy that spans the entire value chain—from solar power plant generation and communication applications to energy storage systems—which will serve as the core of our medium- to long-term product development roadmap.

Unit: NT$

Direct economic value generated and distributed by the organization			
project	2023	2024	2025
income	8,260,947	4,514,018	1,825,354
Operating costs	6,986,706	4,195,036	3,179,076
Employee Compensation and Benefits	1,321,188	1,109,282	825,701
Payments to capital contributors	122,389	293,125	69,896
Payments to the government	128,225	76,153	43,030
Community Investment	1,150	2,050	0
Retained economic value	-298,711	-1,161,628	-2,292,349

註 "Revenue" is defined as net sales plus income derived from financial investments and asset sales.
"Operating costs" are defined as cash outflows to external parties for the purchase of raw materials, product components, facilities, and services.
"Employee wages and benefits" are defined as total wages (including employee salaries and amounts paid to the government on behalf of employees) plus total benefits
(excluding costs for training, protective equipment, or other cost items directly related to job duties).
"Payments to capital providers" are defined as dividends paid to all shareholders plus interest paid to lenders.
"Payments to government" are defined as all taxes and fines paid by the organization in accordance with international, national, and local standards. Taxes may include sales tax, income tax, and property tax.
"Retained economic value" is calculated as: Revenue – (Operating costs + Employee wages and benefits + Payments to capital providers + Payments to government + Community investments).

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performanc
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

Defined Benefit Obligations and Other Retirement Plans

In strict compliance with the Labor Pension Act, TSEC makes monthly contributions equal to 6% of the employee's pensionable wage—based on the statutory wage bracket table—into the employee's individual pension account. Additionally, employees may voluntarily contribute up to 6% of their wages to the same account to benefit from tax exemptions. Upon meeting the eligibility criteria for retirement, employees may withdraw funds directly from their individual pension accounts.

Retirement System and Implementation Status

Unit: NT$

Pension system	old system	New system
Applicable Legal Basis	Labor Standards Act	Labor Pension Act
How to make a withdrawal	Funds equivalent to 2% of the total monthly employee payroll shall be allocated and deposited into a dedicated account at the Bank of Taiwan (formerly the Central Trust of China) in the Company's name.	A contribution of 6% based on the employee's insured salary bracket is made to their individual account at the Bureau of Labor Insurance.
Allocated amount	NO	The appropriation amount for the 2025 fiscal year is NT$27,897 thousand.

Obtained from government financial assistance

The financial assistance received by TSEC from the government in 2025 is set forth in the table below.

Unit: NT$

Subsidy Programs	Grant-providing entity	Subsidy Program	Subsidy amount	Remark
Industrial Upgrading Guidance	Ministry of Economic Affairs	Development Project for Large-Format, High-Efficiency N-Type TOPCon Cells and Bifacial Modules	12,900,000元	The project implementation period begins on July 1, 2023 – December 31, 2025 2023 subsidy: 10,000,000 yuan 2024 subsidy: 14,000,000 yuan 2025 subsidy: 12,900,000 yuan
Exhibition subsidy	Ministry of Economic Affairs	Subsidies for overseas exhibitions	60,000元	Japan Solar PV Exhibition
Education and Training Subsidy	Ministry of Labor – Workforce Development Agency	Corporate Human Resources Enhancement Plan	754,757元	Subsidizing costs for external training courses, fees for internal and external instructors, travel expenses for external instructors, etc.
Total subsidy amount：14,841,757元				

3.5 Innovation and R&D of Green Products

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

Management Policy

Key Themes	Innovative R&D of Green Products
Importance to Yuanchin	In recent years, factors such as climate change, the global pandemic, and the Russia-Ukraine war have heightened the focus on international energy demand. As a player in the solar energy industry, Yuanjing continuously offers a diverse range of products and services to meet market needs and maintain its overall competitiveness.
Policy Direction	Actively develop green energy solutions and, in response to market trends regarding the energy transition, invest in the development and application of energy storage systems and niche products.
Core Objectives	short term: 1 In response to market demand, we continuously improve the mass-production quality of monocrystalline H-Cell batteries, balancing enhancements in conversion efficiency and production yield to optimize process conditions and reduce production costs. 2 We are developing space-grade solar cells to meet the demand for low-Earth orbit (LEO) satellites. 3 We are actively entering the energy storage sector, laying a solid foundation for future expansion into the solar-plus-storage and electric power industries. Mid-term: 1 The evaluation and adoption of advanced manufacturing technologies and materials effectively enhance photoelectric conversion efficiency. 2 Efforts include evaluating and developing G12-format cell technology to boost total power output, as well as researching other innovative technologies and novel cell structures. 3 Solar products with specialized functions are being developed for unique applications or environments, such as electric vehicles and offshore installations. 4 The company is expanding its R&D focus to include the development of stable, baseload green energy, with a strategic emphasis on incorporating geothermal power into its energy portfolio. long: 1 Developing mass-production applications for novel perovskite tandem battery structures and modules. 2 Developing a smart optoelectronic platform that transforms traditional PV operations and maintenance (O&M) procedures into an automated, flexible, intuitive, and data-driven solar string monitoring system, thereby maximizing the power plant's overall generation efficiency and reducing labor costs.
Performance Outcomes	1 Launched a project under the Industrial Upgrade and Innovation Platform guidance program of the Industrial Development Administration, Ministry of Economic Affairs. 2 Consecutively recognized for 11 years as a provider of high-quality solar PV products (cells and modules) by the Bureau of Energy, Ministry of Economic Affairs. 3 Obtained the Taiwan High-Efficiency Solar PV Module certification (Voluntary Product Certification) from the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs. 4 Completed wind tunnel testing for M10 modules—simulating Level 17 wind speeds—at the Wind and Rain Wind Tunnel Laboratory of the Architecture and Building Research Institute, Ministry of the Interior.
Action Plans	Continuously improve H-Cell efficiency to enhance product competitiveness. Targeting new energy markets such as energy storage and geothermal power. Integration and evaluation of space-compatible technologies, such as perovskite and HJT.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

How to manage	Resource allocation	1 Continuously improve and enhance existing product manufacturing processes. 2 Formulate phased R&D plans and allocate corresponding R&D resources (equipment, funding, etc.). 3 Develop and design products for diverse applications.
	Feedback mechanism	1 R&D department meetings, expanded management meetings, etc. 2 Customer feedback.
	Evaluation mechanism	1 Achievement rate of R&D KPIs. 2 Outcomes of new process and new product development. 3 Certificates and awards related to product validation.
Future Plans	22026 Goal	Continue investing in the energy storage sector and the development and application of niche products to identify new business opportunities and sales channels for the future. Actively evaluate battery technologies suitable for space satellites.

In recent years, factors such as climate change, the global pandemic, and the Russia-Ukraine conflict have significantly heightened the international focus on energy. Amidst this volatile and challenging landscape, TSEC has expanded its solar industry operations—ranging from solar cells and modules to the development and O&M management of photovoltaic (PV) power plants—while continuously and proactively developing green energy solutions. Furthermore, in response to the trend of energy transition, TSEC has ventured into energy storage and the development of niche products, seeking new business opportunities and sales channels for the future.

Notably, TSEC has received the "Excellent Solar PV Product Award" (Golden Energy Award)—organized by the Bureau of Energy, Ministry of Economic Affairs—for 11 consecutive years (2014–2024).

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

R&D Objectives

1.Short-term Research and Development Plan

In the short term, R&D efforts aim to meet domestic market and VPC requirements while aligning with the government's 2050 net-zero emissions goal. The company will continue to improve high-efficiency monocrystalline N-type H-Cell solar cells by simultaneously enhancing conversion efficiency and production yields, optimizing process conditions, and reducing production costs. Furthermore, the integration of novel, advanced metallization technologies with Super Multi-Busbar (SMBB) bifacial cell technology will be implemented to boost overall cell efficiency.

TSEC is actively developing various niche solar cell products, including the introduction of equipment for large-format N-type cells and the development of G10-sized cells to increase total power output. For G10 modules—available in 108, 120, 132, and 144-cell configurations—new materials are being introduced to optimize encapsulation processes and enhance module power output. Additionally, to address the demand for low-Earth orbit (LEO) satellites, the company is developing space-grade solar cells featuring radiation-resistant passivation layers; it is also conducting research on spectral dispersion to create solar cell products with low visual reflectivity.

Energy storage sector

TSEC is actively expanding into the energy storage sector, focusing on the development of Automatic Frequency Control (AFC) capabilities while simultaneously researching other functions such as peak shaving and valley filling, power smoothing, and regional microgrids; these efforts will lay a solid foundation for the company's future ventures into the solar-plus-storage market and the broader power industry.

2.Medium-term Research and Development Plan

Medium-term R&D objectives focus on evaluating and introducing advanced manufacturing technologies and materials to effectively enhance photoelectric conversion efficiency; this includes the introduction of new equipment, resistance reduction, and the application of novel electrode materials. Efforts are underway to evaluate and develop G12-format cell technology to boost total power output. Other innovative research initiatives cover the development of novel cell architectures—such as Heterojunction (HJT) and Interdigitated Back Contact (IBC) solar cells—and next-generation module packaging processes (e.g., cut-cell, shingled, high-density, and 0BB technologies).

Regarding niche product development, TSEC creates solar products with value-added features tailored for specialized applications or environments. In addition to developing solutions for future electric vehicles and unique settings—such as offshore installations—the company is also developing solar module materials designed for space environments. These initiatives will help solidify TSEC's position as a leader in both technology development and cost management within the solar cell and module industry.

To overcome the limitations of intermittent solar power generation, the company is shifting its R&D focus toward developing stable, green baseload power, with a strategic emphasis on geothermal energy. By evaluating high-efficiency geothermal extraction technologies and corrosion-resistant materials—and leveraging the daytime generation advantages of solar power—the company aims to build a smart power dispatch system that integrates solar and geothermal energy. Concurrently, the company is researching small-scale hydropower and flow battery energy storage technologies; through collaborations with partners across various sectors, it plans to enter the electricity sales market and transform into a comprehensive power service provider capable of round-the-clock supply.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
3.1 Corporate Governance
3.2 Integrity in Business Operations
3.3 Risk Management
3.4 Economic Performance
3.5 Green Product Innovation and R&D
04 Green Sustainability
05 Social Care
appendix

3.Long-range Research and Development Plan

The company's long-term R&D strategy focuses on the mass-market application of next-generation "perovskite tandem" structures. By combining the fundamental research capabilities of top domestic institutions with our own extensive experience in mass production, we are conducting in-depth development in areas such as interface passivation, stability enhancement, and large-area coating processes; our goal is to break through the efficiency bottlenecks of traditional solar cells and solidify our leadership in technology and cost control. Simultaneously, TSEC is actively investing in circular economy and module recycling technologies to help clients navigate international carbon credit and green supply chain requirements. We are also expanding the functionality of the "TSEC Smart PV Platform," shifting our development focus from traditional PV operations and maintenance toward the cross-sector integration of solar power, geothermal energy, and energy storage systems. Leveraging the stable baseload characteristics of geothermal power—combined with smart Energy Management Systems (EMS) and data-driven automated dispatch mechanisms—we are capitalizing on our vertical integration across the supply chain to build a new power operation model encompassing green energy generation, storage, and application. We aim to become a comprehensive power service provider capable of planning and dispatching power for small-to-medium-scale regional grids.





04

Green Sustainability

4.1 Climate-related Financial Disclosures

4.2 Energy Management

4.3 Greenhouse Gas Emissions

4.4 Water Resource Management

4.5 Waste Management

4.6 Sustainable Supply Chain Management

04 Green Sustainability

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
- 04 Green Sustainability
  - 4.1 Task Force on Climate-related Financial Disclosure
  - 4.2 Energy Management
  - 4.3 Greenhouse Gas Emissions
  - 4.4 Water Resource Management
  - 4.5 Waste Management
  - 4.6 Sustainable Supply Chain Management
05 Social Care
appendix

4.1 Climate-related financial disclosures

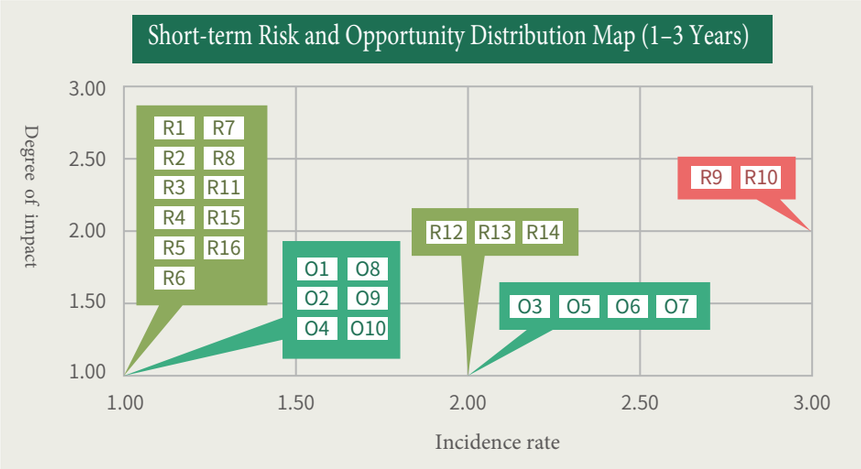
Given the increasing significance of extreme weather events driven by global warming, as well as energy and climate change issues—all of which directly or indirectly impact corporate operations and consumer behavior—TSEC Solar began aligning its disclosures with the Task Force on Climate-Related Financial Disclosures (TCFD) framework in 2022. This approach structures information around four key pillars—Governance, Strategy, Risk Management, and Metrics and Targets—and presents the findings in the company's sustainability report. Through this initiative, TSEC Solar aims to provide stakeholders with insight into the impacts of climate-related risks and opportunities, as well as the measures implemented to mitigate these risks.

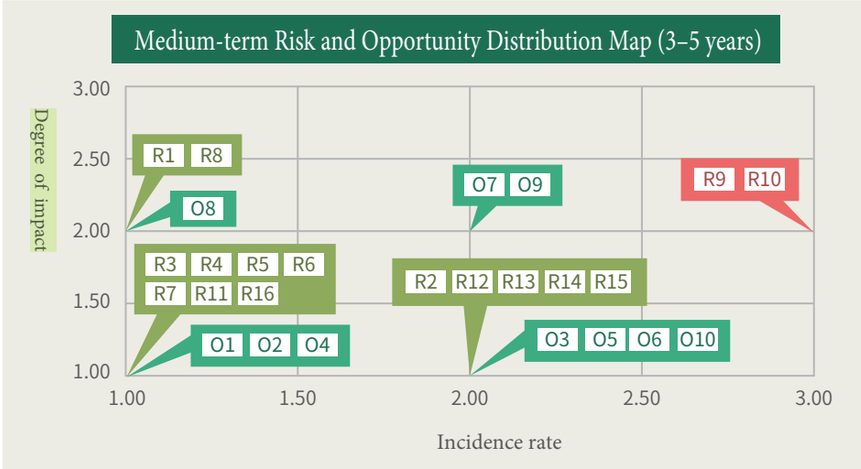
Governance	At TSEC Solar, climate risk management is primarily discussed and evaluated by the Sustainability Committee. The outcomes of climate change-related resolutions are then reported to senior management by the Committee Chairperson, covering implementation performance and recommendations for improvement. Annual implementation results and work plans for the coming year are presented to the Board of Directors during the fourth quarter; these are subsequently revised based on the Board's feedback and incorporate climate change risk issues and their associated management objectives.
Strategy	To address the impact of climate-related risks and opportunities on its strategy and financial planning, TSEC employs both quantitative and qualitative climate-related scenario analyses—referencing the TCFD framework—to formulate appropriate strategies. The company deliberated on the 2°C Scenario (2DS) during Sustainability Committee meetings and utilized tools from the Taiwan Climate Change Projection Information and Adaptation Knowledge Platform (TCCIP) to assess physical climate risk scenarios. Ultimately, TSEC adopted the 2DS/RCP2.6 scenario as the basis for evaluating physical climate risks. Furthermore, in accordance with the ISO 31000 risk management standard, the company assessed transition and physical risks associated with these scenarios based on impact and likelihood, thereby characterizing the relevant climate-related risks and opportunities. Finally, TSEC identified climate risks and opportunities pertinent to its operations; adopting a ten-year horizon for long-term operational planning, the company defined the short term as 1–3 years, the medium term as 3–5 years, and the long term as 6–10 years.

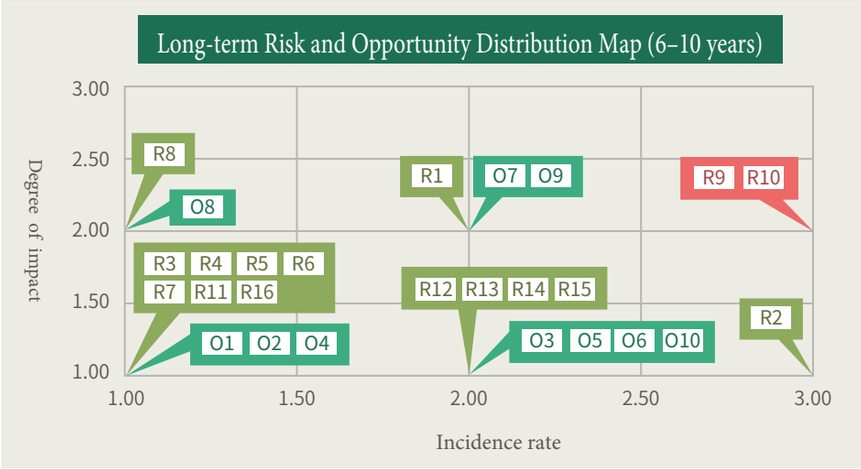
A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosure
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

TSEC 2025 TCFD Climate Risk and Opportunity Matrix

On the matrix chart, a red background indicates issues requiring attention; "R" denotes risk-related issues, and "O" denotes opportunity-related issues.







A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosure
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

risk	factor	Issues regarding climate change risks	Potential business, strategic, and financial impacts	Risk Level		
				Short	Medium	Long
Transition Risk	Policies and Regulations	R1Increase the pricing of greenhouse gas emissions.	Subject to carbon taxes, leading to increased operating costs.	Low	Low	medium
		R2Strengthen emission reporting obligations	Increased reporting costs, raising operating expenses.	Low	Low	medium
		R3Requirements and regulation for existing products and services	Compliance with relevant regulatory measures increases operating costs.	Low	Low	Low
		R4Facing the risk of litigation	IIncreased costs and/or reduced product demand resulting from fines and judgments.	Low	Low	Low
	technology	R5Replace existing products and services with low-carbon alternatives.	Declining demand for products and services reduces revenue.	Low	Low	Low
		R6Failure of investment in new technology	Capital investment in the development of new technologies increases operating costs.	Low	Low	Low
		R7The cost of low-carbon technological transformation	Costs associated with adopting or implementing new operational practices and processes, i ncreasing operating costs.	Low	Low	Low
	market	R8Changes in customer behavior	Shifts in consumer preferences have led to a decline in the quantity demanded for goods, reducing revenue.	Low	Low	Low
		R9Market risk	Competition from rivals led to a decline in product demand and reduced revenu	high	high	high
		R10Rising raw material costs	Increase operating costs and reduce profitability.	high	high	high
	reputation	R11Shifting Consumer Preferences – Industry Stigmatization	Leads to a decline in the quantity of goods demanded and reduces revenue.	Low	Low	Low
		R12Stakeholder concerns and negative feedback are mounting.	Leads to a decline in the quantity of goods demanded and reduces revenue.	Low	Low	Low
Entity risk	Immediacy	R13Increased severity of extreme weather events such as typhoons and floods.	Decline or disruption in production capacity (e.g., production halts, transportation difficulties, supply chain interruptions), leading to increased operating costs.	Low	Low	Low
	Long-term nature	R14Changes in precipitation patterns and extreme shifts in climate patterns.	Impacts workforce management and planning (e.g., health, safety, absenteeism)	Low	Low	Low
		R15Rise in average temperature	Increased electricity consumption leads to higher operating costs.	Low	Low	Low
		R16Sea-level rise	Write-offs and early retirement of existing assets; increased operating costs.	Low	Low	Low

Short-term is 1–3 years, medium-term is 3–5 years, and long-term is 6–10 years.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Risk	factor	Climate Change Risk Issues	Potential Business, Strategic, and Financial Impacts	Risk Level		
				Short	Medium	Long
Chance	Resource efficiency	Adopt more efficient modes of transportation.	Reduce operating costs	Low	Low	Low
		Utilize more efficient production and distribution processes.	Increase production capacity and revenue	Low	Low	Low
		Recycling and reuse	Reduce operating costs	Low	Low	Low
		Switching to more energy-efficient buildings	Reduce operating costs	Low	Low	Low
		Reduce water usage and consumption.	Reduce operating costs	Low	Low	Low
	Energy sources market	Use low-carbon energy sources	Reduce exposure to the risk of rising future fossil fuel prices	Low	Low	Low
		Adopt incentive-based policies	Enter new markets, increase demand for products/services, and boost profitability	Low	medium	medium
	Products/Services	Utilize new technologies	Enhance reputation, increase demand for products/services, and boost profitability	Low	Low	Low
	toughness	Participate in carbon trading markets	Reduce greenhouse gas emission risks, thereby lowering sensitivity to carbon trading price fluctuations	Low	medium	medium
		Transition to decentralized energy systems	Avoid risks associated with reliance on a single energy source and enhance operational continuit	Low	Low	Low

Note: Short-term is 1–3 years, medium-term is 3–5 years, and long-term is 6–10 years.



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosure
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

The identification of risk and opportunity scenarios, along with the control measures incorporated into the management system, are outlined below.：

一、Transition risks—two significant risks identified: market risk and the risk of rising raw material costs.

1 Market risk

In alignment with government policy, and focusing on the four key pillars of energy conservation, generation, storage, and system integration, we are implementing strategies—such as proactive energy saving, diversified generation, smart storage, flexible dispatch, and market development—to establish Taiwan as an Asia-Pacific green energy hub. We remain committed to enhancing product quality and lean management while pursuing a diversified product strategy that spans solar power generation, communication applications, and energy storage systems.

2 Rising raw material prices

TSEC Solar aims to reduce reliance on any single supplier by establishing partnerships with multiple vendors and building a foundation of long-term mutual trust and cooperation, thereby securing supplier support and preferential treatment. Simultaneously, the company closely monitors market and industry developments, including raw material price trends and supply conditions. This proactive approach enables the anticipation of potential issues and, when necessary, the signing of long-term supply contracts to ensure stable supplies and pricing.

二、Although none of the following items are classified as major risks, we have selected those with relatively high likelihood and impact for improvement measures, based on risk mitigation considerations.

1 Policy and regulatory risks – Two transition risks identified: increased pricing of greenhouse gas emissions and strengthened emissions reporting obligations.

Under the carbon fee regulations, fees will be levied starting in 2025 on the electric power, gas supply, and manufacturing sectors for annual greenhouse gas emissions exceeding 25,000 metric tons of CO_2e. While this risk factor could potentially increase operating costs, the Company does not currently operate in a high-emission industry; therefore, the overall financial impact on operations is expected to be minimal. In 2024, the Company conducted a comprehensive greenhouse gas inventory and established carbon reduction targets based on its operational requirements.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosure
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

TCFDRisk management process

STEP 1

- Sustainability Steering Committee Completes Collection of Climate Risk-Related Data
- Disclosure Scope and Climate Risk Assessment

STEP 2

- Develop a list of climate-related risks and opportunities.

STEP 3

- The Sustainability Steering Committee conducts an analysis of the impact of climate risks and opportunities on operations.
- Determination of material risk items.

STEP 4

- Formulate response strategies and set targets for major risks.

STEP 5

- Each year, the Sustainability Steering Committee reviews implementation strategies and the effectiveness of goal achievement through a rolling management approach.

NOLE : This flowchart illustrates the company's process for monitoring climate change risks: data is collected and risk levels are determined using a risk matrix; the Sustainability Committee conducts a comprehensive analysis and assessment; strategies and objectives are established; and performance is reviewed and adjusted on a rolling, annual basis.



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosure
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Indicator targets(Metrics & Targets)

Based on the indicators established in accordance with TCFD climate risks and opportunities, and using 2022 as the base year, TSEC Solar has further set the following targets:

1. The average annual electricity saving rate must reach at least 1%.

2. Reduce carbon emissions by more than 1% annually.

Implementation Plan：

1. We compared energy efficiency across manufacturing processes to determine the optimal operating mode and implemented it on-site to enhance energy efficiency.
2. Regarding load management, we optimized fab lighting by replacing old fixtures with LEDs to achieve energy savings.
3. As an energy-saving measure, we adjusted air compressor pressure settings to reduce the frequency of start-stop cycles and lower electricity consumption.
4. When replacing aging equipment, we prioritize the acquisition of energy-efficient models to reduce electricity usage.

3. Implement greenhouse gas management in accordance with ISO 14064-1, conducting annual verification to maintain effectiveness and ensure the management mechanism operates efficiently.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6
05 Social Care
appendix

4.2 Energy Management (302-1)

Management Policy	Key Themes	Energy Management
	Significance to TSEC	Enable enterprises to achieve their goals of saving on electricity costs and reducing energy consumption and carbon emissions.
	Policy Direction	I. Continuously improve energy efficiency and reduce energy costs. II. Strictly comply with regulatory requirements and comprehensively identify energy aspects. III. Review energy objectives and targets, and ensure the availability of information resources. IV. Implement the energy management system and reduce greenhouse gas emissions.
	Core Objectives	I. Continuously propose energy management solutions II. Use renewable energy III. Achieve a 1% annual reduction in electricity consumption
	Performance Outcomes	Annual electricity savings: 1,615,769 kWh
	Action Plan	Hsinchu Plant: Reduced the number of 3F Recirculating Air Handling Units (RCUs) from 21 to 4. Hsinchu Plant: Completed installation and optimization of the new 2F H-cell process.
How to manage	Resource Allocation	Installation and improvement of the new H-cell process completed.
	Feedback Mechanism	Facility and Equipment Upgrades
	Evaluation Mechanism	Annual electricity savings: 1,615,769 kWh
Future Plans	2026 Goal	Achieve energy conservation and carbon reduction goals by saving 1.64% on electricity annually.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

TSEC believes that solar energy is the optimal solution to global warming and global energy shortages, as the sun is the ultimate source of energy for all life on Earth. As a leader in Taiwan's solar industry, we are fully committed to driving global sustainable development. Regarding energy usage, TSEC currently relies on non-renewable energy sources; purchased electricity accounts for 99.62% of the total, followed by a small amount of diesel. In 2025, TSEC's total energy consumption amounted to 220 megajoules.

Statistics on the Use of Renewable and Non-renewable Energy

Category	Item	Consumption in Year 112 (GJ)	Consumption in Year 113(GJ)	Consumption in Year 114 (GJ)
Direct Energy （A）	Natural gas	427.8	337.0	259.3
	Diesel	221.1	219.8	192.4
	Gasoline	1,034.9	892.0	647.6
Indirect Energy (B)	Purchased electricity (Excluding renewable energy)	388,239.4	349,104.2	219,298.0
Non-renewable （C）	（A）+（B）	389,923.2	350,553.0	220,397.3
Renewable energy (F)	Self-generated and self-consumed (D)	0	0	0
	Purchased (E)	0	0	360
	（D）+（E）	0	0	360
Total energy (G)	（C）+（F）	389,923.2	350,256.0	220,757.3
Percentage of renewable energy (H)	（F）／（G）	0%	0%	0.16%
Electricity intensity (GJ/million RMB)	Revenue (million yuan)	8,261.O	4,514.0	1,825.0
	Electricity consumption intensity	47.2	77.7	121.0

※Energy Intensity = Purchased electricity for the year (GJ) / Cost of revenue for the year (in millions of yuan)

Note:According to Version 6.0.4 of the Greenhouse Gas Emission Factor Management Table, the calorific value of gasoline is 7,800 kcal/L and that of diesel is 8,400 kcal/L; one kilowatt-hour (kWh) of electricity is equivalent to 3,600 kJ, 1 GJ equals 1×10^9 Joules, and 1 cal equals 4.186 kJ (Joules).

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Energy-saving measures and performance over the years

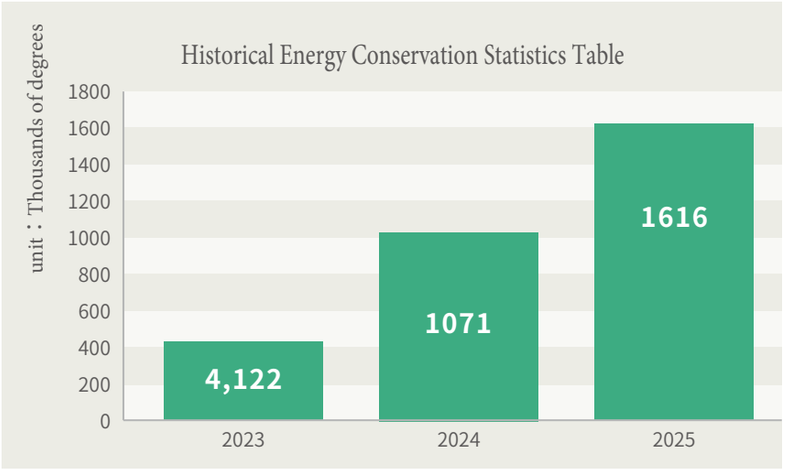
Through the efforts of engineers and guidance from supervisors, TSEC compared various energy usage scenarios to determine the optimal operating mode and implemented it on-site to enhance energy efficiency. Over the past three years, we focused energy consumption management on facility systems and production equipment, employing strategies such as load management and energy-saving measures. These initiatives resulted in a total saving of 3,135 MWh of electricity, equivalent to a reduction of 1,486 tonnes of carbon emissions.

Note: A Each kilowatt-hour of electricity generates 0.474 kg of CO2e.

TSEC's Efforts in Energy Conservation

Provide energy-saving measures for 2025.

3The electricity savings achieved over the years are summarized in the table below: total energy savings amounted to 3,135 MWh (or 11.28 GJ).





A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Management Policy	Major Themes	Greenhouse Gas Management
	Significance for TSE	Amidst the global trend toward the goal of net-zero carbon emissions, TSEC must not only track its own carbon footprint but also manage and control emissions reduction initiatives; this allows the company to address stakeholder concerns regarding carbon emissions while fulfilling its responsibility for sustainable business development.
	Policy direction	Declaration on Greenhouse Gas Reduction Management: Climate anomalies resulting from the global greenhouse effect have led to an increasing frequency of climate-related disasters worldwide, with windstorms, floods, and droughts occurring in alternation. These intensifying climate anomalies not only directly and indirectly affect the human living environment but also significantly impact business operations. Guided by a commitment to the well-being of the planet and humanity—and in alignment with global sustainability agendas and government policies on greenhouse gas management—we have initiated greenhouse gas data management to build a green brand image and fulfill our corporate social responsibility. Having completed our greenhouse gas inventory and product carbon footprint assessment, we will continue to implement greenhouse gas reduction initiatives based on these findings, thereby securing long-term competitive advantages and achieving the goal of sustainable business operations.
	Core objective	Short-term: Audit and verify TSEC's comprehensive greenhouse gas emissions to identify carbon emission hotspots. Medium- to long-term: Set carbon reduction targets, reduce energy consumption, utilize renewable energy, and collaborate with suppliers to lower carbon emissions.
	Performance Outcomes	Conduct an inventory and verification of greenhouse gas emissions for the Taipei office (including the Tainan project office and Changhua sales office), as well as the Hsinchu and Pingtung plants, in 2025.
	Action Plan	1 Establish the GLL-2ES-011 Greenhouse Gas Inventory Management Procedure to standardize the scope, roles and responsibilities, and operational workflows, thereby ensuring a comprehensive greenhouse gas inventory process. Plan carbon reduction initiatives, such as electricity conservation programs and the use of green energy.
How to manage	Feedback mechanism	1 Occupational Safety and Health Committee. 2 EHS Suggestion Box. EHS@tsecpv.com。
	Evaluation mechanism	Annual ISO 14064 greenhouse gas emission verification.
Future Management	2026 Goal	1 Conduct a greenhouse gas inventory.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related FinancialDisclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

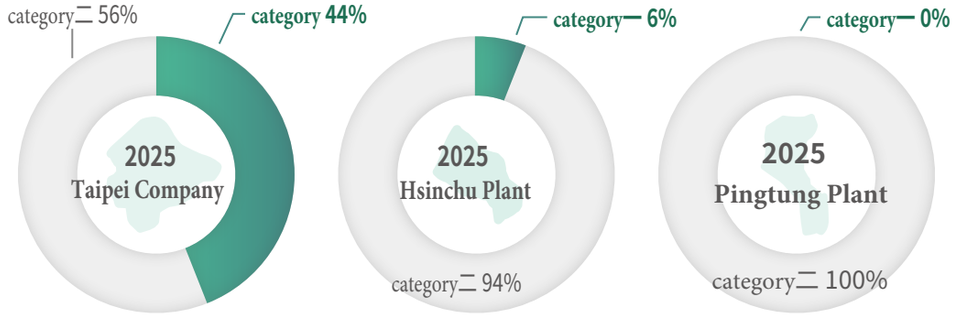
TSEC's greenhouse gas (GHG) inventory for the Hsinchu and Pingtung plants—which fall under its operational control—covers both direct emissions (Scope 1) and indirect energy emissions (Scope 2). Primary emission sources include electricity consumption and nitrous oxide (N2O) emissions from manufacturing processes. Direct emission sources encompass the use of GHGs and resources in production, such as N2O, diesel for emergency generators, and fuel for company vehicles. Indirect energy emissions stem entirely from purchased electricity. TSEC has conducted GHG inventories for the Hsinchu plant since 2011 (including an ISO 14064-1:2018 inventory in 2022) and completed the initial ISO 14064-1:2018 inventory for the Pingtung plant in 2022; both have undergone external verification. The Taipei headquarters conducted its first inventory in 2024 and has scheduled verification. This report discloses the Scope 1 and Scope 2 GHG emissions for the Taipei headquarters, Hsinchu plant, and Pingtung plant over the past three years. Regarding 2025 GHG emissions, although total emissions decreased, emission intensity rose due to a reduction in production capacity.

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category一 + 二：Greenhouse gas emissions	Taipei Company ($mtCO_2e$)	Hsinchu Plant ($mtCO_2e$)	Pingtung Plant ($mtCO_2e$)
2023	116.6680	43390.2411	15693.6235
2024	108.6933	36137.5435	14072.1128
2025 (Data for the Pingtung plant has not been verified)	93.7427	21130.2302	8448.8984

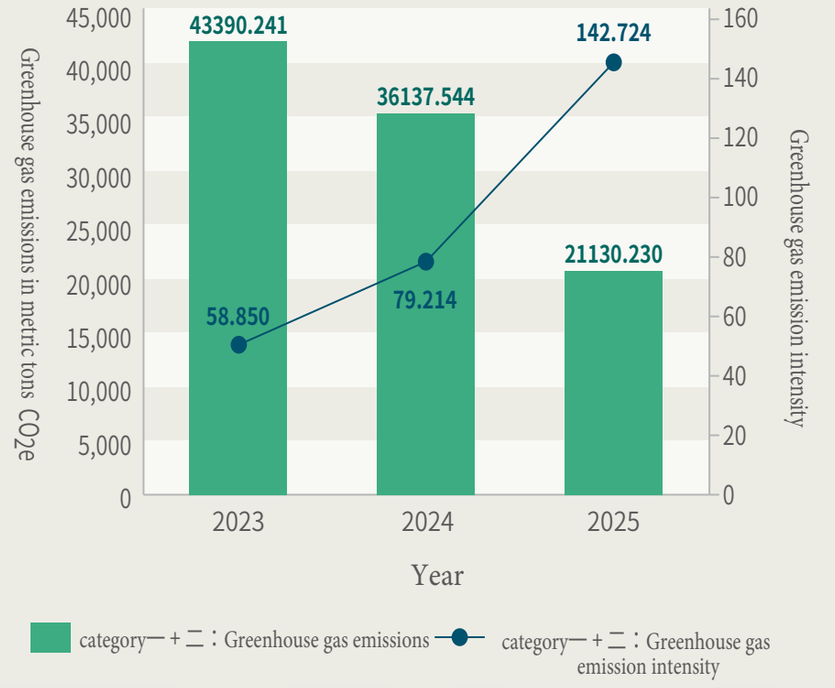
Global warming potential(GWP)Based on the IPCC AR6 (Sixth Assessment Report), the operational control approach is used to compile emissions data.



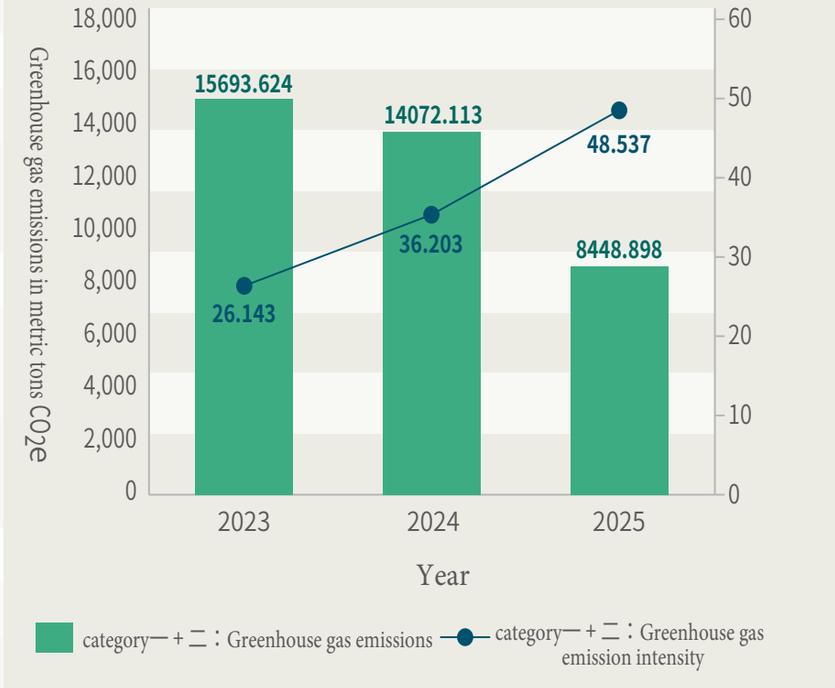
category一and category二 Greenhouse gas emissions	Hsinchu Plant ($mtCO_2e$/Production capacity(MW))	Pingtung Plant ($mtCO_2e$/Production capacityMW)
2023	58.850	26.143
2024	79.214	36.203
2025 (Data for the Pingtung plant has not been verified)	142.724	48.537

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Hsinchu Plant



Pingtung Plant



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

4.4 Water Resource Management(303)

Management Policy	Major Themes	Water Resource Management
	Significance to TSEC	1 Effective water resource management reduces waste, thereby lowering water costs. 2 Sound water management enables the company to maintain operations during water shortages and mitigates the risk of supply disruptions. 3 Proactive water management enhances the company's corporate social responsibility profile and fosters consumer trust.
	Policy Direction	1 Water treatment and transport are energy-intensive; water conservation indirectly lowers energy costs. 2 Compliance with water-related regulations avoids fines and legal risks. 3 Environmentally responsible practices enhance brand value, attracting more customers and investors.
	Core Objectives	100% compliance of discharged water quality with regulatory standards; zero fines for pollution violations.
	Performance Outcomes	No fines incurred for non-compliant wastewater discharge in 2025.
	Action Plans	Effective segregation of wastewater based on its specific characteristics.
Management Approach	Resource Allocation	Installation of an ammonia-nitrogen treatment system
	Feedback Mechanisms	Ammonia-nitrogen concentration meets the current industrial park effluent standard of below 75 mg/L
	Evaluation Mechanisms	24-hour real-time monitoring
Future Planning	2026 Targets	1 Ensure effluent quality 100% complies with regulatory discharge standards, with zero pollution violation fines annually. 2 Complete the installation of the ammonia-nitrogen wastewater treatment system and ensure compliance with the standard of below 75 mg/L.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

The global community currently faces uncertainties and unpredictability resulting from climate change, posing significant challenges for water resource management. Consequently, the protection and management of water resources have become urgent priorities. To address this challenge, enterprises must conduct risk assessments and formulate appropriate response strategies. TSEC has implemented a series of measures to effectively manage water resources, including the adoption of water-saving equipment, improvements in production technology, the implementation of water recycling and reuse systems, the enhancement of monitoring and early-warning capabilities, and the promotion of water conservation awareness among employees. These initiatives help reduce water consumption, achieve energy savings and emission reductions, and contribute to environmental protection and sustainable development.

Water Intake Sources and Discharge Points for the Plant Site

Factory premises	Sources of water withdrawal	Wastewater treatment methods	Final discharge point
Hsinchu Plant Site	Touqian River surface water and Baoshan Reservoir	Wastewater undergoes fractionation and treatment in the wastewater treatment system before discharge	Discharged into Qiedong Creek after centralized treatment via the Hsinchu Industrial Park pipeline network
Pingtung Plant	Deep underground well	The wastewater undergoes fractional distillation and is then treated in a wastewater treatment system before discharge.	Gaoping River

Water withdrawal, water consumption, and water consumption rate over the past three years

Taipei, Hsinchu, and Pingtung Plant Sites			
Annual	2023	2024	2025
Water Intake (million liters)	516,555	406,115	250,945
Water Discharge (million liters)	433,814	316,498	148,596
Water Consumption (million liters)	82,741	89,617	102,349
Water Consumption Rate (%)	16.0%	22.1%	40.8%
Water Intensity (million liters/million yuan)	9	96.8	78.9

Note
Water consumption intensity = Total water withdrawal for the year (megaliters) / Cost of revenue for the year (millions of yuan)
Water consumption = Water withdrawal - Water discharge

Taipei Plant			
Annual	2023	2024	2025
Water withdrawal (m^3)	11,789	10,975	11,135
Water discharge (m^3)	0	0	0
Water consumption (m^3)	11,789	10,975	11,135

Hsinchu Plant			
Annual	2023	2024	2025
Water intake (m^3)	433,109	324,892	193,657
Water discharge (m^3)	385,066	270,370	123,529
Water consumption (m^3)	48,043	54,522	70,128
Water consumption rate %	11.1%	16.8%	36.2%
Recovered water volume (m^3)	75,747	70,296	24,973
Recovery rate %	17.5%	21.6%	12.9%

Pingtung Plant			
Annual	2023	2024	2025
Water consumption(m^3)	71,657	70,248	46,153
Water intake(m^3)	36,959	35,153	25,067
Water discharge (m^3)	34,698	35,095	21,086
Recovery rate %	48.4%	50.0%	45.7%

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Water-saving measures and water recovery rates

In response to factors such as increasing water scarcity and climate change, water conservation and recycling have become critical priorities for manufacturing plants. The Hsinchu plant currently has high water consumption; consequently, water recovered from certain processes undergoes secondary reverse osmosis (RO) treatment before being supplied to air conditioning systems, thereby reducing the consumption of municipal water. Establishing a comprehensive water resource management system is essential. Such a system enables the enterprise to manage water resources holistically—covering supply, usage, recycling, and discharge. Furthermore, continuously improving management mechanisms fosters greater efficiency and conservation, minimizes waste, and lowers operational costs. Ultimately, establishing a water resource management system helps the enterprise effectively address the challenges posed by water scarcity and climate change, paving the way for sustainable development.



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

4.5 Waste Management (306)

Management Policy	Key Topics	Waste Management
	Significance to TSEC	Waste generated during business operations requires proper handling and treatment; improper disposal can lead to serious environmental pollution. In pursuit of sustainable operations, TSEC aims to achieve a win-win outcome—reducing environmental pollution while ensuring the efficient use of resources—through continuous process optimization and resource recovery.
	Policy Direction	EHS Policy: As a professional manufacturer of solar cells and modules, TSEC aims to achieve corporate growth while prioritizing pollution prevention; committing to energy conservation, carbon reduction, climate change mitigation and adaptation, biodiversity and ecosystem protection, and the promotion of renewable energy and sustainable resource utilization to enhance environmental performance. Furthermore, the company is dedicated to improving occupational health and safety conditions to prevent injuries and ill health, complying with or exceeding relevant EHS regulations and obligations, and engaging in consultation and participation with relevant workers and other stakeholders. TSEC commits to integrating information and resources to implement the following EHS policy, thereby fulfilling its social responsibilities and achieving the goal of sustainable development : ※Fulfill compliance obligations and commit to environmental protection. ※Manage environmental and safety risks and implement continuous improvement. ※Promote environmental and safety education and require full employee participation.
	Core Objectives	Short-term: Ensure 100% proper waste management in compliance with regulations and continuously promote waste reuse. Medium- to long-term: Reduce the rate of waste incineration and landfilling, and increase the waste reuse rate.
	Performance Outcomes	1 No fines incurred for violations of environmental regulations regarding waste in 2025. 2 In 2025, the recovery and reuse rate for packaging materials of products shipped from the Hsinchu Plant to the 3 Pingtung Plant was 76.5%. Audited 11 waste management vendors in 2025.
	Action Plans	Formulate the GLL-3ES-015 Waste Management Specification, defining the scope, roles and responsibilities, and operational procedures to ensure comprehensive waste management.
Management Approach	Resource Allocation	Industrial Safety Department, General Affairs Department, Plant Operations Department.
	Feedback Mechanisms	★Occupational Safety and Health Committee. ★EHS Suggestion Box、EHS@tsecpv.com。
	Evaluation Mechanisms	Maintain the validity of the ISO 14001 Environmental Management System certificate.
Future Planning	2026 Targets	1 The recycling and reuse rate of product packaging materials shipped from the Hsinchu Plant to the Pingtung Plant exceeds 77%. 2 Waste disposal vendors undergo 100% auditing and guidance.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Committed to sustainable operations, TSEC pursues a win-win strategy of reducing environmental pollution and maximizing resource efficiency through continuous process optimization and resource recovery; notably, the company does not engage in the import or export of waste. In 2025, TSEC achieved an average recycling/reuse rate of 79.3% for general waste and 99.8% for hazardous waste through qualified processing partners. Furthermore, the recycling and reuse rates for product packaging materials shipped from the Hsinchu plant to the Pingtung plant stood at 70.5%, 74.2%, and 76.5% for the years 2023, 2024, and 2025, respectively. Driven by a strong commitment to environmental protection, TSEC manages production with a philosophy of making the most of all materials; waste is classified and processed—either recovered or disposed of—based on its specific characteristics. All contracted disposal vendors are legally qualified, and TSEC reinforces its oversight through annual evaluations and audits, as well as unannounced spot checks (including vehicle tracking).

project	Waste disposal methods
General industrial waste	Authorized qualified disposal vendors: incineration and physical treatment.
Industrial waste with resource recovery potential	Packaging materials: Can be recovered and reused—either within the plant or between facilities—and are suitable for repeated recycling.
	Cannot be reused on-site; entrust to a qualified disposal contractor; processing fees based on weighed weight.
Hazardous industrial waste	Authorized disposal and treatment vendors: identification and analysis of regulated hazardous constituents, incineration, stabilization, and recycling/reuse.
Offshore treatment of industrial waste	none

Factory premises	Year	General industrial waste (incineration, physical treatment, etc.)			Hazardous industrial waste (incineration, physical treatment, etc.)		
		Electronic waste	Scrapped products	other	Electronic waste	Scrapped products	other
Hsinchu Plant	2023	0	0	73.9	0	0	3.6
	2024	0	0	80.3	0	0	3.3
	2025	0	0	30.6	0	0	3.6
Pingtung Plant	2023	0	0	450.8	0	22	1.7
	2024	0	0	358.7	0	0	0.0
	2025	0	0	203.2	0	0	0.5

註 Other wastes include municipal solid waste, waste wood (Class D), waste ceramics, and waste oil mixtures. Unit: Metric tonnes

Factory premises	Year	General Industrial Waste (Reuse/Recycling)			Hazardous Industrial Waste (Reuse/Recycling)		
		Electronic waste	Scrapped products	other	Electronic waste	Scrapped products	other
Hsinchu Plant	2023	0	34.0	1243.0	0	0	971.5
	2024	0	0.0	1343.3	0	0	316.5
	2025	0	15.6	558.3	0	0	303.2
Pingtung Plant	2023	0	21.6	1206	0	51.9	2.7
	2024	0	8.1	790	0	56.0	1.3
	2025	0	1.4	323	0	22.0	0.8

Other wastes include domestic waste, waste wood (Category D), waste ceramics, and waste oil mixtures. Unit: Metric tons. Waste hydrofluoric acid (C0202) and waste modules (E0218) are classified as hazardous waste.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Proportion of waste entrusted to qualified facilities for processing via recycling or reuse

Plant Site	Year	General Industrial Waste (Recycling/Reuse Rate)	Hazardous Industrial Waste (Recycling/Reuse Rate)
Hsinchu Plant	2023	94.5%	99.6%
	2024	94.4%	99.0%
	2025	94.9%	100.0%
Pingtung Plant	2023	73.1%	97.1%
	2024	69.0%	100.0%
	2025	61.5%	97.7%

The Pingtung Plant generates relatively small amounts of hazardous industrial waste, and its recycling rate fluctuated significantly between 2020 and 2022.

Plant Site	Year	General Industrial Waste (Recycling/Reuse Rate)		Hazardous Industrial Waste (Recycling/Reuse Rate)	
		Scrapped products	Other	Scrapped products	Other
Hsinchu Plant	2023	2.5%	92.0%	(No such waste)	99.6%
	2024	0.0%	94.4%	((No such waste)	99.0%
	2025	2.6%	92.4%	((No such waste)	100.0%
Pingtung Plant	2023	1.3%	71.9%	92.2%	4.9%
	2024	0.7%	68.3%	97.8%	2.2%
	2025	0.3%	61.2%	94.3%	3.4%

Recycling and reuse rate of product packaging materials shipped from the Hsinchu Plant to the Pingtung Plant in 2023

Item	Product Name	Unit	Required Quantity	Quantity Stocked In	Volume of recovered material	Reuse rate
Packaging materials	Main body cushioning material	SET	84,629	24,693	59,936	70.8%
	Carton	EAC	84,629	23,579	61,050	72.1%
	Pallet	PCS	2,822	1,234	1,588	56.3%
	EPE foam	EAC	3,049,699	523,000	2,526,699	82.9%
Average						70.5%

Recycling and reuse rate of product packaging materials shipped from the Hsinchu Plant to the Pingtung Plant in 2024

Item	Product Name	Unit	Required Quantity	Quantity Stocked In	Volume of recovered material	Reuse rate
Packaging materials	Main body cushioning material	SET	47,958	14,537	33,421	69.7%
	Carton	EAC	47,958	13,200	34,758	72.5%
	Pallet	PCS	1,402	389	1,013	72.3%
	EPE foam	EAC	1,338,324	237,000	1,101,324	82.3%
Average						74.2%

Recycling and reuse rate of product packaging materials shipped from the Hsinchu Plant to the Pingtung Plant in 2025

Item	Product Name	Unit	Required Quantity	Quantity Stocked In	Volume of recovered material	Reuse rate
Packaging materials	Main body cushioning material	SET	12,283	4,000	8,283	67.4%
	Carton	EAC	12,283	3,728	8,555	69.6%
	Pallet	PCS	410	60	350	85.4%
	EPE foam	EAC	245,643	40,000	205,643	83.7%
Average						76.5%

Quantity to be recovered = Quantity that should be used - Quantity put into storage

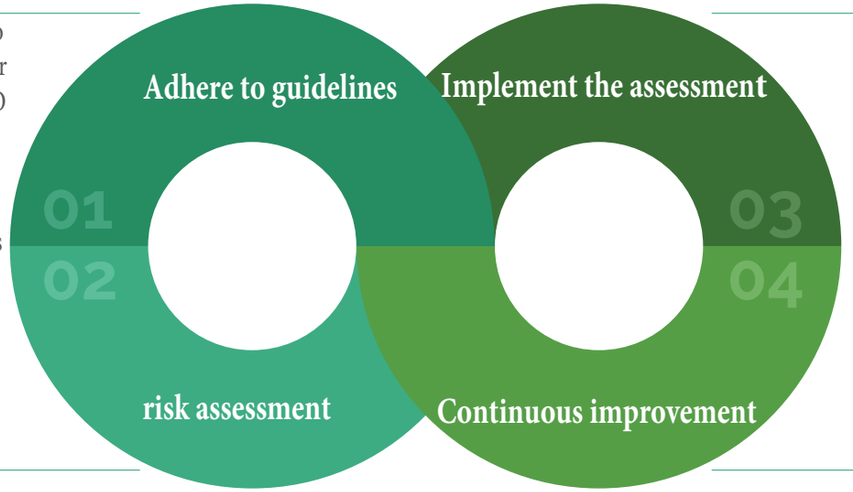
A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 WWater Resource Manageme
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

4.6 Supplier Management

In response to global climate change and global warming, TSEC—a pioneer in the green energy industry—strives to protect the planet and achieve sustainable operations alongside its supply chain partners, even as it grows its revenue. TSEC is committed to fostering a virtuous cycle within the industry and supply chain; it has established standards for supplier social responsibility, conflict-free mineral sourcing, and hazardous substance management. Both its cell and module manufacturing facilities collaborate directly with material suppliers on sustainable supply chain management, ensuring safe working environments, dignified labor relations, ethical business practices, and a commitment to environmental protection throughout the supply chain.

Four Key Principles of Sustainable Supply Chain Management:

1. Suppliers of direct materials must adhere to the Supplier Code of Conduct, pass supplier evaluations, and obtain certification for ISO 9001, ISO 14001, and ISO 45001 management systems.
2. Suppliers are required to have no violations regarding major social responsibilities, business ethics, or corporate sustainability.
3. Assessments are conducted regarding the use of conflict minerals and hazardous substances.



The Company establishes an audit team annually to conduct unscheduled audits and communicate its philosophy and goals regarding sustainable operations. Audits cover areas such as quality and technical capabilities, occupational health and safety, environmental protection, fire safety, and ethical standards for suppliers of direct materials. Suppliers are required to implement improvements based on audit findings and participate in relevant guidance or follow-up audits.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Manage
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Adhere to guidelines

TSEC has established a Supplier Code of Conduct based on the standards of the (Responsible Business Alliance，RBA) —formerly known as the Electronic Industry (Electronic Industry Citizenship Coalition，EICC) —covering four key areas: labor, health and safety, the environment, and ethicsSuppliers are required to sign the "Supplier Social Responsibility Commitment Statement," the "Conflict-Free Minerals Commitment Statement," and the "Declaration of Non-Use of Hazardous Substances." Suppliers of direct materials with an annual transaction value exceeding NT$5 million must acknowledge, sign, and adhere to TSEC's Supplier Code of Conduct, which serves as a primary criterion in procurement decision-making.
Reference websites:https://www.responsiblebusiness.org/

risk assessment

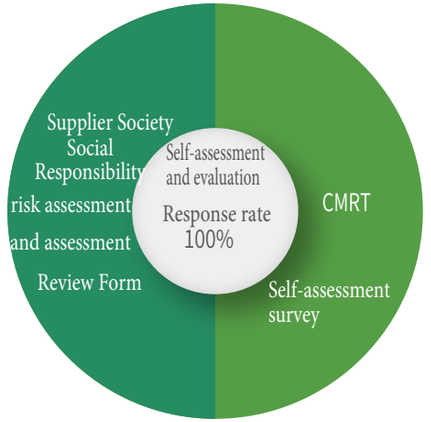
To gain a deeper understanding of supply chain sustainability risks and identify potential hazards, we first conduct a review of direct material suppliers—specifically those with annual transaction volumes exceeding 5 million—associated with our battery and module manufacturing facilities. We require these suppliers to complete a "Supplier Social Responsibility Risk Assessment and Review Questionnaire," detailing their practices across four key sustainability dimensions: labor standards, health and safety, environmental protection, and business ethics. Suppliers must also provide supporting documentation, such as valid environmental permits or relevant operational records; the results of these self-assessments serve as the basis for subsequent sustainability risk management and auditing activities.

In addition, TSEC supports the procurement of conflict-free raw materials, thereby upholding social and ethical standards rooted in humanitarian principles and human dignity; the company also requires suppliers to conduct "CMRT self-assessment surveys" regarding conflict minerals and mandates the sourcing of conflict-free raw materials.

Proportion of local procurement

TSEC's current production operations are primarily based at the Hsinchu battery plant and the Pingtung module plant; raw materials sourced within Taiwan are classified as local procurement. In 2025, local suppliers accounted for 81.97% of the supplier base, while expenditure on local suppliers represented 45.29% of total procurement spending. The relatively low share of local procurement expenditure is due to the fact that over 90% of key materials for the solar industry—such as silicon wafers, aluminum frames, glass, and junction boxes—are manufactured in China.





year	2023	2024	2025
Proportion of local suppliers (%)	85.3%	81.65%	81.97%
Proportion of local procurement value (%)	34.6%	37.32%	45.29%

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engageme
02 About TSEC
03 Integrity-based Governa
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclosures
4.2 Energy Management
4.3 Greenhouse Gas Emissions
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

New Supplier Evaluation Mechanism

The Company has established a "Supplier Management Procedure" to conduct annual audits of suppliers' quality management systems and environmental, health, and safety (EHS) management systems. We also evaluate suppliers based on quality, cost, delivery, service, and management capabilities to inform our procurement decisions. Furthermore, we have implemented a "Social Responsibility Supplier Management Procedure" to strengthen the promotion and assessment of corporate social responsibility (CSR) across the supply chain, covering areas such as environmental impact, labor practices, health and safety, corporate governance, and ethical standards. TSEC remains committed to maintaining communication with key suppliers and monitoring their environmental and social performance through CSR risk assessments and evaluation checklists. We aim to collaborate with our suppliers to promote green manufacturing and jointly contribute to environmental sustainability and social responsibility.

year	2023	2024	2025
Number of new suppliers added	8	3	3
Number of suppliers meeting environmental standards	8	3	3
Number of suppliers meeting social standards	8	3	3

※Explanation of variance: Three new suppliers were added in 2025.

For major new material suppliers engaged by our battery and module manufacturing facilities in 2025, the compliance rate regarding "environmental" and "social" aspects—as determined by supplier assessment forms—reached 100%.

We have established a "Supplier Social Responsibility Management Procedure" to strengthen the promotion and assessment of corporate social responsibility (CSR) across the supply chain, covering areas such as labor rights, health and safety, environmental protection, and ethical standards.

TSEC will maintain ongoing communication with key suppliers and continue to monitor their environmental and social performance through social responsibility risk assessments and review checklists. We aim to collaborate with suppliers to promote green manufacturing concepts and jointly contribute to environmental sustainability and social responsibility.

Implement the assessment

To verify and implement supplier sustainability risk management, audits are scheduled and audit targets selected annually based on assessment results and management decisions (taking into account internal and external issues of concern for the year). Audit findings are recorded in the "Supplier Social Responsibility Risk Assessment and Review Form," and suppliers are required to implement corrective actions for any identified non-conformities. Suppliers must meet internal scoring requirements to be deemed qualified; those failing to do so are required to undertake continuous improvement within a specified timeframe.

Supplier Audit Photos



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
4.1 Task Force on Climate-related Financial Disclos
4.2 Energy Management
4.3 Greenhouse Gas Emiss
4.4 Water Resource Management
4.5 Waste Management
4.6 Sustainable Supply Chain Management
05 Social Care
appendix

Reduce the negative environmental and social impacts of the supply chain.

The company has obtained ISO 14001 and ISO 45001 management system certifications while simultaneously implementing energy-saving initiatives, water resource management, and greenhouse gas inventories. Its "Supplier Social Responsibility Management Procedure" incorporates environmental, labor, health and safety, corporate governance, and ethical standards into supplier evaluations; performance regarding environmental and social aspects is assessed using the "Supplier Evaluation Form" and the "Supplier Social Responsibility Risk Assessment and Review Form."
In 2025, the company completed evaluations for 28 suppliers associated with the Hsinchu battery plant and 20 suppliers associated with the Pingtung module plant; all met the requirements, and no suppliers were found to pose significant risks.

year	2023	2024	2025
Hsinchu Battery Plant	27	27	28
Pingtung Module Plant	21	24	20

※Explanation of variances: Certain suppliers did not engage in any transactions; consequently, the number of supplier evaluations for 2025 is three fewer than for 2024.

Continuous improvement

TSEC demonstrates leadership and sets clear expectations to drive continuous improvement alongside its suppliers, working together across the supply chain to ensure that workers can perform their duties with peace of mind in a dignified, healthy, and safe environment. As a participant in the green energy industry, the company embraces a vital mission regarding environmental protection; we are committed to minimizing environmental impact and upholding the principle of harmonious coexistence with the Earth's ecosystem. By fostering mutually beneficial and friendly partnerships—and pursuing shared growth and continuous improvement—we aim to achieve our goals of sustainable business management.

Target Audience	Topic	Supply Chain Continuous Improvement Initiative
Environmental Protection	Carbon and emission reduction	■ Encourage suppliers to conduct internal carbon emission inventories in accordance with the ISO 14064-1 standard. ■ Continuously evaluate suppliers' environmental permits and compliance regarding pollutant emissions. ■ Incorporate carbon and emission reduction achievements into supplier evaluation criteria.
Labor Standards	Non-discrimination and freedom from harassment	■ Adequate and effective policies and procedures should be implemented to prohibit discrimination and harassment.
Health and Safety	Prevention of occupational injuries and occupational diseases	■ Contractors providing engineering, labor, or other services must comply with all safety and health operational standards while working on company premises. ■ Hazardous industrial waste disposal vendors are subject to periodic audits to ensure safety regarding personal protective equipment, machinery and equipment, chemicals, and the working environment, as well as the proper handling of hazardous waste.
Corporate Governance and Ethics	Grievance and communication channels	■ Suggestion boxes or channels for anonymous grievances should be established.



05

Social Care

5.1 Labor and Human Rights

5.2 Safe Workplace

5.3 Customer Relations

05 Social Care

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

5.1 Labor and human rights

Human Rights Policy

Diversity, Inclusion, and Equal Opportunity

Do not discriminate against employees in recruitment or actual employment—such as regarding wages, promotions, rewards, or training opportunities—based on race, skin color, age, gender, sexual orientation, gender identity and expression, ethnicity or nationality, disability, pregnancy, religious beliefs, political stance, organizational affiliation, veteran status, protected genetic information, or marital status. Provide effective and appropriate grievance mechanisms to prevent and address situations that compromise employees' rights.

Freedom of association

Respect the right of all employees to organize and participate in trade unions of their choice, engage in collective bargaining, and participate in peaceful assembly, while also respecting their right to refrain from such activities.Employees and/or their representatives are able to openly communicate with management—and share their ideas and concerns—regarding working conditions and management practices without fear of discrimination, retaliation, threats, or harassment.

Prohibit child labor

Strict adherence to the Labor Standards Act is required; the employment of child labor under the age of 16 is prohibited. Should a child under the age of 16 be found to have been hired in error, their work must cease immediately. The Human Resources department must promptly verify the situation, arrange for a medical examination, settle all outstanding wages, and implement remedial measures.

Prohibition of forced labor

Workers shall not be compelled to perform labor through the use of force, coercion, confinement, or other illegal means. Wages shall not be withheld as a penalty for breach of contract or as compensation for damages. Employees may exercise their right to terminate the employment contract in accordance with the provisions of the Labor Standards Act.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

Staffing Structure

In addition to local staff, TSEC's workforce includes employees from the Philippines, Vietnam, and Indonesia—comprising migrant workers, professionals approved to remain in Taiwan under the points-based system, and international students—and the company is fully committed to their well-being.
A robust workforce structure supports the company's sustainable development; TSEC operates an office in Taipei and manufacturing plants in Hsinchu and Pingtung, with a total of 715 full-time employees (40 in Taipei, 361 in Hsinchu, and 314 in Pingtung). To safeguard employees' legal rights and prevent arbitrary dismissal, the company enters into formal employment contracts with every staff member.

TSEC Employee Statistics (2023–2025)

Statistics/Year		2023Year		2024Year		2025Year	
Total number of employees (Note 1)		1669		1504		715	
Employment contracts		Non-fixed	fixed	Non-fixed	fixed	Non-fixed	fixed
Gender	Male	1013	9	924	6	437	0
	Female	644	3	571	3	278	0
Region	Taipei	44	0	47	0	40	0
	Hsinchu	752	2	679	1	361	0
	Pingtung	861	10	769	8	314	0
Employment Type		Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
Gender	Male	1014	8	924	6	437	0
	Female	618	29	551	23	278	0
Region	Taipei	44	0	47	0	40	0
	Hsinchu	749	5	675	5	361	0
	Pingtung	839	32	753	24	314	0

TSEC Statistics on Non-employees (2023–2025)

Statistics/Year		2023Year		2024Year		2025Year	
Total number of workers (Note 1)		0		0		0	
Employment Type		Non-fixed	Other Types	Non-fixed	Other Types	Dispatch	Other Types
Gender	Male	0	0	0	0	0	0
	Female	0	0	0	0	0	0
Region	Taiwan	0	0	0	0	0	0
	Overseas	0	0	0	0	0	0
Employment Type		Technician/ Operator	Technical Consultant	Technician/ Operator	Technical Consultant	Technician/ Operator	Technical Consultant
Gender	Male	0	0	0	0	0	0
	Female	0	0	0	0	0	0
Region	Taiwan	0	0	0	0	0	0
	Overseas	0	0	0	0	0	0

The significant reduction in the workforce in 2025 is primarily due to adjustments in production capacity.

Employee Diversity and Equal Opportunity

In its recruitment processes—including job advertisements and interviews—TSEC focuses on evaluating professional capabilities and qualifications rather than personality traits or private matters, and avoids the excessive collection of applicant information. Regarding employment, training, compensation, promotion, termination, or retirement, the company prohibits discrimination based on race, social class, nationality, religion, disability, health status, gender, sexual orientation or identity, age, military status (including conscription status), union membership, labor representation, employee grievance activities, political stance, zodiac sign, ancestral home, or blood type. TSEC respects the differences and value of every individual, striving to create a friendly, diverse, and inclusive work environment.

For specific groups of workers (such as foreign nationals, students in cooperative education programs, women, and individuals with disabilities), TSEC adheres to relevant legal protections by offering flexible work arrangements. Employees may adjust their schedules based on personal needs and commitments—such as through flexible hours, remote work, or reduced working hours—or have work assignments tailored to their employment status, technical skills, and physical condition. Furthermore, the company strictly prohibits any form of discrimination or harassment in employee management and daily interactions.

Employee Diversity Statistics

Diversity Statistics / Annual				2023		2024		2025	
				Number of people	percentage	Number of people	percentage	Number of people	percentage
Employee	Direct	Gender	Male	902	54.04%	788	52.39%	320	44.76%
			Female	557	33.37%	483	32.11%	206	28.81%
		Age	Under 30	469	28.10%	376	25.00%	63	8.81%
			30 to under 50	960	57.52%	865	57.51%	440	61.54%
			50 and over	30	1.80%	30	1.99%	23	3.22%
		Education	Graduate school	52	3.11%	52	3.46%	25	3.50%
			College	848	50.81%	769	51.13%	355	49.65%
			Other	559	33.49%	450	29.92%	146	20.42%
	Indirect	Gender	Male	120	7.19%	142	9.44%	117	16.36%
			Female	90	5.39%	91	6.05%	72	10.07%
		Age	Under 30	28	1.68%	30	1.99%	19	2.66%
			30 to under 50	151	9.05%	160	10.64%	127	17.76%
			550 and over	31	1.86%	43	2.86%	43	6.01%
		Education	Graduate school	51	3.06%	55	3.66%	49	6.85%
			College	147	8.81%	167	11.10%	123	17.20%
			Other	12	0.72%	11	0.73%	17	2.38%

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

We offer competitive compensation and career development opportunities, maintaining a remuneration system that balances internal equity with external competitiveness. Compensation is determined by holistically considering the company's financial status, professional experience, educational background, and personal attributes. Our approach prioritizes fairness while aiming to retain talent and drive value creation; consequently, annual performance reviews are linked to promotions and salary adjustments, which average 2–3%. Furthermore, in accordance with our Articles of Incorporation, we allocate no less than 5% of operating profits for employee profit-sharing. This initiative seeks to attract top talent and reward employees for their contributions, thereby boosting morale and enhancing work efficiency.

Ratio of base salary to total compensation			Proportion					
			2023Year		2024Year		2025Year	
Key Operational Hubs	Employee Category	project	Male	Female	Male	Female	Male	Female
Taiwan	Direct	Base salary	1.18	1	1.15	1	1.25	1
		Compensation	1.17	1	1.08	1	1.20	1
	Indirect	Base salary	1.47	1	1.23	1	1.53	1
		Compensation	1.55	1	1.25	1	1.77	1

1. Basic salary refers to the minimum fixed amount paid to an employee for the performance of their duties, excluding any additional remuneration such as overtime pay, bonuses, or various allowances.
2. Remuneration refers to basic salary plus additional amounts paid to the worker; "additional amounts paid to the worker" include length-of-service allowances, bonuses (including cash and equity), benefits, overtime pay, compensatory time off, and any other subsidies (such as transportation allowances, cost-of-living allowances, and childcare subsidies).

Salaries of full-time non-managerial employees

Unit: NT$ Thousands

Full-time non-supervisory employees	Number of employees	Average annual salary	Median annual salary
2024Year	1,483	588	491
2025Year	910	614	497
difference	573	(26)	(6)

Employee Turnover Statistics

Breakdown of Employee Turnover by Gender and Age (Year 114)				
Age Group	Female		Male	
	Number	Proportion (%)	Number	Proportion (%)
Under 30	80	11%	100	14%
30–50	155	22%	256	36%
Over 50	7	1%	9	1%
Total	242	34%	365	51%
Gender Breakdown of Departures	39.9%		60.1%	

Total headcount at year-end: 708
Total number of departures: 607

Breakdown of Employee Turnover by Gender and Age (Year 113)				
Age Group	Female		Male	
	Number	Proportion (%)	Number	Proportion (%)
Under 30	54	4%	105	8%
30–50	98	8%	143	11%
Over 50	1	0%	7	1%
Total	153	12%	255	20%
Gender Breakdown of Departures	37.5%		62.5%	

1. Turnover rate (%) = Number of employees who left in each category / Total headcount at year-end.
2. Gender breakdown of departing employees (%) = Number of departing employees by gender / Total number of departing employees.

Total headcount at year-end: 1,275
Total number of departures: 408

In 2025, the Company's turnover rate rose by 50% compared to 2024. A breakdown by gender reveals that men constituted the majority of those leaving the Company. This overall increase was primarily driven by a challenging industry environment, which necessitated adjustments to production scale and workforce levels—specifically on production lines—to cut costs, thereby leading to a higher number of departures.
In 2025, the Company also strengthened its employee retention initiatives. By integrating an internal transfer system, the Company provided opportunities for skills enhancement, career development, and challenging assignments to improve the retention of high- and mid-performing talent. The Company remains committed to offering transfer incentives and maintaining accessible internal transfer channels to ensure a healthy turnover rate.
Due to the nature of the industry, the Company employs a relatively large number of men; consequently, men continued to account for the majority of departures in 2025. Employees aged 30 to 50 represented the largest demographic among those leaving, regardless of gender; this trend is attributed to the fact that individuals in this age group possess relevant work experience, making it easier for them to transition to new jobs.

Category	Description	Implementation Status
Non-discrimination	To ensure that no discrimination occurs regarding the employment, work and life, or compensation and promotion of the Company's employees, and to strictly prohibit discriminatory conduct while preventing any form of harassment.	1 No history of violations regarding relevant policies or regulations 2 Announcement of new hire training 3 Zero recorded complaints over the years
Freedom of association	To safeguard employees' freedom of association, the Company shall respect all employees' rights regarding their beliefs, freedom of association, participation in organizations and trade unions, and collective bargaining.	1 No history of violations regarding relevant policies or regulations. 2 Announcements made during new-hire orientation. 3 Labor-management meetings are held on both a scheduled and ad-hoc basis; specifically, when new policies are implemented or major issues arise, employee feedback is gathered through these meetings or via consultations with the labor union, and implementation proceeds only after such consultation. 4 Records of past labor-management meetings are clear and publicly accessible, allowing any employee to review them at any time. 5 Zero recorded grievance cases to date.
Child labour	Effectively ensure that child labor is neither employed nor supported.	1 No history of violations regarding relevant policies or regulations 2 Announcement of new hire training 3 Zero recorded complaints over the years
Forced or compulsory labour	To prohibit the use of any forced labor, bonded labor (including debt bondage), or labor bound by contract; involuntary or exploitative prison labor; and slave labor or human trafficking. This includes labor obtained or work required through the use of intimidation, coercion, threats, abduction, or fraud in the transportation, harboring, recruitment, transfer, or receipt of workers.	1 No history of violations regarding relevant policies or regulations 2 Announcement of new hire training 3 Zero recorded complaints over the years

TSEC continues to employ individuals with disabilities; even amidst rapid workforce growth, the company strives to meet statutory hiring quotas. Simultaneously, it implements "job redesign" initiatives to create a favorable work environment for employees with hearing or visual impairments, enabling them to fully utilize their talents. Furthermore, there is no disparity between employees with disabilities and their colleagues regarding promotion and salary adjustment rates.
Based on figures from December 2025, TSEC has exceeded statutory requirements by employing one additional individual with a disability.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

Care and support for foreign colleagues

In addition to Taiwanese nationals, TSEC's workforce includes employees from the Philippines, Vietnam, and Indonesia—comprising migrant workers, professionals staying in Taiwan under the points-based system, and international students—and the company bears an unwavering responsibility for their well-being.

- Offers meals reflecting employees' home cuisines—such as pork-free Indonesian dishes and Filipino-style meals and seasonings.
- Respects religious beliefs and practices—including prayer times and Ramadan observances—and provides Muslim-friendly facilities such as prayer rooms and foot-washing areas.
- Displays factory notices and documents in employees' native languages.
- Provides internship opportunities for international students, along with free accommodation and complimentary shuttle bus services between the school and the workplace.
- Ensures attentive care during the pandemic by assisting with meal delivery, medical needs, and quarantine measures; also demonstrates the company's concern through condolence payments and fruit gifts for employees who test positive.

Upholding the philosophy that "talent is the most important asset," TSEC is committed to enhancing the professional skills and career development of all employees—whether domestic or foreign. Through a comprehensive training system and a diverse range of courses, the company continuously elevates its workforce's professional capabilities and overall competitiveness. In 2024, TSEC was honored with the "National Talent Development Award"—the highest accolade in the field of education and training conferred by the Ministry of Labor—demonstrating the company's outstanding achievements in talent cultivation and systematic development.

Building on this foundation, the company continued its participation in the Ministry of Labor's "Corporate Human Resources Enhancement Program" in 2025. Throughout the year, TSEC offered 119 courses totaling 890 training hours and secured NT$754,757 in subsidies, marking the year with the highest volume of training hours since the company began implementing the program. By consistently investing in education and training while integrating government resources, TSEC further strengthens its organizational capacity for talent development, thereby supporting the company's sustainable growth.

Labor-Management Communication and Grievance Channels

TSEC has two labor unions: the "TSEC Enterprise Union" and the "TSEC Pingtung Plant Enterprise Union." Collective bargaining agreements signed between the unions and the company cover 14.56% of all active employees; however, the working conditions and benefits for employees not covered by these agreements are identical to those of employees who are covered. Furthermore, the company safeguards employee rights through individual employment contracts and holds regular meetings—including labor-management meetings and sessions of the Employee Welfare Committee—where guaranteed seats are allocated to ensure collaborative resolution of issues regarding labor matters, workplace health and safety, and employee welfare.

To safeguard employees' working conditions, TSEC fully complies with the Labor Standards Act and other relevant labor regulations. While striving to minimize any potential adverse impacts, the company places great importance on labor-management communication and has established multiple channels for raising concerns, as detailed in the table below:

Pipeline Name	Mode of Operation	Description
Committee for Handling Complaints Regarding Workplace Harassment and Sexual Harassment	■ Employees who encounter workplace misconduct—such as sexual harassment or bullying—may file a formal complaint with the committee. The committee comprises 15 members drawn from various departments; most hold managerial or specialized administrative roles, and external professionals are also appointed to serve on investigation teams. ■ To protect the parties involved, the entire handling process is kept strictly confidential.	■ Contact information for committee members is posted on company bulletin boards; employees may seek assistance from a nearby member or one they trust. ■ Committee members and all company supervisors are required to undergo relevant professional training to establish the correct mindset and understand the handling procedures. ■ In 2025, TSEC received two complaints regarding workplace unlawful infringement; both cases have been concluded. Although neither complaint was substantiated, the company still made every effort to assist the employees involved—such as adjusting work arrangements to prevent contact between the parties, and providing consultations with the plant physician and psychological counseling.
Labor-Management Conference	■ Maintain open lines of communication between labor and management. ■ Hold regular labor-management meetings on a quarterly basis.	■ Archives of past meeting minutes are available in the company's internal network announcement section for employees to review at any time. ■ In 2025, TSEC was involved in two labor-management disputes, both of which have been resolved. Although the mediation outcomes confirmed that the company had not violated any laws, the company still made every effort to provide assistance to the employees involved.
Employee Welfare Committee	■ Periodically review the implementation of welfare measures. ■ Hold meetings every three months; extraordinary meetings may be convened when necessary.	Colleagues may voice any opinions regarding employee benefits through this committee.
Food Committee	■ Regularly review the operation of the meal service. ■ Hold meetings at the beginning of each month, with ad-hoc meetings convened as necessary. ■ Provide both a physical "employee suggestion box" and an online feedback channel (official LINE account) in the staff cafeteria.	In 2025, the employee cafeteria will fully switch to biomedical-grade, non-toxic, and heat-resistant tableware to safeguard the health of colleagues.
Community: Facebook Fan Page and LINE Platform	■ Provides a simpler channel for direct communication with colleagues. ■ Human Resources serves as the point of contact, typically responding to messages within one day, and no later than three days.	We occasionally host small "like-and-win" events featuring gift vouchers to help colleagues become more familiar with this channel.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

Conduct employee satisfaction surveys.

To gain ongoing insight into employees' actual perceptions regarding organizational operations, the work environment, and the functioning of systems, the Company's Human Resources Development Department will conduct its inaugural 2025 Employee Satisfaction Survey in December 2025. This initiative aims to assess the organizational climate, facilitate in-depth communication and interviews regarding key issues, and formulate improvement plans.

The employee satisfaction survey covered all active employees, achieving a participation rate of approximately 90.1%. The questionnaire utilized a five-point scale and addressed topics such as company operations, management systems, supervisory leadership, the work environment, compensation and benefits, and overall satisfaction.

To sharpen the analytical focus and ensure the feasibility of subsequent improvements, the survey results were categorized into five key dimensions for analysis: "Corporate Vision, Brand Image, and Social Responsibility"; "Management Systems, Fairness, and Employee Well-being"; "Leadership, Communication, and Support"; "Job Content, Resource Support, and Teamwork"; and "Compensation, Benefits, Incentives, and Overall Retention Sentiment." With average scores across these dimensions ranging from 4.06 to 4.25, the results indicate a high level of employee identification with and satisfaction regarding the company. In response to these findings, the Human Resources Development Department will continue to strengthen internal communication, refine management systems and talent development mechanisms, and regularly monitor satisfaction trends to inform the company's continuous improvement efforts and management decision-making.



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

Target Group	All active employees
Subject	"Corporate vision, operational image, and social responsibility," "management systems, fairness, and employee well-being," "leadership, communication, and support," "job content, resource support, and teamwork," and "compensation and benefits, incentive mechanisms, and overall commitment to retention."
Number of Respondents	708 people
Coverage Rate	about90.1%
Responsible Agency	Human Resources Development Department
Survey Frequency	Once a year
Survey Period	2025/01/01～2025/12/31
Overall Satisfaction	4.16 points (out of 5)
Survey Results	A comprehensive analysis indicates that the Company's employees demonstrate a high level of overall satisfaction, reflecting a strong sense of engagement and identification with the organization, particularly in the following areas: ■ Possess a clear understanding of the company's future direction and vision. ■ Have confidence in the company's products, business integrity, and social responsibility. ■ Hold a positive view regarding overall job satisfaction and relationships with colleagues.
Improvement Plan	Based on the survey results and employee feedback, the Human Resources Development Department will continue to drive improvements in the following areas: ■ Continuously Strengthening Internal Communication and Organizational Cohesion Through management meetings, internal announcements, and cross-departmental communication mechanisms, we consistently reinforce our strategic direction, explain policies, and build organizational consensus, thereby enhancing employees' understanding of and trust in the company's overall operations. ■ Refining Management Systems and Workflows Feedback from open-ended survey questions indicates that employees generally hold positive views regarding punctuality, interpersonal relationships, and the workplace atmosphere. However, some employees offered specific suggestions concerning workflow integration, resource support, and communication efficiency. The Human Resources Development Department has consolidated this feedback and shared it with the relevant departments to serve as a basis for future process optimization and adjustments to operational support. Enhancing Talent Development and Managerial Capabilities ■ We will continue to strengthen training on management and communication skills for supervisors. By integrating these efforts with talent development initiatives, we aim to help supervisors more effectively support their teams and foster a positive, supportive work environment.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

Human rights due diligence

The Company places great importance on upholding human rights and protecting employee interests, incorporating employee satisfaction surveys as a component of its internal human rights due diligence. The survey conducted in 2025 covered the Taipei headquarters, the Hsinchu and Pingtung plants, and the Tainan project office. It addressed topics such as compliance with labor laws, compensation and benefits, occupational health and safety, work stress, leave entitlements, upward communication, career development, equal opportunity, respect for diversity, and overall satisfaction, while also utilizing open-ended fields to gather suggestions for improvement from employees.

Survey results indicate that employees hold a generally positive view of the Company regarding occupational safety, leave entitlements, respect for diversity, and compliance with labor laws. However, some feedback highlighted areas for attention, including expectations regarding compensation and benefits, communication transparency during organizational restructuring, staffing levels and workload, process efficiency, and the need for improvements to equipment and the work environment.

In response to these findings, the Company is using employee feedback to guide future management improvements. We are continuously reviewing communication mechanisms, staffing arrangements, communication regarding compensation and benefits, process efficiency, and requirements for work environment upgrades. These efforts aim to mitigate potential human rights risks while enhancing employees' sense of security and trust in the organization.

Steps for human rights due diligence	Company Implementation Status
1 Identification and Assessment	Employee satisfaction surveys are used to gather feedback on various aspects, including corporate governance, compliance with labor laws, compensation and benefits, occupational safety, leave entitlements, work-related stress, respect for diversity, communication mechanisms, work resources, and career development.
2 Termination, Prevention, and Mitigation	Based on survey results, key areas of concern—such as expectations regarding compensation and benefits, communication transparency during organizational restructuring, staffing and workload, process efficiency, and improvements to equipment and the work environment—are identified, and relevant departments formulate plans for improvement.
3 track	The survey results and open-ended employee suggestions are consolidated and presented to management and relevant departments to serve as a basis for improvements; the implementation of these measures is subsequently tracked, and the findings inform planning for employee communication and HR management for the following year.
4 communicate	Employee feedback is continuously gathered through channels such as employee surveys, internal communications, management meetings, and input from relevant departments; significant or common issues are then incorporated into subsequent improvement efforts and management communications.

Human rights-related subjects	High-risk or high-priority issues	Investigation findings / Employee feedback	Remediation or mitigation measures
staff	Salary, Benefits, and Incentive Systems	Some employees have expressed a desire for benefits or incentive programs such as salary adjustments, pay raises, bonuses, allowances, company trips, and childcare subsidies. The survey indicates that "salary fairness," "benefits meeting needs," and "non-monetary recognition and rewards" are areas requiring particular attention.	Continuously promote occupational safety and health management, and regularly inspect equipment, tools, and the work environment; ensure that the responsible departments follow up on and address issues raised by employees regarding equipment repairs, environmental safety, and health concerns.
	Organizational Restructuring, Operational Information, and Communication Transparency	Some employees have expressed a desire for the company to strengthen two-way communication and enhance information transparency, while also voicing concerns regarding company operations, layoffs, and future strategic direction.	Strengthen communication mechanisms regarding major organizational changes, operational directions, and matters affecting employees; alleviate uncertainty and build trust through management meetings, employee communication channels, and interactions with senior executives.
	Staffing and Workload	Some employees have reported increased workloads, insufficient staffing, and a heavier burden regarding cross-site support following the organizational restructuring—factors that could impact work-related stress and the willingness to remain with the organization.	Review staffing arrangements, the division of labor, and support mechanisms; where necessary, assess the reasonableness of workloads, support allowances, or the need for additional personnel to prevent excessive strain caused by understaffing.
	Occupational Safety and Work Environment	The survey items covered occupational safety as well as work equipment and resources; employees also offered suggestions for environmental or equipment improvements, such as the repair of machinery and tools, addressing water leaks, and issues regarding air conditioning, odors, and card-swipe systems.	Continuously promote occupational safety and health management, and regularly inspect equipment, tools, and the work environment; ensure that the responsible departments follow up on and address issues raised by employees regarding equipment repairs, environmental safety, and health concerns.
	Right to Leave and Working Hours Management	Survey results indicate that employees rate their rights regarding leave very highly overall; open-ended comments also touched upon issues such as special leave, overtime, and work scheduling.	Continuously ensure that the management of working hours, overtime, leave, and time off complies with labor laws, and strengthen communication by supervisors regarding leave entitlements to prevent employees from facing adverse treatment due to taking leave or time off.
	Respect for Diversity and Equal Opportunity	The survey items cover aspects such as equitable development and promotion opportunities, fair opportunities within the team, respect for individuals of diverse backgrounds, and a diverse workplace.	Continuously implement fair hiring practices, career development, and management policies that foster a diverse and inclusive workplace—along with relevant training—to strengthen supervisors' understanding of fair treatment, respect for differences, and anti-discrimination principles.
	Process Efficiency and Digitalization	Numerous employees put forward suggestions regarding electronic approvals, process simplification, work order workflows, and improvements to cross-departmental communication.	Continuously review internal processes and system usage; drive the digitization of approval workflows, process simplification, and enhanced cross-departmental collaboration to reduce the operational burden on employees.

5.2 Safe Workplace (403-9、403-10)

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

Management Policy	Major Themes	Safe Workplace
	Significance for TSEC	Employees are the company's most valuable asset, and ensuring their safety and health is TSEC's most fundamental responsibility. To demonstrate its commitment to protecting worker safety and health, TSEC has established an occupational safety and health management system designed to ensure compliance with relevant regulations and other requirements.
	Policy direction	EHS Policy: As a professional manufacturer of solar cells and modules, TSEC aims to achieve corporate growth while prioritizing pollution prevention; committing to energy conservation, carbon reduction, climate change mitigation and adaptation, biodiversity and ecosystem protection, and the promotion of renewable energy and sustainable resource utilization to enhance environmental performance. Furthermore, the company is dedicated to improving occupational health and safety conditions to prevent injuries and ill health, complying with or exceeding relevant EHS regulations and obligations, and engaging in consultation and participation with relevant workers and other stakeholders. TSEC commits to integrating information and resources to implement the following EHS policy, thereby fulfilling its social responsibilities and achieving the goal of sustainable development: ■ Fulfill compliance obligations and commit to environmental protection. ■ Control environmental and safety risks and implement continuous improvement. ■ Promote environmental and safety education and require full employee participation.
	Core objective	1 Complies with laws and regulations. 2 No major occupational accidents.
	Performance Outcomes	1 In 2025, the Hsinchu and Pingtung plants organized the 12th Occupational Safety, Health, and Environmental Protection Month event. 2 In 2025, the Hsinchu plant obtained the Health Promotion Mark under the Healthy Workplace Certification.
	Action Plan	1 Implementation of the ISO 45001 Occupational Health and Safety Management System. 2 Occupational Safety, Health, and Environmental Protection Month.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

How to manage	Invest resources	Industrial Safety Department.
	Feedback mechanism	1 The Occupational Safety and Health Committee meets monthly. 2 EHS Suggestion Box: EHS@tsecpv.com.
	Evaluation mechanism	Maintain the validity of the ISO 45001 Occupational Health and Safety Management System certificate.
Future Plans	2026 Goal	1 Complies with laws and regulations. 2 No major occupational accidents.

TSEC has obtained certifications such as ISO 45001 (Occupational Health and Safety Management System), the Ministry of Health and Welfare's "Certificate of Self-Assessment for Workplace Health Promotion," and the Health Bureau's "Outstanding Workplace for Breastfeeding/Pumping Facilities." These achievements reflect the company's commitment to mitigating workplace hazards, providing a safe and healthy work environment for employees, meeting customer and regulatory requirements, and pursuing sustainable corporate development.

Management System/Regulations	Inspection Type	Number of people	Proportion
ISO 45001	Internal Audit	654	92.88%
	External verification	654	92.88%

ISO 45001The scope of certification covers the Hsinchu and Pingtung plants; the headquarters functions as an administrative office and is excluded from the scope.

TSEC's EHS (Environment, Health, and Safety) policy prioritizes employee safety and health above all else. Guided by the spirit of corporate social responsibility, the company is committed to providing a safe working environment and fostering a culture of safety excellence, striving to achieve a goal of zero workplace accidents across all operations and production processes. TSEC safeguards employee safety; in accordance with occupational safety and health regulations, if an employee identifies an imminent danger while performing their duties, they are authorized to halt work and retreat to a safe location—provided this does not endanger others—and must immediately report the situation to their direct supervisor. The company guarantees that no adverse disciplinary action will be taken against employees for exercising this right.

To promote the health and well-being of its workforce, TSEC actively encourages self-managed workplace health, strengthens physical and mental health support, and fosters a healthy work environment that promotes holistic well-being. Regarding risk management, the company identifies potential Environment, Health, and Safety (EHS) hazards associated with its operations, assesses and controls these risks, and regularly reviews EHS-related proposals, post-incident analyses, stakeholder requirements, and regulatory standards. These measures ensure the continued suitability and adequacy of the EHS management system and help prevent occupational injuries and illnesses. In the event of an occupational injury, TSEC convenes the Occupational Safety and Health Committee to review the incident and communicates the findings to employees; this process aims to prevent recurrence and continuously improve TSEC's overall EHS performance.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

Accident Investigation and Handling Process



In 2025, traffic accidents occurring during commutes remained the most frequent type of workplace-related incident; consequently, the company continued to promote traffic safety awareness and defensive driving concepts through new-hire orientation, on-the-job training, Occupational Safety and Health Committee activities, and traffic safety seminars. Additionally, there were four cases of minor injuries; measures such as enhanced training and the provision of additional protective equipment are being implemented to prevent and reduce the occurrence of such accidents.

project	Overview of Key OHS Performance for 2025
EHS Risk and Opportunity Assessment	A. Hazard identification regarding the work activities and environments of employees and contractors, along with action plans for safety and health proposals, are managed through a graded approach. This involves tracking, controlling, preventing, or mitigating risks—encompassing a total of 1,395 risk identification and assessment cases. The process entails individual departments conducting assessments under the overall coordination of the Industrial Safety Department, all in accordance with the ISO 45001 Occupational Health and Safety Management System.
	B. Employee Health Assessment and Analysis: A total of 926 assessments for musculoskeletal symptoms and employee stress were conducted, along with 898 self-assessments by supervisors regarding workplace harassment and misconduct, and 35 maternal health assessments for pregnant and postpartum employees. Based on the results, employee health management was implemented through tiered management, professional counseling, and work adjustments.
Health and Safety Education and Training	A. Prioritize and continuously promote occupational safety, health, and hygiene (OSH) education and training: conducted six-hour safety, health, and chemical hazard training for 49 new employees; provided various in-service OSH training sessions for 113 participants; carried out respiratory protection equipment fitting and testing for 141 participants; and delivered OSH hazard identification training and internal audit training for 32 and 34 participants, respectively.
	B. Strengthened the skills of employees and emergency response personnel, completing a total of 1,764 instances of employee fire safety and evacuation training, 58 instances of skills training for emergency response personnel, and nine emergency response drills.
Occupational Safety and Health Committee	The Occupational Safety and Health Committee meets monthly; worker representatives account for more than one-third of the membership, and workers possess decision-making authority.
Change Management	A. Two plants completed 3 change management items.
	B. All chemicals must undergo a safety review process prior to entering the facility; the review and assessment of 15 new chemicals have been completed.
Contractor Management	Regarding contractor management, a total of 281 instances of on-site safety orientation training, 31 pre-work safety coordination meetings, and 8 periodic contractor agreement committee meetings were completed.
Verification of implementation status	A total of 61 items requiring corrective action were identified through internal audits and inspections; all deficiencies were rectified within the prescribed timeframes.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
5.1 Labor and Human Rights
5.2 Safe Workplace
5.3 Customer Relations
appendix

Statistics/Annual		2023Year		2024Year		2025Year	
Factory premises		Hsinchu Plant	Pingtung Plant	Hsinchu Plant	Pingtung Plant	Hsinchu Plant	Pingtung Plant
Total Man-Hours (Employees)		1,613,075	1,772,674	1,365,413	1,412,519	881,189	830,208
Total Man-Hours (Non-employees)		128	0	0	0	0	0
Fatalities resulting from occupational injuries	Number of people	0	1	0	0	0	0
	Proportion	0	0.56	0	0	0	0
Severe occupational injury	Number of people	0	1	1	0	0	0
	Proportion	0	0.56	0.73	0	0	0
Recordable occupational injuries	Number of people	11	30	9	23	6	5
	Proportion	6.82	16.92	6.59	16.28	6.81	6.02
Reportable occupational diseases	Number of people	0	0	0	0	0	0
	Proportion	0	0	0	0	0	0

The number of occupational injuries includes work-related traffic accidents occurring during the commute to and from get off work.



Statistics on Types of Occupational Injuries Among Employees and Non-employees (2025)

type	Number of pieces	reason	Explanation of Hazards and Improvements
Burn	2	Accidental exposure to chemical splashes during operations	1 Workplace Education and Training 2 Ensure an adequate supply of protective equipment and verify that staff use it 3 correctly; post warning signs.
Cut	1	A blade cuts through the cut-resistant glove.	Workplace Safety Awareness and Procurement of Stainless Steel Cut-Resistant Gloves
Crush injury		P-Assignment	宣Safety regulations for guiding operations.
Commuting	3	Fell due to inattention to road conditions.	1 Traffic Safety and Safe Driving Training 2 Publicity by the Safety Committee
	2	Failed to pay attention to traffic conditions ahead while driving.	
	1	A stray dog suddenly darted out, causing the rider to brake urgently and fall.	
	1	Struck by a vehicle that ran a red light	



ISO 45001證書



職場健康促進自主評核合格證明(新竹廠/屏東廠)



職場親善哺集乳室(新竹廠/屏東廠)

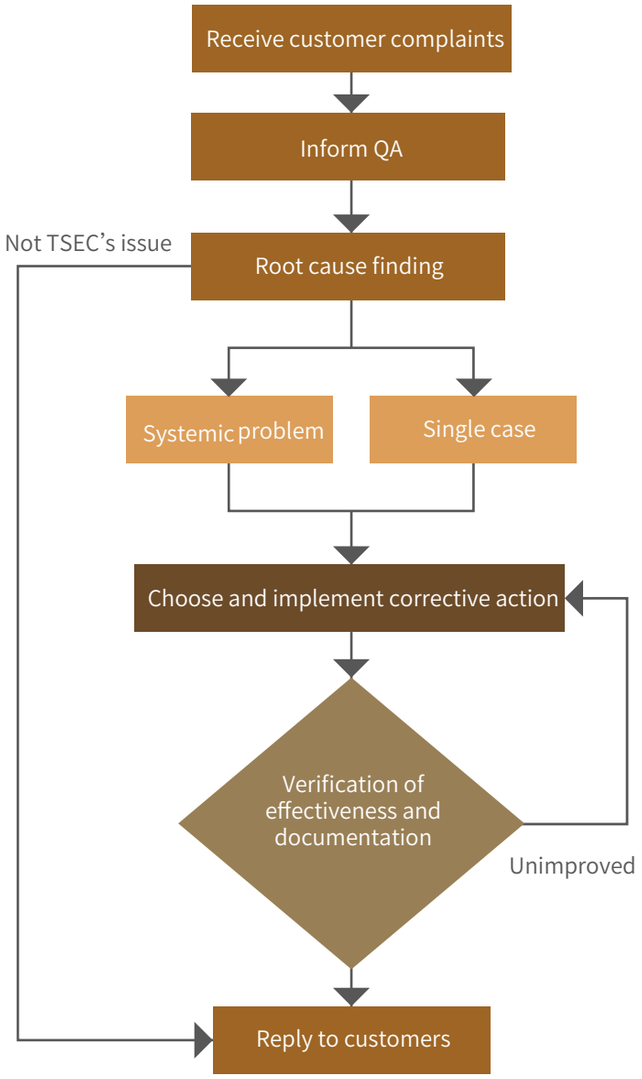
5.3 Customer Relations

Policies/Commitments		■ High quality, high efficiency, high satisfaction. ■ Establish a service-oriented operating model and optimize service processes to enhance customer trust and create a win-win outcome.
Policies/ Commitments	short	■ 100% response rate for customer satisfaction surveys. ■ Overall satisfaction among the top 20 customers by shipment volume met expectations, with all 20 achieving the target level.
	Medium-to-long	■ Continuously improve and maintain customer satisfaction. ■ Swiftly resolve customer complaints and build customer trust. °
Resources invested during the year		Customer Service Department.
Resources invested during the year		■ We uphold a customer-centric service philosophy and respond to clients promptly. ■ By holding regular weekly meetings to review complaints regarding quality issues, we ensure the timely identification of problems, the formulation of feasible corrective actions, and the continuous monitoring of their effectiveness. This approach enhances product quality and customer satisfaction, thereby strengthening the company's market competitiveness.
Evaluation Mechanism/ Outcomes		■ Overall satisfaction among the top 20 customers by shipment volume improved as expected. ■ The response rate for the customer satisfaction questionnaire was 100%.

Overall Satisfaction Results

2023Year		2024Year		2025Year	
Satisfaction Score	Number of enterprises	Satisfaction Score	Number of enterprises	Satisfaction Score	Number of enterprises
Far exceeded expectations	4	Far exceeded expectations	4	Far exceeded expectations	5
Exceeded expectations	5	Exceeded expectations	4	Exceeded expectations	6
In line with expectations	11	In line with expectations	12	In line with expectations	9
Below expectations	0	Below expectations	0	Below expectations	0
Did not meet expectations	0	Did not meet expectations	0	Did not meet expectations	0

Customer Complaint Handling Process



A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
– appendix

Appendix 1: GRI Sustainability Reporting Standards Content Index

Terms of Use	TSEC Corporation has reported in accordance with the GRI Standards for the period from January 1 to December 31, 2025.
GRI 1 Used	GRI 1：Fundamentals 2021
Applicable GRI Sector Standards	The Company operates in the optoelectronics industry and does not yet have GRI sector standards.

theme	Disclosure Project	Project Description	chapter	page number	Omitted/Remarks
GRI 2: General Disclosures 2021					
Organization and Reporting Practice	2-1	Organizational details	2.1 Company Profile	20	
	2-2	Entities included in the organization's sustainability reporting	Editorial Policy	04	
	2-3	Reporting period, frequency, and contact person	Editorial Policy	04	
	2-4	Restatements of information	Editorial Policy	04	
	2-5	External assurance	Editorial Policy	04	
Activities and Workers	2-6	Activities, value chain, and other business relationships	2.1 Company Profile	20	
	2-7	Employees	5.1 Labor and Human Rights	73	
	2-8	Workers who are not employees	5.1 Labor and Human Rights	73	
Governance	2-9	Governance structure and composition	3.1 Governance Practices	26	
	2-10	Nomination and selection of the highest governance body	3.1 Governance Practices	26	
	2-11	Chair of the highest governance body	3.1 Governance Practices	26	
	2-12	Role of the highest governance body in overseeing the management of impacts	3.1 Governance Practices	26	
	2-13	Responsibility for managing impacts	3.1 Governance Practices	26	
	2-14	The Role of the Highest Governance Body in Sustainability Reporting	1.1 Sustainable Development Committee	08	
	2-15	Conflict of interest	3.1Governance Practices	26	
	2-16	Communicating key major events	3.1Governance Practices	26	
	2-17	Collective Wisdom of the Highest Governing Body	3.1Governance Practices	26	
	2-18	Performance evaluation of the highest governance body	3.1Governance Practices	26	
	2-19	Remuneration Policy	3.1.2 Functional Committees	30	
	2-20	Compensation determination process	3.1.3Internal Audit	32	
	2-21	Annual Total Compensation Ratio		--	Confidentiality Provision / Maximum Total Annual Individual Compensation is Company Confidential Information.

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
– appendix

theme	Disclosure Project	Project Description	chapter	page number	Omitted/Remarks
Strategies, Policies, and Practices	2-22	Statement on Sustainable Development Strategy	A Word from the Management	02	
	2-23	Policy Commitment	3.3Risk Management	36	
			5.1Labor and human rights	73	
	2-24	Incorporate into policy commitments	3.3Risk Management	36	
			5.1Labor and human rights	73	
	2-25	Procedures for remedying negative impacts	3.1Corporate Governance	26	
	2-26	Mechanisms for seeking advice and raising concerns	3.1Corporate Governance	26	
	2-27	Regulatory Compliance	3.2Honest and trustworthy business operations	33	
	2-28	Membership in associations and societies	2.4 Participation in external organizations	23	
Stakeholder Engagement	2-29	Stakeholder Engagement Policy	1.2 Identify stakeholders	10	
			1.3Stakeholder Communication Channels and Key Issues of Concern	10	
	2-30	Collective Agreement	5.1Labor and human rights	73	
GRI 3：Major Themes 2021					
Major Themes	3-1	Process for determining major themes	1.4Identifying major themes	13	
	3-2	List of Major Themes	1.4Identifying major themes	13	
Economic fundamentals					
Financial performance					
GRI 201：Economic performance 2016	3-3	Management of Major Themes	3.4Economic performance	41	
	201-1	Direct economic value generated and distributed by the organization	3.4Economic performance	41	
	201-2	Financial impacts, as well as other risks and opportunities, arising from climate change	4.1Climate-related financial disclosures	49	
	201-3	Defining Benefit Plan Obligations and Other Retirement Plans	3.4Economic performance	41	
	201-4	Derived from government financial subsidies	3.4Economic performance	41	
Procurement Practices					
GRI 204：Procurement Practices 2016	204-1	Proportion of procurement spending from local suppliers	4.6Supplier Management	68	
Innovative R&D of Green Products					
Custom Theme	3-3	Management of Major Themes	3.5Innovative R&D of Green Products	44	

theme	Disclosure Project	Project Description	chapter	page number	Omitted/Remarks
Environmental aspects					
Energy Management					
GRI 302：energy2016	3-3	Management of Major Themes	4.2Energy Management	56	
	302-1	Energy consumption within the organization	4.2Energy Management	56	
	302-3	Energy intensity	4.2Energy Management	56	
	302-4	Reduce energy consumption	4.2Energy Management	56	
Water Resource Management					
GRI 303：Water and Effluent Management Policy (2018)	303-1	Interactions in Shared Water Resources	4.4Water Resource Management	62	
	303-2	Management of drainage-related impacts	4.4Water Resource Management	62	
	303-3	Water withdrawal volume	4.4Water Resource Management	62	
	303-4	Displacement	4.4Water Resource Management	62	
	303-5	Water consumption	4.4Water Resource Management	62	
Greenhouse gas emissions					
GRI 305 : emission 2016	3-3	Management of Major Themes	4.3Greenhouse gas emissions	59	
	305-1	Direct (Scope 1) greenhouse gas emissions	4.3Greenhouse gas emissions	59	
			Appendix VI	99	
	305-2	Indirect energy-related (Scope 2) greenhouse gas emissions	4.3Greenhouse gas emissions	59	
			Appendix VI	99	
	305-4	Greenhouse gas emission intensity	4.3Greenhouse gas emissions	59	
			Appendix VI	99	
	305-5	Reduction of greenhouse gas emissions	4.3Greenhouse gas emissions	59	
			Appendix VI	99	
Waste Management					
GRI 306：Waste 2020	306-1	Generation of waste and significant waste-related impacts	4.5Waste Management	65	
	306-2	Management of Significant Waste-Related Impacts	4.5Waste Management	65	
	306-3	Generation of waste	4.5Waste Management	65	
	306-4	Transfer of waste for disposal	4.5Waste Management	65	
	306-5	Direct disposal of waste	4.5Waste Management	65	

A Word from the Management
Editorial Policy
Sustainable Performance
01 Stakeholder Engagement
02 About TSEC
03 Integrity-based Governance
04 Green Sustainability
05 Social Care
– appendix

theme	Disclosure Project	Project Description	chapter	page number	Omitted/Remarks
Supply Chain Environmental and Social Assessment					
GRI 308：Supplier Environmental Assessment 2016	308-1	Screening new suppliers using environmental standards	4.6Supplier Management	68	
	308-2	Negative environmental impacts of supply chains and actions taken	4.6Supplier Management	68	
GRI 414:Supplier Social Assessment 2016	414-1	Screening new suppliers using social criteria	4.6Supplier Management	68	
	414-2	Negative social impacts in the supply chain and actions taken	4.6Supplier Management	68	
social aspect					
Occupational Safety and Health					
GRI 403：Occupational Safety and Health 2018	3-3	Management of Major Themes	5.2 Safe Workplace	85	
	403-1	Occupational Safety and Health Management System	5.2 Safe Workplace	85	
	403-2	Hazard Identification, Risk Assessment, and Accident Investigation	5.2 Safe Workplace	85	
	403-3	Occupational Health Services	5.2 Safe Workplace	85	
	403-5	Occupational Safety and Health Training for Workers	5.2 Safe Workplace	85	
	403-6	Workplace Health Promotion	5.2 Safe Workplace	85	
	403-7	Prevent and mitigate occupational health and safety impacts directly associated with business relationships.	5.2 Safe Workplace	85	
	403-9	Occupational injury	5.2 Safe Workplace	85	
	403-10	Occupational disease	5.2 Safe Workplace	85	
Employee Diversity and Equal Opportunity					
GEmployee Diversity and Equal Opportunity	405-1	Diversity within the governing body and among employees	3.1.1Board of Directors	28	
			5.1Labor and human rights	73	
	405-2	Ratio of women's total remuneration to men's	5.1Labor and human rights	73	
Labor and human rights					
Custom Theme	3-3	Management of Major Themes	5.3Customer Relations	90	

Appendix 2: Verification Statement

格瑞國際驗證有限公司
GREAT International Certification Co., Ltd.

元晶太陽能科技股份有限公司
2025 年永續報告書之獨立保證意見聲明書

聲明書編號:2605001

元晶太陽能科技股份有限公司(以下簡稱元晶太陽能)與格瑞國際驗證有限公司(以下簡稱格瑞驗證)為相互獨立的公司及組織，格瑞驗證除了針對該公司 2025 年永續報告書進行評估和查證外，與元晶太陽能並無任何財務上的關係。

本獨立保證意見聲明書(以下簡稱聲明書)的目的，僅作為對下列有關元晶太陽能之永續報告書所界定範圍內的相關事項進行保證之結論，而不作為其他之用途。除對查證事實提出聲明書外，對於其他目的之使用，或閱讀此聲明書的任何人，格瑞驗證並不負有或承擔任何相關法律或其他之責任。

本聲明書係基於元晶太陽能提供予格瑞驗證之相關資訊所作查證之結論，因此審查範圍乃基於並局限在這些提供的資訊內容之內，格瑞驗證認為這些信息內容都是完整且準確的。對於這份聲明書所載內容或相關事項之任何疑問，將全部由元晶太陽能回覆。

保證範圍

元晶太陽能與格瑞驗證協議的查證範圍包括：

1. 整份永續報告書內容及元晶太陽能在 2025 年 1 月 1 日至 2025 年 12 月 31 日的所有營運績效。
2. 依照 AA1000 保證標準 v3 的第 1 應用類型評估元晶太陽能遵循 AA1000 當責性原則標準(2018)的本質和程度，不包括對於報告書揭露的資訊／數據之可信賴度的查證。
3. 本聲明書以中文作成，並翻譯成英文以供參考。

意見聲明

我們總結元晶太陽能之永續報告書內容，對於元晶太陽能的相關運作與績效則提供一個公平的觀點。我們相信有關元晶太陽能 2025 年的環境、社會及公司治理等特定績效指標是被正確無誤地展現。報告書所揭露的績效指標展現了元晶太陽能對鑑別及滿足利害關係人的期望與努力。

我們的查證工作是由一組具有依據 AA1000 保證標準 v3 查證能力之團隊執行，以及規劃和執行這部分的工作，以獲得必要的資訊數據及說明。我們認為元晶太陽能所提供的證據足夠以表明其依循 AA1000 保證標準 v3 及其 2018 年附錄的報告方法與自我聲明符合 GRI 永續性報導準則。

查證方法

為了收集與作成結論有關的證據，我們執行了以下工作：

- 對來自外部團體相關於元晶太陽能之公司政策的議題，進行高階管理的審查，以確認本報告中聲明書的合適性；
- 與元晶太陽能之主管討論有關利害關係人參與的方式，且並未直接接觸外部利害關係人；
- 訪談與永續報告書編制及資訊提供有關的職員；
- 在抽樣基礎上稽核元晶太陽能之績效數據；
- 審查報告中所作宣告的支持性證據；
- 針對元晶太陽能之報告及其相關 AA1000 當責性原則(2018)中描述有關包容性、重大性、回應性及衝擊性原則的流程管理進行審查。

結論

針對 AA1000 當責性原則(2018)之包容性、重大性、回應性、衝擊性與 GRI 永續性報導準則的詳細審查結果如下：

格瑞國際驗證有限公司
GREAT International Certification Co., Ltd.

包容性

元晶太陽能已建立與主要利害關係人合作的過程，包含股東、客戶、員工、供應商、政府機關及銀行等，於 2025 年展開一系列利害關係人活動，涉及經濟、環境和社會等一系列重大主題。以我們的專業意見而言，這份報告書涵蓋了元晶太陽能的包容性議題。

重大性

報告書已載明元晶太陽能所關注經濟、環境和社會面向等主題，並鑑別出 8 項重大主題包括能源管理、溫室氣體管理、水資源管理、廢棄物管理、職業安全、客戶關係、營運績效及綠色產品之創新研發等。以我們的專業意見而言，這份報告書適切地涵蓋了元晶太陽能的重大性議題。

回應性

元晶太陽能執行來自利害關係人的要求與看法之回應。實行方法包括股東會、法人說明會、年報、財報、公司網站投資人專區、公開資訊觀測站、客戶拜訪/來廠稽核、客戶滿意度調查、勞資會議、職工福利委員會、員工信箱/申訴專線、供應商拜會/會議/稽核、政府機關座談會/研討會/評鑑/公文往來、發言人系統、電話及電子信箱等眾多的內部和外部利害關係人的溝通機制，作為提供進一步回應利害關係人的機會，並能對利害關係人所關切議題及時回應。以我們的專業意見而言，這份報告書涵蓋了元晶太陽能的回應性議題。

衝擊性

元晶太陽能已鑑別，並以平衡且有效之量測及揭露方式公正地展現其衝擊。元晶太陽能已建立監督、量測、評估及管理衝擊之流程，有助於組織內實現更有效之決策與成果管理。就我們的專業意見而言，本報告涵蓋了元晶太陽能的衝擊性議題。

GRI 永續性報導準則

元晶太陽能提供有關依循 GRI 永續性報導準則之自我宣告與相關資料，基於審查的結果，我們確認報告書參照 GRI 永續性報導準則的社會責任與永續發展的相關揭露項目已被揭露、部分揭露或省略。以我們的專業意見而言，此自我宣告涵蓋了元晶太陽能的社會責任與永續性主題。

保證等級

依據 AA1000 保證標準 v3 及其 2018 年附錄，我們的查證與本聲明書為中度保證等級，如同本聲明書中所描述的範圍與方法。

責任

本聲明書的意見聲明供元晶太陽能使用。我們的責任僅基於所描述的範圍與方法，提供專業意見並提供利害關係人一個獨立的聲明書。

能力與獨立性

格瑞驗證為由各管理系統領域的專家組成。本查證團隊係由具專業背景，且接受過如 AA1000AS v3、ISO 9001、ISO 14001 與 ISO 45001 之一系列永續發展、環境及社會等管理標準的訓練，具有主導稽核員資格之成員組成。

基於保證團隊之查證行為，
並由格瑞國際驗證有限公司(中華民國，台灣)
於 2026 年 05 月 18 日簽署發行

簽證　陳文俊 總經理

AA1000
Licensed Report
000-250/V3-JXWBS

Appendix 2: Verification Statement

格瑞國際驗證有限公司
GREAT International Certification Co., Ltd.

Independent Assurance Statement Based on 2025 Sustainability Report of TSEC CORPORATION

Statement No.: 2605001

TSEC CORPORATION (hereinafter referred to as TSEC) and GREAT International Certification Co., Ltd. (hereinafter referred to as GREAT) are independent companies and organizations. Except for the evaluation and verification of the company's 2025 sustainability report, GREAT has no financial relationship with TSEC.

The purpose of this independent assurance statement (hereinafter referred to as the Statement) is only to serve as the conclusion of guaranteeing the relevant matters within the scope defined in the following relevant TSEC's Sustainability Report, and not for other purposes. Except for the Statement for fact verification, GREAT does not bear any relevant legal or other responsibilities for the use of other purposes, or anyone who reads this Statement.

This Statement is based on the conclusions made by the relevant information verification provided by TSEC to GREAT. Therefore, the scope of the review is based on and limited to the content of the information provided. GREAT believes that the information content is complete, accurate and precise. Any questions about the content of this Statement or related matters will be answered by TSEC.

The Scope of Assurance

The verification scope of TSEC and GREAT agreement includes:

- The contents of the entire sustainability report and all operating performance of TSEC from January 1, 2025 to December 31, 2025;
- According to the type 1 of AA1000 Assurance Standard v3, evaluate the nature and degree of TSEC 's compliance with the AA1000 Accountability Principles (2018), excluding the verification of the reliability of the information/data disclosed in the report.
- This Statement is made in Chinese and translated into English for reference.

Verification Opinion

We summarize the content of TSEC's sustainability report, and provide a fair standpoint of TSEC 's related operations and performance. We believe that the specific performance indicators of TSEC in 2025, such as environment, society and corporate governance, are presented correctly. The performance indicators disclosed in the report demonstrate TSEC's expectations and efforts to identify and satisfy stakeholders.

Our verification work is carried out by a group of teams with verification capabilities according to the AA1000 Assurance Standard v3, as well as the planning and execution of this part of the work to obtain the necessary information data and instructions. We believe that the evidence provided by TSEC is sufficient to show that its reporting method and self-declaration in accordance with the AA1000 Assurance Standard v3 and its 2018 appendix are in line with the GRI Sustainability Reporting Guidelines.

Verification method

To gather the evidence relevant to the conclusions, we performed the following:

- To conduct a senior management review of issues from external parties related to TSEC 's corporate policies to confirm the appropriateness of the statement in this report;
- To discuss with the managers of TSEC about the way of stakeholder participations, and have no direct contact with external stakeholders;
- To interview with employees related to the preparation of the sustainability report and information provision;
- To audit the performance data of TSEC on a sampling basis;
- To evidence supporting the claims made in the review report;
- To Review the management process of the principles of inclusivity, materiality, responsiveness, and impact described in the company report and its related AA1000 Accountability Principles (2018).

Conclusion

The results of a detailed review of the AA1000 Accountability Principles (2018) including inclusivity, materiality, responsiveness, impact and GRI sustainability reporting standards are as follows:

- **Inclusivity**
  TSEC has established a process of cooperation with major stakeholders, including shareholders, customers, employees, suppliers, government agency, and banks, etc., and will launch a series of stakeholder activities in 2025, involving economy,

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GREAT International Certification Co., Ltd.

environment and society, a series of major themes. In terms of our professional opinion, this report covers the inclusivity issues of TSEC.

- **Materiality**
  The report has stated that TSEC focuses on economy, environment and society topics, and identified 8 major topics including energy management, greenhouse gas management, water resource management, waste management, occupational safety, customer relations, operational performance, and innovative R&D of green products, etc. In terms of our professional opinion, this report appropriately covers the materiality issues of TSEC.

- **Responsiveness**
  TSEC responds to requests and opinions from stakeholders. Implementation methods include shareholders' meetings, corporate briefing, annual reports, financial statements, company website investor section, public information monitoring station, customer visits/factory audits, customer satisfaction survey, labor-management meetings, employee welfare committee, employee mailbox/complaint hotline, supplier visits/meetings/audits, government agency seminars/conferences/evaluations/official correspondence, spokesperson system, phone calls and email, etc., those numerous internal and external stakeholder communication mechanisms, as an opportunity to provide further responses to stakeholders, and to promptly respond to stakeholder concerns. In terms of our professional opinion, this report covers the responsiveness issues of TSEC.

-Impact

TSEC has identified and fairly demonstrated its impact with balanced and effective measurement and disclosure. TSEC has established a process for monitoring, measuring, evaluating and managing impacts, which helps to achieve more effective decision-making and results management within the organization. In terms of our professional opinion, this report covers the impact issues of TSEC.

-GRI Guidelines

TSEC provides the self-declaration of compliance with the GRI Sustainability Reporting Standards and relevant information. Based on the results of the review, we confirm that the report refers to the social responsibility and sustainability of the GRI Sustainability Reporting Standards. Relevant disclosure items for developments have been disclosed, partially disclosed, or omitted. In terms of our professional opinion, this self-declaration covers TSEC 's social responsibility and sustainability themes.

Assurance level

According to the AA1000 Assurance Standard v3 and its 2018 Appendix, we have verified that this Statement is a moderate level of assurance, as described in the scope and methods of this Statement.

Responsibility

The responsibility of the sustainability report, as stated in this Statement, is owned by the person in charge of TSEC. The responsibility of GREAT is solely to provide professional opinions based on the scope and methods described, and to provide a Statement for the stakeholders.

Ability and Independence

GREAT is composed of experts in various management system fields. The verification team is composed of members with professional background, who have received training in a series of sustainable development, environmental and social management standards such as AA1000 AS v3, ISO 9001, ISO 14001 and ISO 45001, and are qualified as lead auditors.

On behalf of the assurance team MAY 18, 2026
GREAT International Certification Co., Ltd.
Taiwan, Republic of China

Signed by General Manager W. J. Chen

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000-250/V3-JXWBS

Appendix 3: SASB Standards Alignment Table – Solar Technology & Project Developers

theme	Code	index	type	Unit of measurement	Response
Manufacturing Energy Management	RR-ST-130a.1	1 Total energy consumption 2 Percentage of grid electricity 3 Percentage of renewable energy	Quantification	Gigajoules (GJ), percentage (%)	4.2 Energy Management
Inside the manufacturing water pipe	RR-ST-140a.1	1 Total water withdrawal as a percentage of the total in areas with high or extremely high baseline water stress 2 Total water consumption as a percentage of the total in areas with high or extremely high baseline water stress	Quantification	thousand cubic meters (1,000m^3) , percentage(%)	Water withdrawal: 250,945 thousand cubic meters; water consumption: 102,349 thousand cubic meters; none of the plant sites are located in areas of water stress.
	RR-ST-140a.2	Description of water management risks and discussion of strategies and practices to mitigate such risks.	Discussion and Analysis	not applicable	4.4 Water Resource Management
Hazardous Waste Management	RR-ST-150a.1	1 Weight of hazardous waste generated 2 Recycle percentage	Quantification	Metric ton (t), percentage (%)	4.5 Waste Management
	RR-ST-150a.2	1 Report the number of leak incidents and the total weight. 2 Recovery Volume 2	Quantification	Quantity, kilograms (kg)	4.5 Waste Management
Ecological Impact of Project Development	RR-ST-160a.1	Regarding project delays associated with ecological impacts: 1 frequency 2 duration	Quantification	Quantity, number of days	No such incident occurred.
	RR-ST-160a.2	Description of efforts made to address community and ecological impacts during the development of solar energy system projects.	Discussion and Analysis	not applicable	None of them will affect the existing ecological environment.
Integration of Energy Infrastructure and Management of Related Regulations	RR-ST-410a.1	A description of the risks associated with integrating solar energy into existing energy infrastructure, and a discussion of efforts to manage such risks.	Discussion and Analysis	not applicable	3.3 Risk Management 3.5 Innovative R&D of Green Products
	RR-ST-410a.2	Description of risks and opportunities related to energy policy and their impact on integrating solar energy into existing energy infrastructure.	Discussion and Analysis	not applicable	4.2 Energy Management
Product End-of-Life Management	RR-ST-410b.1	Percentage of sold products that are recyclable or reusable	Quantification	percentage(%)	No relevant regulations at present.
	RR-ST-410b.2	1 Recovered weight of end-of-life materials 2 Recycling percentage	Quantification	Metric ton (t), percentage (%)	4.5 Waste Management
	RR-ST-410b.3	Percentage of revenue from products containing declarable substances under IEC 62474, arsenic compounds, antimony compounds, or beryllium compounds.	Quantification	Quantity, number of days	Our products comply with relevant regulations such as RoHS and REACH; however, we do not currently have statistical data based on these specific metrics.
	RR-ST-410b.4	Description of practices and strategies for designing products for high-value recycling	Discussion and Analysis	not applicable	Not applicable; the Company currently has no product recall mechanism.
Material Acquisition	RR-ST-440a.1	Description of risk management related to the use of key materials	Discussion and Analysis	not applicable	4.6 Sustainable Supply Chain Management
	RR-ST-440a.2	Description of environmental risk management related to the polysilicon supply chain	Discussion and Analysis	not applicable	4.6 Sustainable Supply Chain Management

Indicator code	Activity indicators	type	Unit of measurement	Response
RR-ST-000.A	Total capacity of manufactured photovoltaic (PV) modules	Quantification	Megawatt (MW)	Battery: 148.05 | Module: 174.07
RR-ST-000.B	Total capacity of completed solar energy systems	Quantification	Megawatt (MW)	No relevant statistical data available.
RR-ST-000.C	Total Assets of Project Development	Quantification	Reporting currency	3.4 Operational Performance

Appendix 4: TCFD Disclosure Items Cross-Reference Table

For	TCFD Disclosure Items	Corresponding chapter
Governance	Board oversight of climate-related risks and opportunities	4.1 Climate-related financial disclosures
	The role of management in assessing and managing climate-related risks and opportunities	4.1 Climate-related financial disclosures
Strategy	Short-, medium-, and long-term climate-related risks and opportunities identified by the organization	4.1 Climate-related Financial Disclosures
	Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning.	4.1 Climate-related Financial Disclosures
	Build strategic organizational resilience and consider various climate-related scenarios.	4.1 Climate-related Financial Disclosures
Risk Management	The organization's process for identifying and assessing climate-related risks.	4.1 Climate-related Financial Disclosures
	An organization's climate-related risk management processes	4.1 Climate-related Financial Disclosures
	How are the processes for identifying, assessing, and managing climate-related risks integrated into the organization's overall risk management framework?	4.1 Climate-related Financial Disclosures
Indicators and Targets	Metrics used by the organization to assess climate-related risks and opportunities in alignment with its strategy and risk management processes.	4.1 Climate-related Financial Disclosures
	Disclose Scope 1, Scope 2, and Scope 3 (where applicable) greenhouse gas emissions and related risks.	4.1 Climate-related Financial Disclosures
	The targets used by the organization to manage climate-related risks and opportunities, and performance against those targets.	4.1 Climate-related Financial Disclosures

Appendix 5: Sustainability Disclosure Indicators – Optoelectronics Industry

index	TSEC Annual Disclosure Status
1 Total energy consumption (GJ) 2 Percentage of purchased electricity (%) 3 Renewable energy usage rate (%)	4.2 Energy Management
1 Total water withdrawal (thousand m^3) 2 Total water consumption (thousand m^3)	4.4 Water Resource Management
1 Weight of hazardous waste generated 2 (metric tons) and recycling percentage (%)	4.5 Waste Management
Specify the categories, number of persons, and rates (%) of occupational injuries.	5.2 Safe Workplace
Product Lifecycle Management Disclosure: 1 Weight of scrapped products and electronic waste (metric tons) 2 Recycling percentage (%) Note 1	4.5 Waste Management
Description of risk management related to the use of critical materials	TSEC requires suppliers to provide relevant documentation for all raw materials regarding hazardous substances.
Total financial losses resulting from legal proceedings related to anti-competitive conduct regulations.	No relevant cases occurred in 2025.
Production volume of major products by product category	2.1 Company Profile

Appendix 6: Climate-related Information of Listed and OTC Companies

Risks and opportunities posed by climate change to the company and the corresponding measures taken by the company.

project	Report Disclosure Section
1 Clearly describe the Board of Directors' and management's oversight and governance of climate-related risks and opportunities.	4.1 Climate-related Financial Disclosures
2 Clearly explain how the identified climate-related risks and opportunities impact the enterprise's business, strategy, and financial planning (over the short, medium, and long term).	4.1 Climate-related Financial Disclosures
3 Clearly explain the financial impacts of extreme weather events and transition actions.	4.1 Climate-related Financial Disclosures
4 Clearly explain how the processes for identifying, assessing, and managing climate risks are integrated into the overall risk management framework.	4.1 Climate-related Financial Disclosures
5 When using scenario analysis to assess resilience against climate change risks, the scenarios, parameters, assumptions, analysis factors, and key financial impacts employed should be disclosed.	4.1 Climate-related Financial Disclosures
6 If a transition plan for managing climate-related risks is in place, describe the content of the plan, as well as the metrics and targets used to identify and manage physical and transition risks.	4.1 Climate-related Financial Disclosures
7 If internal carbon pricing is used as a planning tool, the basis for setting the price should be explained.	Internal carbon pricing has not yet been implemented.
8 If climate-related targets have been established, information regarding the covered activities, greenhouse gas emission scopes, planning timeframes, and annual progress toward achievement should be disclosed; if carbon offsets or renewable energy certificates (RECs) are utilized to meet such targets, the source and quantity of the carbon offset credits or the quantity of RECs should be specified.	4.1 Climate-related Financial Disclosures
9 Status of greenhouse gas inventory and assurance, as well as reduction targets, strategies, and specific action plans (to be entered separately in sections 1-1 and 1-2).	Refer to the table below.

Status of Greenhouse Gas Inventory and Assurance

1-1 Greenhouse Gas Inventory and Assurance Status for the Past Two Years

1-1-1 Greenhouse Gas Inventory Information

Specify the greenhouse gas emissions (in tonnes of CO2e) and intensity (in tonnes of CO2e per million yuan) for the most recent two years, as well as the scope of the data coverage.

1 TSEC's parent company (Hsinchu Plant, Pingtung Plant, and Taipei office) is required to begin inventorying emissions in 2024.

2 Subsidiaries included in TSEC's consolidated financial reports are required to begin inventorying emissions in 2025.

We have established a greenhouse gas (GHG) inventory mechanism in accordance with the ISO 14064-1 standard issued by the International Organization for Standardization (ISO). Starting in 2024, we conduct annual inventories of the Company's GHG emissions to fully track GHG usage and emission levels and to verify the effectiveness of reduction initiatives. Furthermore, the GHG inventory data for the past two years—compiled based on the operational control approach—covers the Company's GHG emissions and is detailed below:

		113year		114year	
		Emissions volume ($tonCO_2e$)	Density ($tonCO_2e$/Revenue (in millions of New Taiwan Dollars)	Emissions volume ($tonCO_2e$)	Density ($tonCO_2e$/Revenue (in millions of New Taiwan Dollars)
The Company	Scope 1 Direct greenhouse gas emissions	5135.2450		1302.7433	
	Scope 2 Indirect greenhouse gas emissions	45183.1046		28370.1280	
	Subtotal	50318.3496		29672.8713	
All subsidiaries included in the consolidated financial statements	Scope 1: Direct Greenhouse Gas Emissions	None of the subsidiaries included in the 2024 consolidated financial statements were subject to mandatory inventory verification requirements; therefore, no such verification was conducted.		0	
	Scope 2: Indirect Greenhouse Gas Emissions			0	
	Subtotal			0	
total		50318.3496	11.15	29672.8713	16.26

1 Direct emissions (Scope 1: emissions directly from sources owned or controlled by the company), indirect energy emissions (Scope 2: indirect greenhouse gas emissions resulting from the consumption of purchased electricity, heat, or steam), and other indirect emissions (Scope 3: emissions resulting from the company's activities but originating from sources owned or controlled by other companies, excluding indirect energy emissions).

2 The scope of data coverage for direct emissions and indirect energy emissions shall be determined in accordance with the schedule prescribed pursuant to Article 10, Paragraph 2 of these Standards; disclosure of information regarding other indirect emissions is voluntary.

3 Greenhouse gas inventory standards: The Greenhouse Gas Protocol (GHG Protocol) or ISO 14064-1 issued by the International Organization for Standardization (ISO).

4 Greenhouse gas emission intensity may be calculated based on units of product/service or revenue; however, data calculated based on revenue (in millions of New Taiwan Dollars) must be disclosed.

1-1-2 Greenhouse Gas Assurance Information

Clearly state the details of the assurance engagements for the two most recent fiscal years up to the date of the annual report's publication, including the scope of assurance, the assurance provider, the assurance standards, and the assurance conclusion.

TSEC's parent company (on a standalone basis) is to implement assurance starting in 2027.

Subsidiaries included in TSEC's consolidated financial reports are to implement assurance starting in 2028.

TSEC has established a greenhouse gas inventory mechanism in accordance with the ISO 14064-1 standard issued by the International Organization for Standardization (ISO) and conducts verification; it also plans to implement assurance starting in 2027.

1 Compliance shall be ensured in accordance with the schedule prescribed pursuant to Article 10, Paragraph 2 of these Guidelines. If a company is unable to obtain a complete greenhouse gas assurance opinion by the date of the annual report's publication, it shall include a note stating that "complete assurance information will be disclosed in the sustainability report"; if the company does not prepare a sustainability report, it shall include a note stating that "complete assurance information will be disclosed on the Market Observation Post System," and the complete assurance information shall be disclosed in the following year's annual report.

2 Assurance providers must comply with the relevant regulations for sustainability report assurance providers established by the Taiwan Stock Exchange Corporation and the Taipei Exchange.

3 For disclosure content, please refer to the best practice examples available on the website of the Taiwan Stock Exchange's Corporate Governance Center.

1-2 Greenhouse gas reduction targets, strategies, and specific action plans

Specify the greenhouse gas reduction base year and associated data, reduction targets, strategies, and specific action plans, as well as the status of target achievement.

Baseline Year and Reduction Targets for Greenhouse Gas Emissions

To formulate greenhouse gas reduction strategies, the Company conducted an emissions inventory in 2023 based on the scope of its consolidated financial statements, thereby establishing 2023 as the base year. Scope 1 and Scope 2 emissions were 7,266.4811 tonnes CO2e and 51,934.0515 tonnes CO2e, respectively. Through the implementation of reduction strategies, the Company aims to reduce carbon emission intensity by more than 1% annually starting in 2024, with a projected reduction of over 7% by 2030.

Greenhouse Gas Reduction Strategies and Specific Action Plans

Set a target for an average annual electricity saving rate of at least 1%, appropriately introduce renewable energy, and implement greenhouse gas management in accordance with ISO 14064-1—including conducting annual inventories—to ensure the effective operation of the management system.

Status of Reduction Target Achievement

The annual emissions data and status of target achievement to date are as follows:
In Year 112, carbon emissions were 7,266.4811 tonnes CO2e (Scope 1) and 51,934.0515 tonnes CO2e (Scope 2), totaling 59,200.5326 tonnes CO2e, with an intensity of 7.17.
In Year 113, carbon emissions were 5,135.2450 tonnes CO2e (Scope 1) and 45,183.1046 tonnes CO2e (Scope 2), totaling 50,318.3496 tonnes CO2e, with an intensity of 11.15.
In Year 114, carbon emissions were 1,614.6797 tonnes CO2e (Scope 1) and 28,866.6139 tonnes CO2e (Scope 2), totaling 30,481.2936 tonnes CO2e, with an intensity of 16.70.
While emissions have decreased year-over-year—with the combined Scope 1 and Scope 2 emissions in Year 114 dropping by 19,837.0560 tonnes CO2e compared to Year 113—the carbon emission intensity increased, meaning the target was not met.

1 Actions shall be taken in accordance with the schedule stipulated in the order issued pursuant to Article 10, Paragraph 2 of these Guidelines.

2 The base year shall be the year in which the inventory based on the consolidated financial report boundaries is completed; for example, under the order issued pursuant to Article 10, Paragraph 2, companies with paid-in capital of NT$10 billion or more are required to complete the inventory for the 2024 fiscal year by 2025, making 2024 the base year. However, if a company completes the inventory based on consolidated financial reports ahead of schedule, it may designate that earlier year as the base year. Additionally, data for the base year may be calculated based on a single year or as an average over multiple years.

3 For disclosure content, please refer to the best practice examples available on the website of the Corporate Governance Center of the Taiwan Stock Exchange.

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2025 TSEC SUSTAINABILITY REPORT