Sino-American Silicon Products Inc.

2025 Sustainability Report

Renewable Energy Total Solution Provider

CONTENTS

About This Report 3
Message from the Chairperson 5
2025 Key Indicators and Recognitions 8

SAS 12
Company Profile 12
Market and Service 14
Company Philosophy 16
Participation in External Associations 16

Sustainability Management 17
Sustainability Organization 18
Determining Material Topics 19
Impact Management of Material Topics 27
Material Topics and Sustainability Goals 29

Climate Strategy and Actions 34
Governance Structure and Responsibility 34
Climate Risk Management 36
Climate Strategy 41
Performance and Targets 43
Carbon Emissions Management 44

01 **Governance and Operation** 48
1.1 Corporate Governance 49
1.2 Operational Performance 61
1.3 Risk Management 63

02 **Products, Services and Values** 66
2.1 Innovation Management 67
2.2 Customers and Product Services 70
2.3 Customer Confidential Information Protection 72
2.4 Product Responsibility 73
2.5 Supply Chain Management 73

03 **Energy (Resource) and Environment Management** 78
3.1 Energy Management and Development 79
3.2 Water Resource Management 84
3.3 Air Pollution Prevention and Control 88
3.4 Resource Circularity 92
3.5 Biodiversity 96

04 **Talent Development and Social Inclusion** 97
4.1 Human Resource 98
4.2 Talent Attraction and Retention 102
4.3 Talent Cultivation and Development 106
4.4 Supportive and Caring Workplace 110
4.5 Empowering Local Communities 117

05 **Workplace Health and Safety** 120
5.1 Safe Workplace 122
5.2 Health Promotion and Care 134

06 **Appendix** 140
GRI Guideline Index 141
SASB Standards Index 147
Climate-Related Information of TWSE/TPEx Listed Companies 148
Disclosure of Sustainability Indicators as Required by TPEx 150
External Assurance Statement 151

About This Report

Report Axis

The principal business activities of Sino-American Silicon Products Inc. (SAS) and its subsidiaries encompass research and development, design, manufacturing, and sales of semiconductor silicon materials and components, photovoltaic and communication wafer materials, as well as providing technical services for the integration and installation of photovoltaic power generation systems. Since 2017, SAS has proactively prepared a Corporate Social Responsibility (CSR) report, which was rebranded as the Sustainability Report in 2021. Leveraging extensive and sustained engagement with local communities and stakeholders, SAS discloses pertinent information related to material topics in corporate governance, economic performance, environmental stewardship, and human rights. In addition to reporting on actions and improvements, the report articulates the Company's long-term vision and objectives for sustainable development.

Report Editing and Finalization

SAS compiles and organizes relevant information and edits its Sustainability report by following organizations and procedures as below.

- Sustainability Reporting Task Force

The principal members of the Sustainability Reporting Task Force include the President's Office and the Environment, Health & Safety Management Department. This task force is responsible for advancing initiatives related to energy and environmental matters, overseeing comprehensive planning, compiling and organizing relevant information, facilitating communication and integration among stakeholders, and ensuring the accuracy and quality of report editing and revisions.

- Editing Procedures, Review, and Finalization

The initial draft of the President's Office and the Environment, Health & Safety Department shall be distributed to all unit members (Sustainable Development Committee members) and the Audit Office for review, and then delivered to the Chairperson (Sustainability Development Committee Chairperson) for publication finalization after review.

Report Reference

The content structure of this report is prepared with reference to the following standards

- Global Reporting Initiative (GRI) – GRI Standards: 2021
- Sustainability Accounting Standards Board (SASB) – Semiconductors Sustainability Accounting Standard 2023
- Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies
- Task Force on Climate-Related Financial Disclosures (TCFD) Framework
- The report also addresses material topics of concern to stakeholders. Based on the results of its materiality analysis, SAS discloses and responds to these topics in the relevant sections.

Report Boundaries and Reporting Period

The reporting period and scope of this CSR report released by Sino-American Silicon (SAS) are defined as follows:

Publication time: August 2026

Coverage time: January 1 to December 31, 2025

Scope of coverage: This report covers the performance data of SAS (including the headquarters, Chunan Branch, Yilan Branch), its subsidiaries (including Sustainable Sunrise Co., Ltd. (hereinafter referred to as "Sunrise"), Susen Green Energy Corporation and Hsu-Hsin Branch (hereinafter referred to as "SGE" and "Hsu-Hsin"), Actron Technology (hereinafter referred to as "Actron"), Taiwan Speciality Chemicals Corporation (hereinafter referred to as "TSC"), and Advanced Wireless Semiconductor Company (hereinafter referred to as "AWSC"), and GlobalWafers Co., Ltd. (hereinafter referred to as "GlobalWafers").

- The financial data in this report is consistent with the consolidated financial scope presented in the Company's annual report. The financial data is verified by KPMG according to International Financial Reporting Standards (IFRS), and the calculation unit is New Taiwan Dollar (NT$).
- Environmental performance is primarily disclosed for SAS and subsidiaries (Sunrise, SGE, GlobalWafers, Actron, TSC, and AWSC).
- Performance related to people (including human rights) is primarily disclosed for SAS, GlobalWafers and subsidiaries (Sunrise, SGE).

Considering that some subsidiaries (GlobalWafers, Actron, TSC, and AWSC) have separately prepared their own sustainability reports, the relevant content and disclosures in this report focus primarily on SAS. The internal units provide the relevant performance data, compiled, and presented in an internationally accepted indicator calculation method.

Going forward, SAS will publish a sustainability report annually and make the electronic version of the sustainability report and related policies available for download and viewing.

Previous publication time: August 2025

Report Assurance

To strengthen the alignment of this Sustainability Report with the GRI Standards and enhance the transparency and credibility of SAS's sustainability disclosures, the Sustainability Development Committee of SAS resolved to engage an independent third-party assurance organization to conduct external verification and assurance. This report has been verified by DQS Taiwan Inc., in accordance with the GRI Standards: 2021 requirements and the AA1000 AS v.3 2020 Type 2 moderate assurance level. The verification statement is provided in the appendix. Financial performance data presented in this report is based on information publicly disclosed and certified by certified public accountants and is consistent with the data presented in the Company's annual report.

Contact

Should you have any comments or suggestions regarding this report, please feel free to contact us in one of the following ways:

Sino-American Silicon Products Inc.
Contact person: Spokesperson Hsin-Yu Peng, Special Assistant to the Chairperson
Acting spokesperson: Meng-Hua Lu, Senior Specialist
Acting spokesperson: Chi-Yi Chen, Sales & Marketing
Telephone: 03-5772233 #2221
Address: 4 F., Hsinchu Science Park, No. 8, Industry East 2nd Road, East District, Hsinchu City, 300
E-mail: IR@saswafer.com
Official website: https://www.saswafer.com/

Message from the Chairperson

As the effects of climate change intensify, a global consensus has emerged recognizing the urgent need for an energy transition to address these challenges. Renewable energy stands at the core of this transformation and is essential for achieving carbon neutrality. Net-zero carbon emissions have become an international objective. Although Taiwan lacks fossil fuel resources, its abundant wind and solar assets make it exceptionally well-suited for renewable energy development. SAS positions itself as a comprehensive provider of green-energy solutions, with a business scope that includes green power generation, energy storage, power retail, and energy distribution. Through concrete initiatives, SAS supports both global and national efforts toward a net-zero transition, pledging that the entire SAS Group and its subsidiaries will reach 100% renewable energy usage by 2050. GlobalWafers, a subsidiary of SAS, officially joined the RE100 initiative in 2022 and further announced an accelerated RE100 commitment in 2025, pledging to achieve 100% renewable energy usage by 2040.

Beyond corporate sustainability, SAS is also dedicated to its social responsibilities, emphasizing strong corporate governance, environmental stewardship, and employee welfare. The Company aims to foster a positive influence within both the industry and broader society, promoting sustainable values such as economic growth, environmental protection, and social advancement.

Rising Revenues and Sustainable Governance

In response to the global energy transition and rising corporate demand for green energy, Sino-American Silicon Products Inc. initiated an organizational restructuring in 2025 and refocused on two core areas: manufacturing and services. Manufacturing operations were transferred to its Sunrise subsidiary, while service operations are promoted by SGE, strengthening operational efficiency and responding to market needs. In solar product manufacturing, although Taiwan's renewable energy industry continued to face challenges in 2025, including delays in project development and low-priced competition from imported products, trade controls as well as anti-dumping and countervailing measures are expected to create supply shortages in the U.S. solar PV market. In addition, driven by the rapid growth in demand for global 5G communications, audiovisual transmission, and VR street-view applications, demand for low-earth-orbit satellites is expected to grow significantly. SAS solar cell products manufactured in Taiwan have passed stringent reliability tests and customer-end application validations for U.S. clients, enabling the Company to continue steadily expanding in international markets.

In renewable energy services, the Company is gradually building an integrated service framework covering green power development, electricity sales, energy storage, and energy conservation through its comprehensive renewable energy service platform, SGE. This platform responds to the practical needs of enterprises during the net-zero transition. Its subsidiaries include Sustainable Energy Solution, which focuses on Type 1 project development and serves the electronics and semiconductor industries, and Anneal Energy, which focuses on Type 3 project development with customers in the service, telecommunications, and financial sectors. They provide diversified renewable energy development, green power procurement matching, and other green services. Additionally, Relocate Energy Storage CO. (Relocate Energy), develops energy storage services, EcoSoar Energy Service CO. (EcoSoar) provides energy technology services (ESCO) to help customers improve energy efficiency, and the Hsu-Hsin branch is responsible for project operation and maintenance services. Through these capabilities, the Company provides customers with complete green energy solutions and jointly creates a net-zero future. As of the end of December 2025, cumulative green power contracts signed by SGE had exceeded 18 billion kWh. In 2025, the combined revenue of its electricity sales subsidiaries Sustainable Energy Solution and Anneal Energy grew nearly sevenfold year over year, demonstrating strong growth momentum in the Group's green power services business and continuously expanding its market visibility and influence.

In addition to renewable energy, Sino-American Silicon Products Inc. has diversified its business portfolio into semiconductors, automotive components, specialty gases, compound materials, and chemical materials. Although annual revenue in 2025 declined slightly from the previous year, the Group's affiliated companies, including AWSC, Actron, and TSC, delivered outstanding revenue performance. Both Actron and TSC reached record-high annual revenue in 2025, while AWSC recorded its second-highest annual revenue, demonstrating that the Group's diversified strategic layout is gradually bearing fruit and that overall operational momentum continues to expand.

1. consolidated revenue reached NT$78.171 billion, reflecting a 1.89% decrease year-over-year.
2. consolidated gross profit was NT$19.57 billion, representing a 19.4% decrease year-over-year.
3. Net profit attributable to the parent company was NT$4.11 billion, representing a 23% decline year-over-year.
4. After-tax earnings per share were NT$6.71.
5. The Company was honored with the "the top 5% of TPEx-listed companies in the Corporate Governance Evaluation" distinction for the twelfth consecutive year.

As the 2050 net-zero emissions policy advances, enterprises are accelerating their net-zero transitions and joining SBTi commitments. This dual momentum from policy and corporate action continues to expand demand in the renewable energy market. SAS's operational strategy is aligned with Taiwan's net-zero emissions target. The Company is committed to developing high-efficiency products and building clean-energy power plant systems; expanding grid infrastructure through investments in energy storage and microgrids; and providing integrated green energy solutions through its comprehensive renewable energy service platform, SGE, covering green power development, electricity sales, energy storage, and energy conservation, in response to enterprises' practical needs during the net-zero transition. Through alignment with policy directions and systematic expansion of its business portfolio, SAS provides sustainable momentum for a brighter future. In terms of corporate governance, the Company will continue to enhance its governance performance to strengthen SAS's commitment to sustainable operations.

Forward-looking and Industry-leading Technologies

In 2025, as global climate change intensified and the pressure of energy transition and carbon reduction became increasingly urgent, Sunrise's R&D team remained committed to maximizing the value of every ray of sunlight in order to achieve carbon reduction goals. Through continuous improvements to the TOPCon cell manufacturing process, Sunrise subsidiary raised the average mass-production conversion efficiency of TOPCon cells to 25.87% in 2025. This not only set a new internal mass-production record, but also reinforced its leading position in the high-efficiency solar cell segment. In addition, supported by extensive R&D experience and the Company's flexible strategy, the team is able to quickly develop solar cell products tailored to the special application needs of overseas customers. In 2025, several customized products meeting specific customer requirements were introduced into mass production and successfully entered high-entry-barrier markets in Europe and the United States. This tailor-made strategy not only avoids red-ocean competition in standard products, but also deepens cooperation with leading international manufacturers. It demonstrates strong customization capabilities and the ability to promptly satisfy overseas customers' special specification requirements. One of the most significant milestones was that certain high-end customized products successfully passed reliability testing for low-earth-orbit satellite applications by U.S. customers.

From Mitigation to Adaptation: SAS Advances Toward Its 2050 Net-Zero Vision through a Dual Solar and Wind Energy Strategy

Looking back on 2025, extreme climate disasters occurred frequently around the world, and the business community has recognized that sustainability is no longer merely a slogan, but a fundamental determinant of corporate survival. Companies have moved from making commitments to mitigation mitigating greenhouse gas emissions, slowing global warming, and reducing the impact of extreme climate events on business operations and are now shifting toward adaptation. Extreme weather events have become one of the greatest short-term threats to the global economy, forcing us to acknowledge that some aspects of climate change are already irreversible, long-term environmental risks are increasingly unavoidable, and climate tipping points are no longer merely hypothetical scenarios. Enterprises can no longer stop at carbon inventories, disclosure, and regulatory compliance. Instead, they must further examine whether their supply chain footprint, critical infrastructure, and dependence on energy and resources are sufficiently adaptive and operationally resilient under a future in which extreme climate becomes the norm. As a result, corporate thinking is evolving beyond carbon management, with business resilience becoming a new imperative.

To demonstrate its determination to achieve net zero by 2050, and driven by policy momentum and global sustainable supply chain trends, SAS voluntarily declared its 2050 RE100 target in 2021 and submitted its SBTi commitment letter in 2023. The Company's greenhouse gas reduction targets, set in line with the 1.5℃ global warming scenario, have been officially validated by the Science Based Targets initiative (SBTi). SAS commits to reducing absolute Scope 1 and Scope 2 emissions by 63% by 2035 from a 2022 base year, and to reducing absolute Scope 3 greenhouse gas emissions covering purchased goods and services, capital goods, and fuel- and energy-related activities by 37.5% by 2035 from a 2024 base year. To strengthen its carbon reduction pathway, SAS focuses on two key pillars: improving energy efficiency and introducing renewable energy. The Company continues to enhance its low-carbon competitiveness through low-carbon processes, energy-loss reduction and optimization, improved energy-use efficiency, and energy efficiency and circularity initiatives. In addition, SAS is accelerating its renewable energy deployment by expanding diversified investments and promoting green power procurement strategies, thereby strengthening the Group's overall renewable energy dispatch flexibility and supply resilience. Leveraging the Group's long-standing advantages in renewable energy, SAS has adopted a diversified renewable energy power purchase agreement strategy, steadily increasing its renewable energy usage ratio through parallel development of solar power and offshore wind power. SAS consolidates its solar power supply through its subsidiaries and, together with its Group renewable energy development company SES, signed a joint offshore wind power procurement agreement with Copenhagen Infrastructure Partners (CIP). Supported by both solar and wind energy, the Company plans to increase its renewable energy usage ratio year by year and remains committed to achieving 100% renewable energy usage (RE100) by 2050. Looking ahead, SAS will dynamically adjust the scale of its PPA procurement based on operational needs, continue monitoring emerging energy developments, and seek cooperation opportunities with energy suppliers. For the final mile toward net-zero emissions, the Company plans to bridge any remaining gap through renewable energy certificates (RECs) and carbon credit procurement as it advances toward its 2050 net-zero vision.

Cultivating a Happy Workplace and Advancing Sustainable Shared Good

SAS has always upheld the core value of being people-oriented and regards talent as its most valuable asset for sustainable corporate development. The Company has issued its Human Rights Policy and Diversity, Equity and Inclusion Statement to put a culture of diversity, equity, and inclusion into practice. It is also committed to building an inclusive workplace that safeguards personal safety, strictly complies with labor laws and regulations, and is grounded in respect. SAS firmly believes that the exchange of diverse perspectives is what inspires corporate competitiveness and creativity.

To accurately respond to employees' needs, the Company listens to employees' genuine feedback through satisfaction surveys, while supporting career development through comprehensive compensation and benefits as well as diversified training systems. Beyond the workplace, SAS fully promotes health care programs and emergency assistance mechanisms, caring for employees' physical, mental, and spiritual well-being so that they can enjoy a high-quality and happy life while pursuing excellence.

At the same time, SAS extends this spirit of "love and responsibility" to society by actively engaging in care for disadvantaged groups and charitable initiatives. Through concrete actions, the Company fulfills its corporate responsibility and works together with employees and society to create a harmonious and sustainable future.

Chairperson of SAS

徐秀蘭

2025 Key Indicators and Recognitions

Top 5% in Corporate Governance Evaluation among TPEx-listed companies for 12 consecutive years

High-quality solar photovoltaic products
Taiwan
Excellent PV Award
for 4 consecutive years

Recognized by Newsweek as one of **the World's Most Trustworthy Companies 2025** in the Technology Industry

Carbon Disclosure Project (CDP)
Water Security Questionnaire rating **A**
Climate Change Questionnaire rating **B**

Exemplary Unit Selection for Promoting Workplace Equality
Excellence Award
for 3 consecutive years

Sunrise Subsidiary received the **Silver Award** of the Healthy Workplace Benchmark Award

Economic Aspect

Corporate Governance Appraisal

2013
Information disclosure appraisal A

2014
Information disclosure appraisal A+
Ranked among the top 5% of all TPEx-listed companies in the 1st Corporate Governance Evaluation

2015
Ranked among the top 5% of all TPEx-listed companies in the 2nd Corporate Governance Evaluation.

2016
Ranked among the top 5% of all TPEx-listed companies in the 3rd Corporate Governance Evaluation.

2017
Ranked among the top 5% of all TPEx-listed companies in the 4th Corporate Governance Evaluation.

2018
Ranked among the top 5% of all TPEx-listed companies in the 5th Corporate Governance Evaluation.

2019
Ranked among the top 5% of all TPEx-listed companies in the 6th Corporate Governance Evaluation.

2020
Ranked among the top 5% of all TPEx-listed companies in the 7th Corporate Governance Evaluation.

2021
Ranked among the top 5% of all TPEx-listed companies in the 8th Corporate Governance Evaluation.

2022
Ranked among the top 5% of all TPEx-listed companies in the 9th Corporate Governance Evaluation.

2023
Ranked among the top 5% of all TPEx-listed companies in the 10th Corporate Governance Evaluation.

2024
Ranked among the top 5% of all TPEx-listed companies in the 11th Corporate Governance Evaluation.

2025
Ranked among the top 5% of all TPEx-listed companies in the 12th Corporate Governance Evaluation.

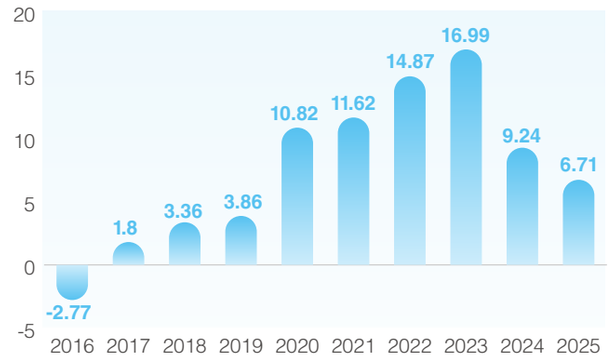
Economic Aspect

Operating Revenue (Consolidated Revenue)

Unit: NT$ 100 million

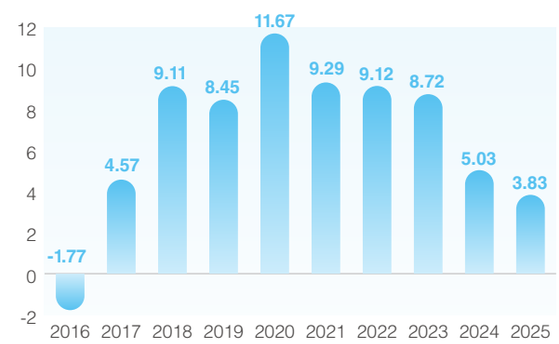
Earnings per Share (EPS)

Unit: NT$



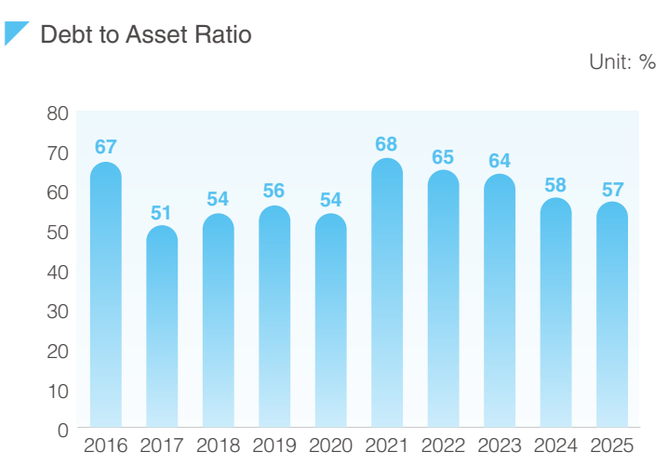
Return on Assets

Unit: %



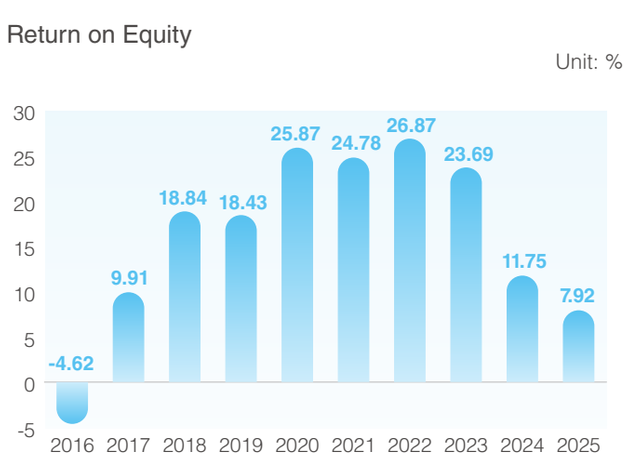
Debt to Asset Ratio

Unit: %



Return on Equity

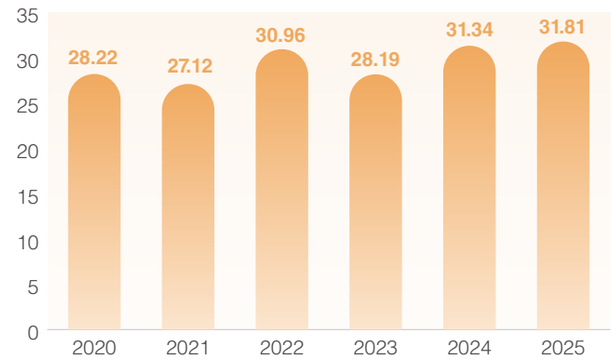
Unit: %



People

Education and Training Hours

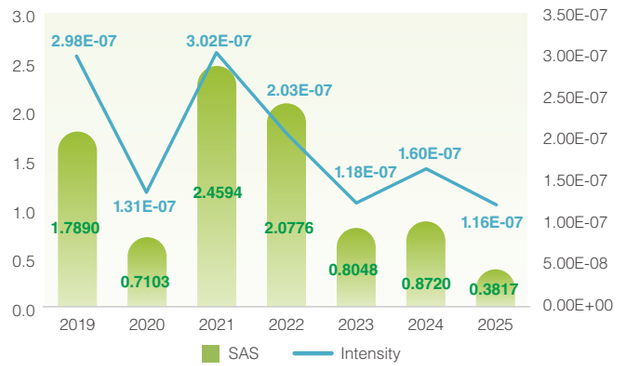
Unit: hour



Environmental Aspect

VOC Emissions

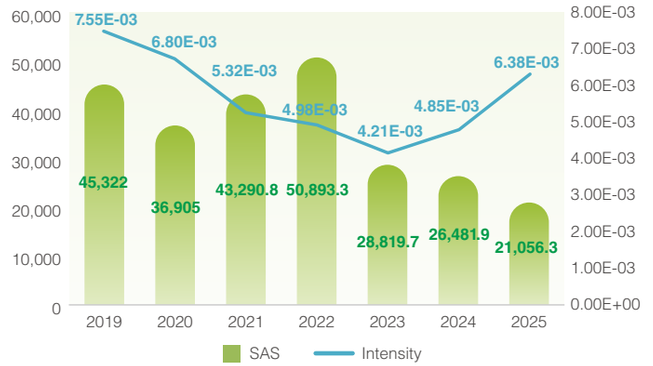
Unit: ton/yr



Note: Intensity: VOC Emissions (ton)/revenue (KNTD)

Carbon Emission

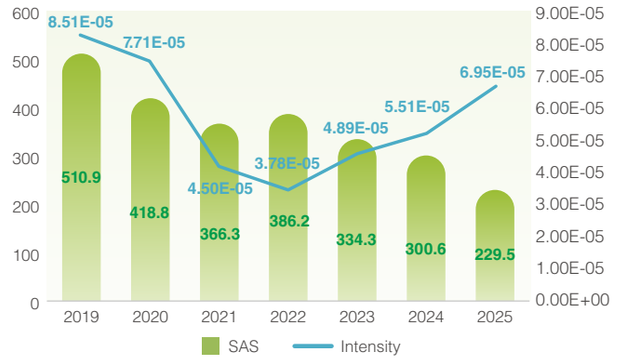
Unit: ton CO_2e/yr



Note: Intensity: Carbon Emission (tonCO_2e)/revenue (KNTD)

Water Withdrawal

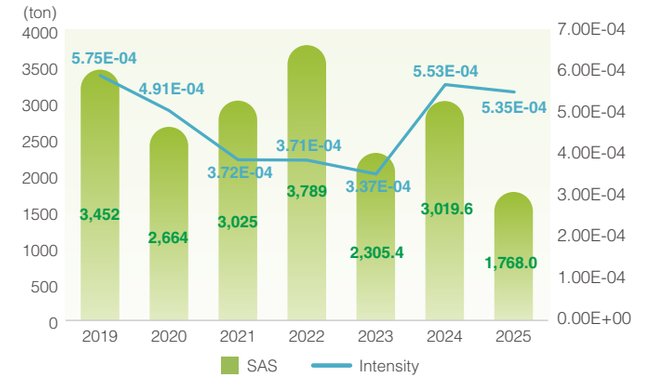
Unit: 10^6 L



Note: Intensity: water withdrawal quantity (10^6)/revenue (KNTD)

Waste Output Quantity

Unit: ton



Note: Intensity: Amount (ton)/revenue (KNTD)

SAS

Company Profile

Sino-American Silicon Products Inc. (SAS), headquartered in Hsinchu, Taiwan, oversees the Group's strategic management and planning. In addition to its established renewable energy operations, SAS actively seeks and invests in companies with high growth potential. Leveraging the synergy across the Group, SAS facilitates the business expansion of its affiliates, creating multiple growth engines, building a robust foundation for sustainable development, and broadening its global presence. The Group comprises three major growth engines: the Semiconductor Business Group, the Renewable Energy Business Group, and the Automotive Component Business Group.

Founded on January 21, 1981, SAS began as a specialized wafer manufacturer, operating through its semiconductor and solar energy business groups. On October 1, 2011, SAS spun off its semiconductor silicon wafer business into GlobalWafers Co., Ltd. ("GlobalWafers"), shifting its primary focus to solar energy. It now manages vertically integrated manufacturing, including solar silicon ingots, wafers, cells, and modules, as well as downstream power generation systems, establishing itself as one of the nation's most comprehensive vertically integrated companies.

SAS's commitment to advanced R&D and continuous launch of next-generation, high-efficiency solar cell products has been a key factor in enabling the Company to stand out and continue attracting niche customers.

Through its strategic objective of vertical integration, SAS seeks to achieve synergies across the upstream, midstream, and downstream segments and expand the global deployment of end-market solar systems, with the aim of playing an important role in the green solar energy sector and creating greater value for its shareholders and employees.

On August 1, 2014, SAS completed a merger with Sunrise Global Solar Energy Co., Ltd., a leading solar cell producer. In parallel, Sunrise Global merged with Aleo Solar GmbH, a German solar module manufacturer in Prenzlau, on May 16, 2014.

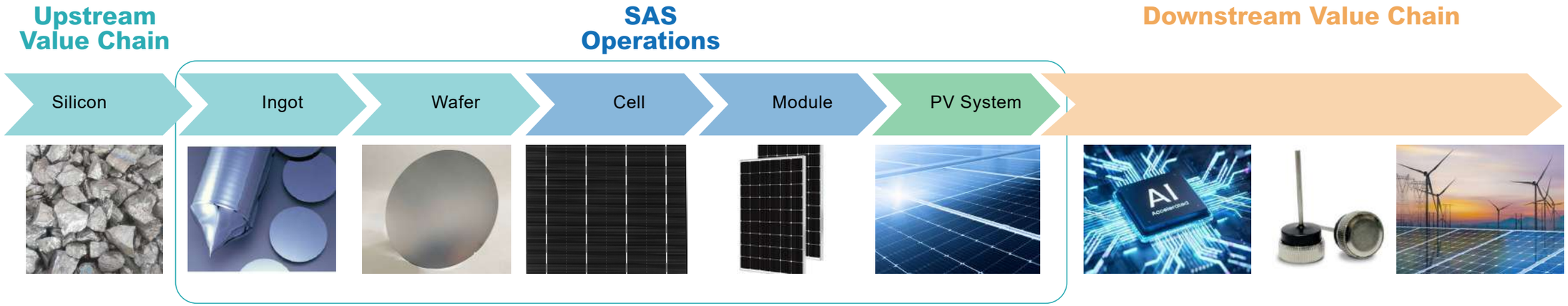
In 2015, SAS engaged in global solar power plant investments through its subsidiary SAS Sunrise, constructing a 50MW solar plant in Palo, Leyte, the Philippines, which commenced commercial operation in May 2016.

By 2022, SAS had established Sustainable Energy Solution Co., Ltd. (SES), securing an electricity retail license and entering the liberalized green power market. With extensive expertise in solar energy, SES provides comprehensive green energy services, including diversified renewable energy planning, buyer-seller alignment, and integrated green power procurement solutions. In November 2024, SES, its parent company SAS, and CIP's Fengmiao I Offshore Wind Farm jointly signed a corporate power purchase agreement (CPPA), the first corporate PPA for Phase III zonal development. By combining offshore wind, which provides stable power at night, with high-output daytime solar PV, the portfolio complements supply across the day, meets corporate demand for stable electricity, raises the share of green power, and provides the Group and its supply-chain partners with more diverse and abundant renewable electricity. It also supports corporate social responsibility, the global ESG agenda, and a shared net-zero future.

In 2024, SAS further expanded its green power portfolio by investing in Anneal Energy. Anneal focuses on Type III solar PV projects for the service, telecommunications, and financial sectors, while SES develops Type I projects primarily for electronics and semiconductor clients. By integrating customer needs and resources, the Group has expanded its operational reach and set a precedent for green power dispatch in the electricity retail industry. This integration maximizes synergies across finance, business operations, distribution channels, and services, helping enterprises advance their energy transition and align with international net-zero and sustainability trends.

In 2025, SAS carried out an organizational restructuring and repositioned its two key areas of manufacturing and services. Through the professional division of manufacturing and service operations, SAS enhanced the autonomy of its business units and the efficiency of resource utilization, thereby optimizing the Group's management model and increasing operational flexibility and management effectiveness. On the manufacturing side, the operations are mainly undertaken by Sunrise, a wholly owned subsidiary of SAS. With an industry-leading solar cell conversion efficiency of 26.0%, Sustainable Sunrise Co., Ltd. successfully passed the stringent enhanced reliability testing conducted by VPC. In addition to being a preferred brand in the domestic market, it has repeatedly received the Golden Energy Award for solar cells, which is highly recognized and trusted at the national level, earning strong trust and recognition from users. On the green power service side, the operations are undertaken by SGE which serves as the Group's major platform for renewable energy services and fully covers green power-related services. From development and electricity sales to energy storage and energy conservation, it has established a comprehensive smart energy ecosystem. Its Hsu-Hsin Branch is mainly responsible for site operation and maintenance services; Sustainable Energy Solution (SES) and Anneal Energy are responsible for electricity sales operations; Relocate Energy Storage Co., Ltd. (RES) develops energy storage services; and EcoSoar Energy Service Co., Ltd. (EES) provides energy technology services (ESCO), offering customers comprehensive green energy solutions and jointly creating a net-zero future.

Led by GlobalWafers, the Semiconductor Business Group completed a merger with Denmark's Topsil Semiconductor Materials A/S ("Topsil") and SunEdison Semiconductor Limited ("SunEdison") in 2016, successfully expanding its product portfolio from CZ wafers into large-diameter epitaxial wafers, polished silicon wafers, silicon-on-insulator (SOI) wafers, and FZ semiconductor wafers. By combining GlobalWafers' operational strengths and product diversity with SunEdison's global reach and R&D, the Group has established a comprehensive portfolio. With headquarters in Hsinchu, Taiwan, the Group operates across Taiwan, China, Japan, South Korea, Malaysia, the United States, Italy, Denmark, and Singapore. The Semiconductor Business Group also includes Advanced Wireless Semiconductor Company (AWSC), the world's second-largest GaAs foundry, and Taiwan Speciality Chemicals Corporation (TSC), which specializes in specialty gases for advanced semiconductor processes. In 2025, TSC further merged with Hung Jie Technology Corporation, expanding into new fields including ultra-clean cleaning and inspection of high-end equipment components, precision surface processing, and regeneration. This strengthened the Group's support for the critical needs of advanced processes and enhanced its market competitiveness driven by AI, advanced packaging, and high-performance computing. The Automotive Component Business Group, led by Actron, manufactures automotive diodes and power-related components, capturing key powertrain markets and adapting to the growing demand for vehicle electrification.



SAS Basic Information

Date of Establishment	January 21, 1981
Capital	NT$ 6.41 billion
Main Product and Technology	Solar ingots, solar wafers, solar cells, solar modules, solar power generation system operations, and silicon material application products
Number of employees	SAS (headquarters & Chunan, Yilan branches): 434 employees [Note 1]
Chairperson & CEO	Hsiu-Lan Hsu
Vice Chairperson / Deputy CEO	Tang-Liang Yao
President	Cheng-Chien Chen
Headquarters	Hsinchu Science Park, 4F., No. 8, Industrial East 2nd Road, East District, Hsinchu City
Operating Bases	Headquarters: 4F., No. 8 Industrial East Road 2, Hsinchu Science Park, Taiwan, R.O.C. Chunan Branch: No. 6, Kejung Rd., Jhunan Science Park, Chunan, Miaoli County, Taiwan, R.O.C Yilan Branch: No.1 Sec. 2 Ligong 1st Rd., Wujie Township, Yilan 268, Taiwan, R.O.C
Affiliated Enterprises	SAS affiliates operate in semiconductor silicon wafer manufacturing, solar cell and module production, solar power system services, and renewable energy sales.

Note 1: The number of employees represents employees of the headquarters and branches who were actively employed as of December 31, 2025, excluding employees of subsidiaries.

Shareholding Structure

Shareholders / Structure Quantity	Governmental Institutes	Financial Institutes	Other Juridical Persons	Natural Persons	Foreign institutes and foreigners	Total
No. of People	6	31	479	125,476	406	126,398
Shareholding	1,335,850	111,858,628	99,325,351	310,318,482	118,383,340	641,221,651
Shareholding Percentage	0.21%	17.44%	15.49%	48.40%	18.46%	100.00%

Data as of March 27, 2026

SAS manufactures efficient solar wafers, cells, and modules with a focus on integrity and meeting challenges. By expanding into system integration, SAS has achieved vertical integration and strengthened its position as a professional domestic green energy provider. The Company continually seeks new growth opportunities and aims for sustainable development alongside its customers and suppliers. SAS primarily sells products in Asia, Europe, and the Americas. SAS is committed to environmental protection and aspires to become a globally technology-leading green energy solution provider.

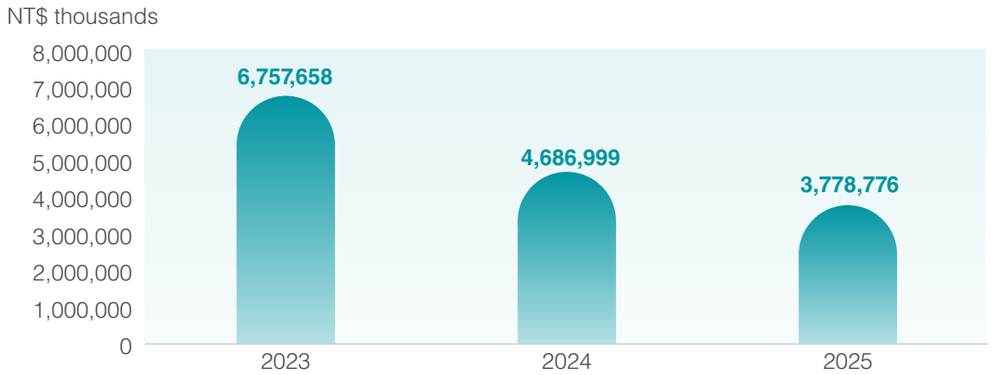
Market and Service

Renewable Energy Industry

Product Sales

As the global energy transition continues to advance, demand in the renewable energy market remains resilient, and the long-term development trend of global solar photovoltaics in 2025 continues to have a solid foundation. However, in the short term, the rapid expansion of production capacity has caused product prices to remain at low levels, significantly intensifying industry competition. At the same time, major manufacturers have adopted price competition strategies to maintain market share, further compressing the overall profitability of the industry, with some companies already facing operational pressure and entering a phase of consolidation. In terms of technological development, TOPCon has become the mainstream technology and continues to improve efficiency, while the market is also moving toward higher performance and cost optimization; technological and scale advantages will become key factors in competition. Under this industry environment, although the 2025 revenue of SAS Group's Renewable Energy Business Group declined due to market price fluctuations, the Company proactively optimized its product portfolio and focused on high-efficiency products and application markets with technical barriers in order to enhance overall profitability profile. In response to industry structural adjustments, the Company has adopted prudent order-taking and risk management strategies, while continuously strengthening its overseas market presence and technological differentiation capabilities, thereby further reinforcing its market competitiveness.

Renewable Energy Business Group Revenue

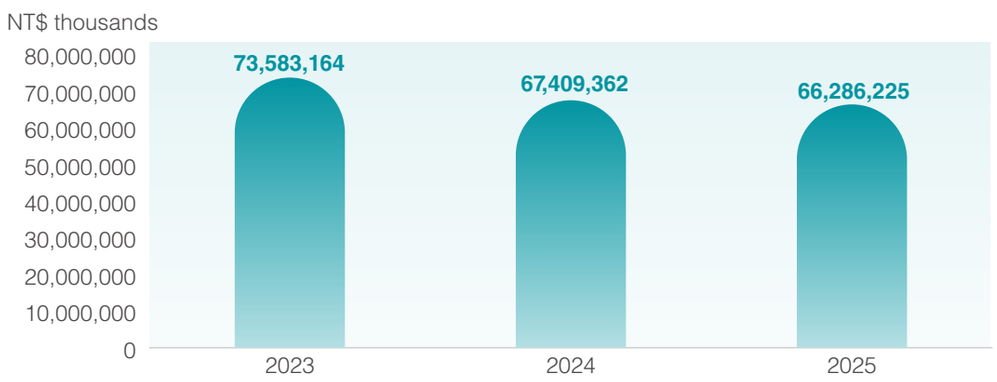


Semiconductor Industry

Product Sales

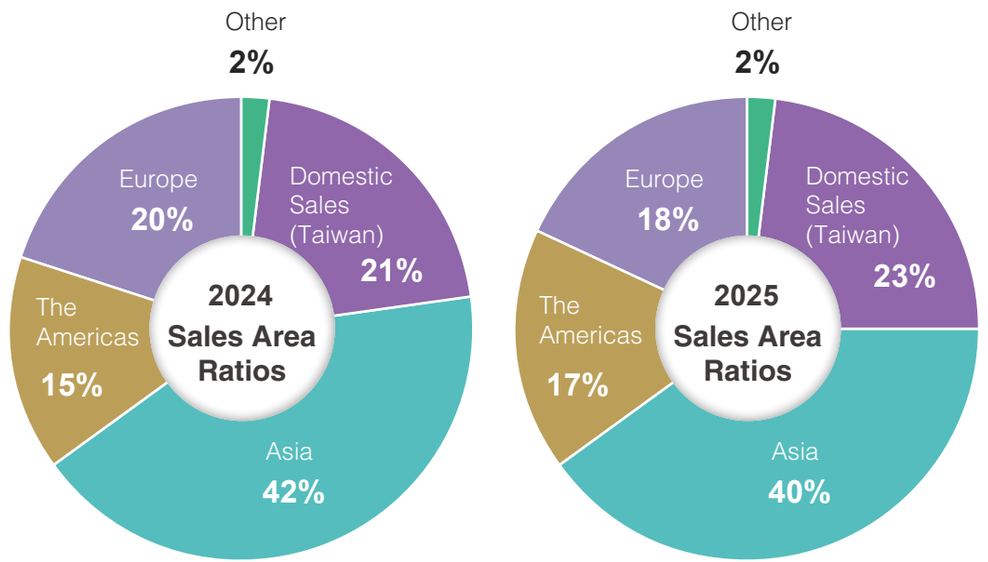
Due to uncertain global end-consumer demand, the semiconductor industry has experienced slow recovery and weaker overall growth momentum. GlobalWafers Group, a subsidiary, has responded by utilising long-term customer contracts, redeploying production capacity worldwide, and allocating resources flexibly across global sites. These efforts are intended to maintain secure and stable shipments while improving quality and customer satisfaction in response to market needs.

Semiconductor Business Group Revenue



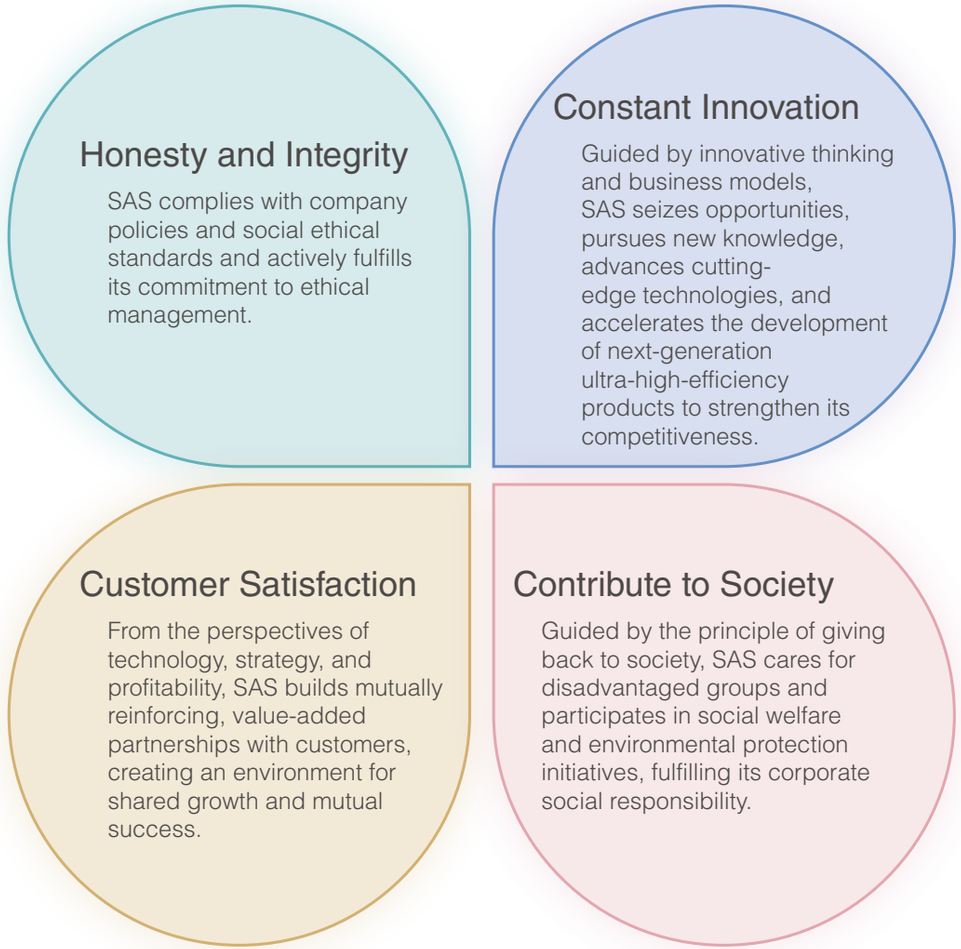
Proportion of Consolidated Revenue by Sales Region

Through its mergers and acquisitions over the years, SAS Group has effectively acquired established customer orders and expanded its global sales network. As a result, the proportion of sales revenue across different regions has become more balanced and stable.



Company Philosophy

SAS follows a set of principles that include integrity, constant innovation, customer satisfaction, and contributing to society. The Company seeks to provide high-quality products, technologies, and services, and aims for sustainable operations and growth in collaboration with customers and suppliers. SAS states its goals as creating value for shareholders and employees while meeting its corporate social responsibility commitments.



Participation in External Associations

Unit: NT$

Associations/Organizations	Participant	Members	Roles	2025 Public and Industry Association Participation
Taiwan Photovoltaic Industry Association	●	●		50,000
Solar PV Generation System Association	●	●	Vice Chairperson	10,000
Chinese Professional Management Association		●		20,000
Taiwan Science Park Association of Science and Industry	●	●	Supervisor	162,000
Taiwan Climate Partnership		●		50,000
The 8th Taiwan Mergers & Acquisitions and Private Equity Council (2024 to 2025)	●	●	Vice Chairperson	130,000
Taiwan Electrical and Electronic Manufacturers' Association		●		42,000
Taiwan Computer Emergency Response Team / Coordination Center (TWCERT/CC)		●		0
Science Park Information Sharing and Analysis Center (SP-ISAC)		●		0

Public Affairs Participation Expenditures [Note1]

Unit: NT$

Type	2025
Participation in industry associations, trade groups, or nonprofit organizations [Note 2]	479,200
Lobbying expenses	0
Donations to local, regional, or national political campaigns/candidates	0
Other expenses related to elections or referendums	0
Total	479,200

Note 1: The data scope covers SAS (the parent company) only, excluding subsidiaries.
Note 2: The nonprofit organizations listed here do not include those with charitable or cultural/educational purposes.

Sustainability Management

Sino-American Silicon Products Inc. (SAS) operates according to a business philosophy based on integrity, professionalism, innovation, and service. The Company aims to achieve mutual growth with customers, pursue excellence with employees, and maximize shareholder value. SAS also addresses social responsibilities while working toward sustainable corporate operations to contribute to economic growth, environmental protection, and social progress.

SAS has established the Corporate Social Responsibility Best Practice Principles to guide compliance with corporate social responsibility requirements, promote economic, environmental, and social development, and support sustainable development objectives. These principles are intended to facilitate the active integration of corporate social responsibility into business operations, align with international standards, fulfill corporate citizenship obligations, contribute to national economic development, and improve quality of life for employees, communities, and society. Corporate social responsibility is pursued through the implementation of corporate governance, environmental sustainability measures, social welfare initiatives, and strengthened information disclosure regarding corporate social responsibility activities.

In addition to publicly disclosing its Sustainability Policy on the corporate website, SAS has also established a dedicated email address and contact window. Stakeholders may provide suggestions regarding the policy content, which will serve as references for future revisions. SAS is also committed to implementing responsible supply chain management by publicly disclosing its Supplier Code of Conduct on the corporate website. This approach ensures that both existing and prospective suppliers clearly understand the Company's specific expectations regarding environmental protection, labor and human rights, and business ethics, which serve as the fundamental basis for cooperation.

ESG Policy

Sustainability Organization

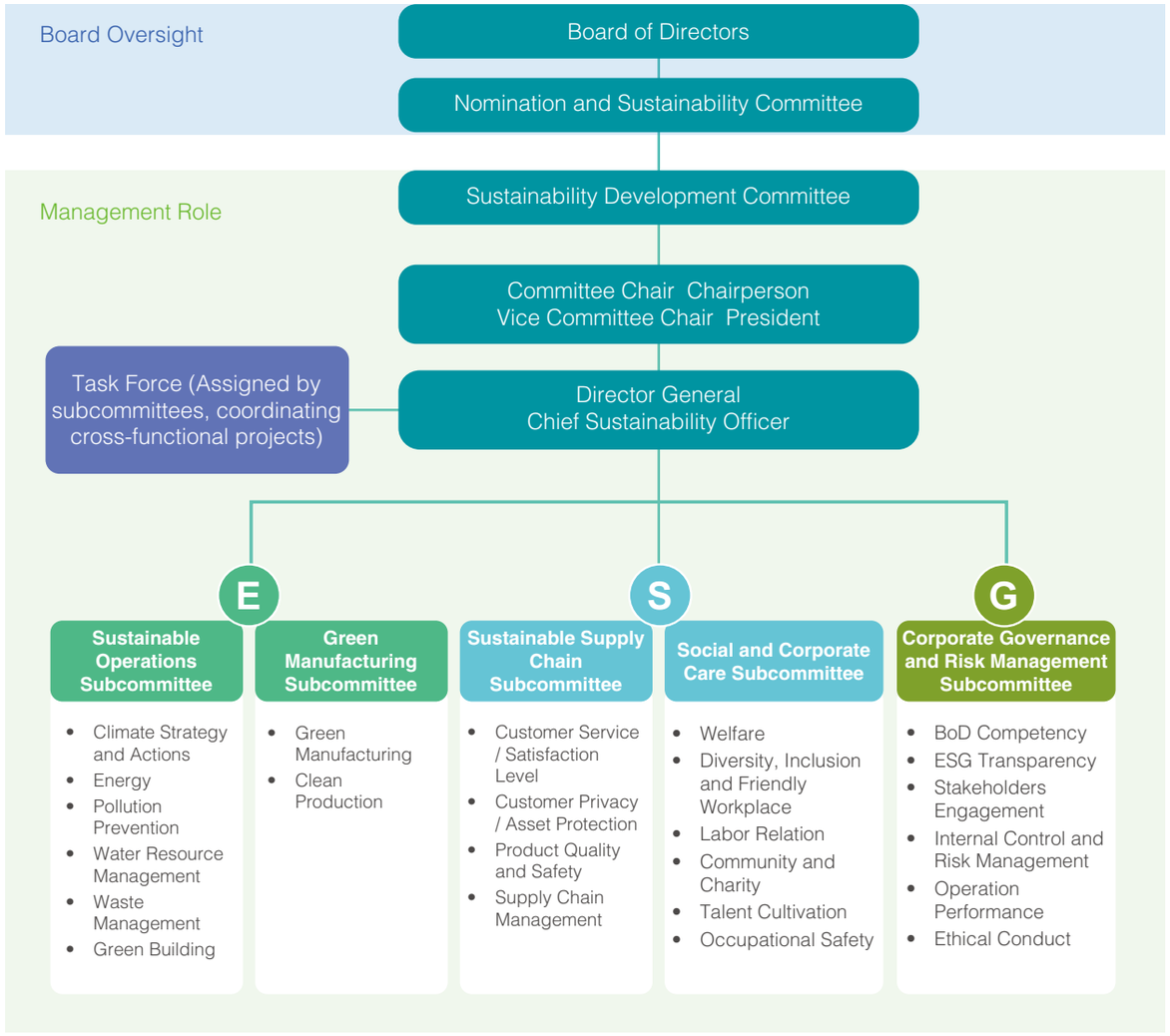
In response to evolving corporate governance and sustainable development trends, and to strengthen the Board of Directors' oversight responsibilities in ESG matters, SAS obtained approval at the 4th Meeting of the 15th Board of Directors on November 7, 2025, to rename the Nomination Committee as the Nomination and Sustainability Committee. The Committee's responsibilities were expanded to incorporate sustainability-related matters into its primary scope of duties, establishing it as the Company's highest-level sustainability management and supervisory body. The Nomination and Sustainability Committee consists of six directors elected by the Board, with at least half of its members being independent directors. The Committee is responsible for assisting the Board in strengthening the Company's sustainability governance framework. Its key responsibilities include overseeing the planning and implementation of corporate social responsibility and sustainable development strategies covering environmental, social, and governance (ESG) aspects, as well as handling sustainability-related matters assigned by the Board.

At the operational level of sustainable development, SAS established the Sustainability Development Committee in April 2016 as the organization responsible for executing the Company's corporate social responsibility initiatives. The Committee is chaired by the Chairperson, with the President serving as Vice Chairperson. In addition, the position of Chief Sustainability Officer (CSO) has been established and is held by Executive Vice President Hau-chun Shih. Department heads serve as committee members and are responsible for coordinating the Company's corporate social responsibility initiatives and sustainable development objectives. (For details regarding the Sustainable Development Best Practice Principles, please refer to the website.)

The Sustainability Development Committee consists of five subcommittees: the Sustainable Operations Subcommittee, Green Manufacturing Subcommittee, Sustainable Supply Chain Subcommittee, Social and Corporate Care Subcommittee, and Corporate Governance and Risk Management Subcommittee. Members of each subcommittee are appointed based on their respective organizational responsibilities. Representatives from each subcommittee form working groups to implement various sustainability projects, ensuring the effective promotion of environmental, social, and governance initiatives. Furthermore, to enhance sustainability information disclosure, the Company established the Sustainability Information Management Procedures in 2024. These procedures provide guidance for sustainability report preparation and related operations, ensuring the completeness, accuracy, and reliability of sustainability information throughout the processes of collection, recording, processing, preparation, approval, and disclosure, thereby improving the credibility and consistency of sustainability information.

The Sustainability Development Committee reports quarterly to the Board of Directors on key implementation priorities, annual objectives, and performance outcomes. Major sustainability-related initiatives reported in 2025 included the progress of greenhouse gas inventory and verification activities across the Group's branches and subsidiaries, compliance with the FSC's ESG disclosure requirements for listed companies, the preparation and assurance results of the 2024 Sustainability Report, progress on the adoption of IFRS S1 and IFRS S2, progress on SBT target setting and submission, and sustainability-related organizational transformation. In the event of significant developments, special agenda items may also be submitted to the Board for review. The Committee operates under the supervision of both the Board of Directors and the Nomination and Sustainability Committee. These governing bodies oversee the establishment and implementation of sustainable development objectives, including the preparation and assurance of the Sustainability Report, and provide recommendations and guidance based on the Committee's reports.

SAS Sustainability Governance Structure



Determining Material Topics

SAS employs the four-step methodology detailed in GRI 3: Material Topics 2021 to refine its process for identifying material topics. The assessment of materiality is assessed based on the level of stakeholder concern and the significance of impact. This approach facilitates the identification and evaluation of key issues across the governance, economic, environmental, and social (including human rights) dimensions relevant to SAS. Sustainability issues with both high stakeholder concern and significant impact are identified as material topics. Issues determined to have high impact and strong influence are designated as material topics; these are addressed in this report with corresponding management approaches and regularly monitored targets.

1. Understand the Organization's Context

▸ 7 Major Categories of Stakeholders

Based on its activities and business relationships, SAS has identified seven major stakeholder groups: employees, customers, investors, suppliers, government agencies, the media, and communities/non-profit organizations. SAS engages with these stakeholders to help identify the impacts of sustainability issues.

Source of Sustainability Issues

According to the SASB classification, SAS is categorized within the semiconductor industry. The Company refers to international sustainability standards and frameworks, United Nations Sustainable Development Goals (SDGs), responsible investment principles, industry developments, and stakeholder engagement, this year's report retains the same 22 sustainability issues as the previous year.

International Sustainability Standards and Regulations	Sustainable Development Goals (SDGs)
With reference to international sustainability standards such as the GRI Sustainability Reporting Standards, the Responsible Business Alliance (RBA), the Task Force on Climate-related Financial Disclosures (TCFD), the Carbon Disclosure Project (CDP), and Sustainability Accounting Standards Board (SASB)	Evaluate the 17 SDG goals and their 169 targets, and select actions where SAS can contribute

Responsible Investment	Industry Development Trends	Issues of Concern to Stakeholders
With reference to rating indicators such as the Dow Jones Best-in-Class Indices (DJ BIC), MSCI ESG Leaders Indexes, and FTSE4Good Index	Sustainability issues of concern among international sustainability leaders, the information technology industry, and other cross-industry sectors	Key sustainability topics of concern to stakeholders include business ethics and integrity, sustainable supply chain management, energy management, and talent attraction and retention.

Sustainability Issues

Governance	Economic	People	Environment
• Corporate Governance • Economic Performance • Risk Management • Legal Compliance • Integrity & Ethics • Information Security and Personal Data Protection	• Sustainable Supply Chain Management • Innovation Management • Green Product Design • Customer Relationship Management	• Workplace Health and Safety • Talent Attraction and Retention • Talent Development • Workforce Diversity • Human Rights • Social Participation	• Energy Management • Climate Change Strategy and Carbon Management • Waste Management • Water Management • Air Pollution Control • Biodiversity

2. Identification of Concerns and Impacts

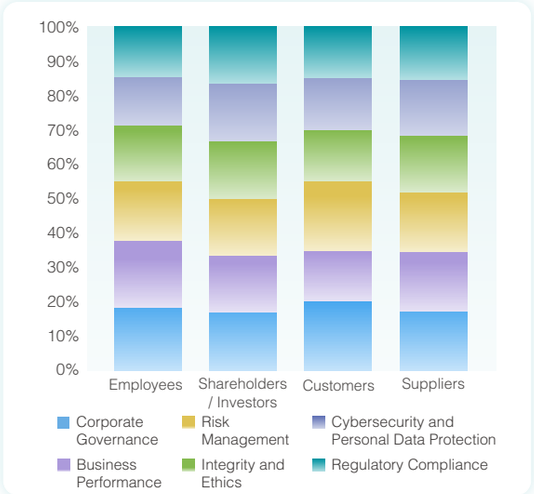
Sustainability Issues of Concern

A questionnaire covering 22 topics was distributed to stakeholders, including employees, customers, investors, suppliers, government agencies, the media, and communities/non-profit organizations. Valid responses were received from employees, customers, investors, and suppliers. The results were used to identify stakeholders' areas of concern and support the subsequent assessment and quantification of impacts related to each sustainability issue.

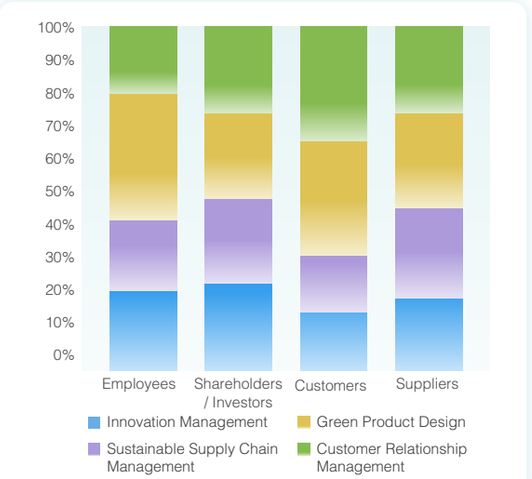
Impact on Business Operations

With reference to GRI Universal Standards GRI 3: Material Topics, SAS developed a "Sustainability Issues Impact on Business Operations" questionnaire and invited management personnel (from section managers to vice presidents) to participate in the assessment. Based on their professional expertise, prior business experience, and understanding of the Company's future plans, respondents evaluated the potential impact of governance, economic, environmental, and social issues on the Company's operations over the next five years. The level of impact was assessed using a scale ranging from 0 (No Impact) to 5 (High Impact).

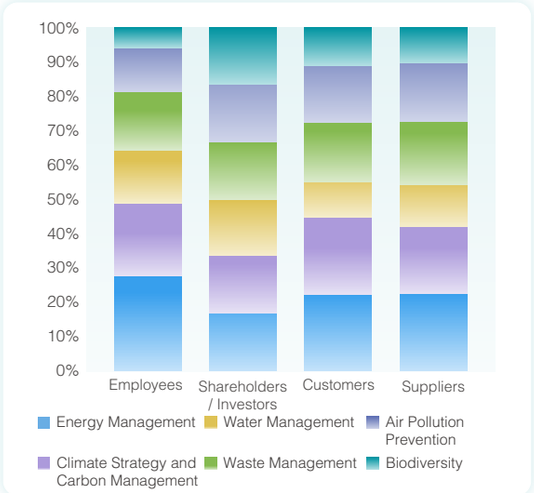
Sustainability Issue–Governance



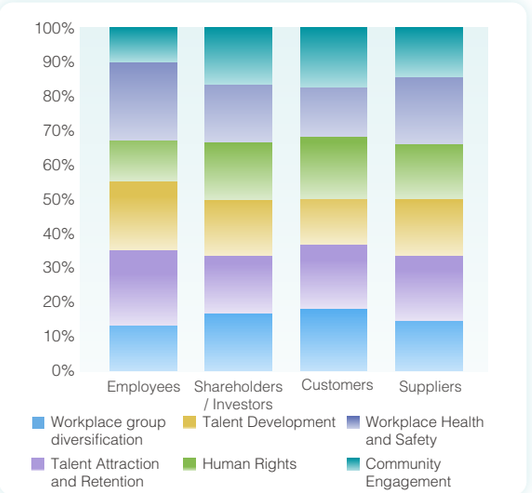
Sustainability Issue–Economic



Sustainability Issue–Environment



Sustainability Issue–People



3. Assessment of Significance

Based on the results of the two questionnaires the "Sustainability Issues Survey" and the "Sustainability Issues Impact on Business Operations Survey" SAS identified 15 significant sustainability issues in 2025, as shown in the figure below.

- Energy Management
- Sustainable Supply Chain Management
- Economic Performance
- Workplace Health and Safety
- Risk Management
- Talent Attraction and Retention
- Corporate Governance
- Integrity & Ethics
- Climate Change Strategy and Carbon Management
- Talent Development
- Information Security and Personal Data Protection
- Legal Compliance

Sustainability Issues Survey

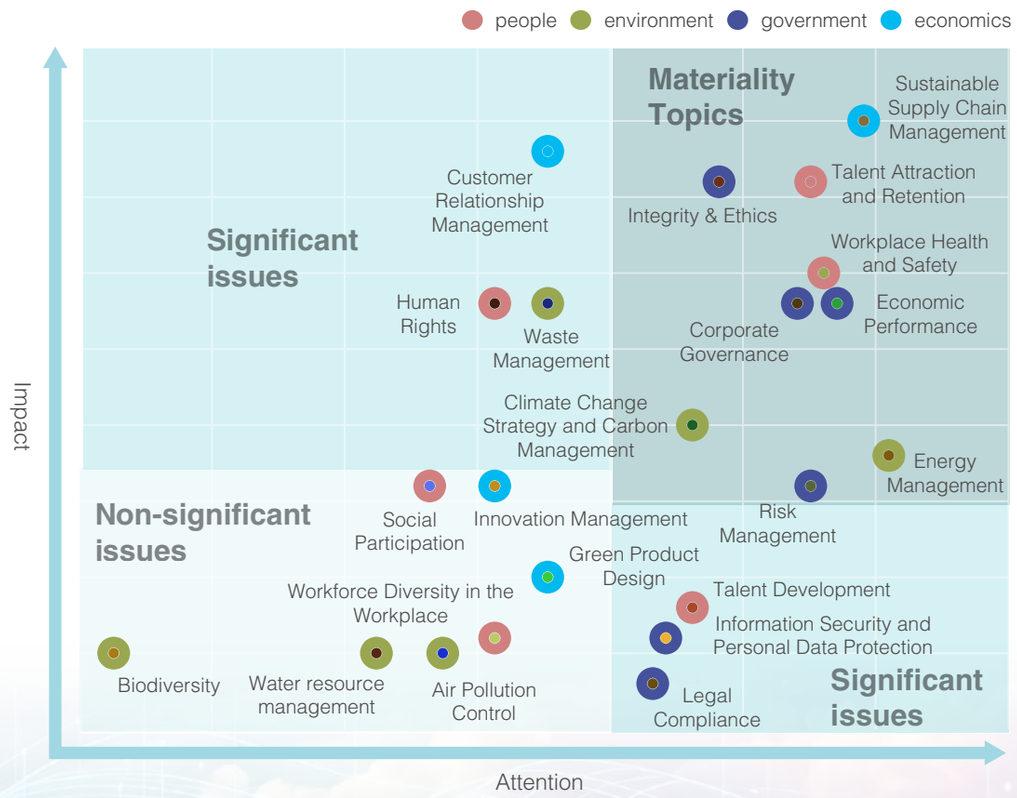
Impact of ESG Issues on Corporate Operations

- Sustainable Supply Chain Management
- Customer Relationship Management
- Talent Attraction and Retention
- Integrity & Ethics
- Workplace Health and Safety
- Corporate Governance
- Economic Performance
- Climate Change Strategy and Carbon Management
- Energy Management
- Risk Management
- Human Rights
- Waste Management

4. Ranking of Significant Impacts

SAS identified 15 key sustainability issues for 2025, the Company integrated the significant issues into a two-dimensional materiality matrix and ranked them based on the level of stakeholder concern and degree of impact. After discussion with members of the Sustainability Development Committee with relevant expertise, nine issues were ultimately identified as material topics. As corporate governance is a fundamental management item and does not correspond to a specific GRI Topic Standard, the remaining material topics are reported in this Report with management approaches and targets established for regular tracking and management. Other sustainability issues are disclosed in summary form or not disclosed in this Report. Prior to publication, this Report is submitted to the Board of Directors for review and is publicly issued after approval.

Material Topic Matrix



Stakeholders' Engagement

Employees

Significance to SAS

Employees represent the Company's most valuable assets. Supporting and investing in our employees ensures mutual growth and alignment between the Company and its workforce.

Issues of Concern

- Talent Attraction and Retention
- Talent Development
- Workplace Health and Safety

Communication Frequency / Method

- Various Organization Meetings/ Irregular
- Company Notice Board / Irregular
- Internal Website and Emails / Irregular
- Performance Appraisal Interviews / Once Per Year
- Labor-management Meetings / 4 Times Per Year
- Employee Satisfaction Survey
- Various Complaint Boxes or Hotlines/ Irregular

Our Responses

Employees are the Company's most important asset, and the Company attaches great importance to communication channels with employees. In 2020, the Company established a dedicated HR portal to provide employees with additional consultation channels and regularly held labor-management meetings to listen to employee feedback.

- To attract and retain outstanding talents, the Company has offered competitive salaries and set the salary adjustment standards each year according to the relevant data.
- The Company has established an exclusive restaurant to provide employees with free meals during their working hours. In addition to labor insurance, the Company also provides group insurance, childcare leave, and other benefits that are better than those required by the law; and established a welfare committee to help employees to obtain more benefits such as employee travel, year-end party, emergency relief, sickness subsidies, and special contract stores.
- The Company adheres to the concept of "Ensuring the Safety and Health of the Employee Work Environment," and uses the organization system operation to create a healthy and safe working environment for employees.

Shareholders / Investors

Significance to SAS

All shareholders are the Company's investors. The Company will handle all disclosed information with fairness as the principle.

Issues of Concern

- Economic Performance
- Corporate Governance
- Sustainable Supply Chain Management
- Climate Change Strategy and Carbon Management

Communication Frequency / Method

- Shareholders' meeting, institutional investors conference, domestic investment institute seminars, and face-to-face communication meetings / a total of 6 meetings were held in 2025
- Company Annual Report / Once Per Year
- News announcement on company websites and the Market Observation Post System / Irregular
- Collecting and replying to messages via telephone or emails / Irregular

Our Responses

- Continue to use our stable financial structure and rich management experience to practice performance management and operational improvement, and improve the overall operational performance.
- Establish and strengthen close interaction and communication channels with investors, domestic and foreign media, institutional investors, and major shareholders.
- Continue to improve corporate governance performance and realize the commitment of sustainable operation.
- Establish a supplier evaluation and management process to implement supplier localization.
- Establish a climate risk identification process to regularly assess the likelihood, impact level (including financial impact), and time horizon of climate-related risks and opportunities relevant to SAS.

Customers

Significance to SAS
Company's main source of revenue

Issues of Concern
- Information Security and Personal Data Protection
- Integrity & Ethics
- Workplace Health and Safety

Communication Frequency / Method
- Business Meetings / Irregular
- Customer Satisfaction Survey / Twice a Year
- Customer Audit / Irregular
- Customer Quality Meeting / Once a Month
- Telephone or E-mail Appeals or Complaints / Irregular

Our Responses
- Continuously operate the ISO 27001: 2022 Information Security Management System to manage and protect information assets.
- "Integrity management is achieved by the compliance with laws and regulations." So, the Company has actively organized education and training as well as integrity management policy advocation, promoted the integrity policy and its importance to directors and employees.
- Adhere to the concept of "Ensuring the Safety and Health of the Employee Work Environment," and use the organization system operation to create a healthy and safe working environment for employees.

Suppliers / Contractors

Significance to SAS
Are the Company's partners and need to maintain the same ideals as ours in order to provide services in line with our needs.

Issues of Concern
- Information Security and Personal Data Protection
- Suppliers / Contractors Management Regulations

Communication Frequency / Method
- Business Meetings / Irregular
- On-site Audit / Irregular
- Collecting and replying to messages via telephone or emails / Irregular

Our Responses
- Continuously operate the ISO 27001: 2022 Information Security Management System to manage and protect information assets
- Establish a supplier evaluation management process
- Formulate contractor management procedures and establish a contractor construction management system to systematically manage all contractors who have entered the plants

Governmental Institutes

Significance to SAS
SAS maintains open and effective communication with government agencies to demonstrate its commitment to regulatory compliance.

Communication Frequency / Method
- Correspondence of Official Documents, Meetings (Public Hearings or Conferences) / Irregular
- Communicating and Meeting with Associations or Unions / Irregular
- Unscheduled Plant Audit / Irregular

Issues of Concern
- Energy Management
- Climate Change Strategy and Carbon Management
- Workplace Health and Safety

Our Responses
- Implement and operate an energy management system to systematically monitor energy consumption and continuously improve energy efficiency.
- Establish a climate risk identification process to regularly assess the likelihood, impact level (including financial impact), and time horizon of climate-related risks and opportunities relevant to SAS.
- Adhere to the concept of "Ensuring the Safety and Health of the Employee Work Environment," and use the organization system operation to create a healthy and safe working environment for employees.

The Media

Significance to SAS
We maintain communication channels with the media and provide accurate, fair, and objective industry and corporate information on an as-needed basis.

Communication Frequency / Method
- Press releases/ average of 2 to 3 press releases each quarter
- Occasionally receive interviews by the media and provide industry news / Irregular

Issues of Concern
- Company Development Direction
- Economic Performance

Our Responses
- Contact the media occasionally to let media professionals understand the Company's industry and operating performances through interviews.
- Issue a press release on revenue and investor conference.
- Provide transparent information disclosure to comply with the completeness, real-time, and fairness principles.

Community (Social Welfare Organizations, Neighborhood, NGOs)

Significance to SAS
- Collaborate with local charitable organizations or rural schools to provide support for disadvantaged groups and under-resourced entities
- Organize environmental protection activities on an irregular basis to contribute to environmental efforts and support local environmental organizations and groups in preserving the environment.

Communication Frequency / Method
- Twice a year/Mobilize group personnel to participate proactively
- Once a year/Mobilize group personnel to participate proactively

Issues of Concern
- Charitable organization projects, such as public-interest science education camps
- Enhancing education and implementing infrastructure improvements for rural schools

Our Responses
- Regularly adopt areas in need of environmental maintenance and announce activity information to recruit more volunteers to join in cleaning the environment.
- Maintain irregular contact with charitable organizations and conduct interviews to help beneficiary groups understand the resources the group can provide.

Description of Changes in Material Topics

Aspects	2024 Material Topics	2025 Material Topics	Description of Changes
Governance	-	Economic Performance	Newly added in 2025
	Risk Management	Risk Management	Unchanged
	-	Integrity & Ethics	Newly added in 2025
	-	Corporate Governance	Classified as a fundamental management item
Environmental Aspect	Energy Management	Energy Management	Unchanged
	Waste Management	-	No longer ranked as a material topic
	Climate Change Strategy and Carbon Management	Climate Change Strategy and Carbon Management	Unchanged
Social Aspect	-	Talent Attraction and Retention	Newly added in 2025
	Workplace Health and Safety	Workplace Health and Safety	Unchanged
Economic Aspect	Sustainable Supply Chain Management	Sustainable Supply Chain Management	Unchanged

Boundary and Scope of Material Topics

● Indicates the scope of disclosure

Material topics	GRI Standards	SASB Standards	Value Chain–Suppliers	Value Chain–Company operations							Value Chain–Customers	Corresponding chapters in the Report
				SAS		Subsidiary				Other subsidiaries Note 1		
				Headquarters	Chunan Branch	Sustainable Sunrise Co.	SGE Hsu-Hsin Branch	GlobalWafers	Actron TSC AWSC			
Risk Management	GRI 201 Economic Performance GRI 418 Customer Privacy	-		●	●	●	●	●				1.3 Risk Management
Economic Performance	GRI 201 Economic Performance	-		●	●	●	●	●	●	●		1.2 Operational Performance
Integrity & Ethics	GRI 205: Anti-corruption	TC-SC-520a.1		●	●	●	●	●				1.1.2 integrity & Ethics
Energy Management	GRI 302 Energy	TC-SC-130a.1			●	●	●	●	●			3.1 Energy Management and Development
					●	●	●	●			●	3.1.3 Energy Management and Conservation
Climate Change Strategy and Carbon Management	GRI 305 Emissions	TC-SC-110a.1 TC-SC-110a.2	●	●	●	●	●	●	●	●		Climate Strategy and Actions
Talent Attraction and Retention	GRI 401 Employment	TC-SC-330a.1		●	●	●	●	●				4.2 Talent Attraction and Retention
Workplace Health and Safety	GRI 403 Occupational health and safety	TC-SC-320a.1 TC-SC-320a.2		●	●	●	●	●				5.1 Safe Workplace 5.2 Health Promotion and Care
Sustainable Supply Chain Management	GRI 204 Procurement practices GRI 205: Anti-corruption GRI 308 Supplier Environmental Assessment GRI 414 Supplier Social Assessment	TC-SC-440a.1	●	●	●	●	●	●				2.5 Supply Chain Management

Note 1：Other subsidiaries including Mosel Vitelic Inc., WaferChem Technology Corporation, Anneal Energy Co., Ltd.

Impact Management of Material Topics

+ indicates positive impact;–indicates negative impact; ● indicates direct impact; ○ indicates indirect impact

Material topics	Significance to SAS (operational importance)	Having significant impact	SAS	Suppliers	Investors	Customers	Employees	Governmental institutes	Communities	Media	Mitigation Measures	GRI Topic Categories
Governance and economic issues												
Risk Management	Conduct risk identification and assessment in accordance with procedures, categorize risks, manage them by level and hierarchy, and report regularly to the Board of Directors.	+ Implement risk identification and evaluation - High information security risk exposure	●	●	○	●	●		●		Implement the ISO 27001:2022 Information Security Management System (ISMS) to manage and protect information assets, and continuously protect the confidentiality of information assets through planning, implementation, and monitoring mechanisms.	GRI 418 Customer Privacy
Integrity and Ethics	Ensure the Company maintains its strongest intangible competitive advantage of stable growth and alignment with international standards within the highly competitive and highly regulated semiconductor and renewable energy industries.	+ Enhance value chain transparency and strengthen stakeholder trust. - Employee violations of integrity and ethical standards may result in financial losses, undermine investor confidence, and pose systemic risks to the Company's long-term sustainable development.	●	●	○	●	●	○			Strengthen ethics and compliance programs, provide regular employee training, and enforce regulatory compliance to reduce operational risks and improve transparency.	205 Anti-corruption
Sustainable Supply Chain Management	Important operational partners who, through close collaboration, promote corporate sustainability and create a win-win sustainable supply chain	+ Increased procurement demand drives supply–demand relationships and boosts output value - Environmental impacts arising from emissions generated during the supply chain production process	●	●		○					Establish a supplier evaluation mechanism to regularly manage, assess, guide, and track suppliers' improvement progress; new suppliers must pass the supplier assessment and sign and comply with the Supplier Code of Conduct and the Supplier Commitment	204 Procurement practices 308 Supplier Environmental Assessment 414 Supplier Social Assessment

Material topics	Significance to SAS (operational importance)	Having significant impact	SAS	Suppliers	Investors	Customers	Employees	Governmental institutes	Communities	Media	Mitigation Measures	GRI Topic Categories
Environmental Issues												
Climate Change Strategy and Carbon Management	GHG emissions from the Company's production and manufacturing operations accelerate global climate change, and extreme weather could bring significant potential impacts on production operations.	+ Reduce the impacts of climate change - Failure to achieve climate action goals may increase climate-related financial risks and negatively affect corporate reputation and stakeholder trust.	●	○	○	○			○		Continuously optimize energy-use equipment and improve energy efficiency to conserve energy and reduce carbon emissions, introduce renewable energy, and declare the Group's RE100 commitment. The Group has expanded into green power development and sales, broadened its clean energy business portfolio, and positioned itself as a comprehensive provider of green energy solutions.	305 Emissions
Energy Management	Reducing energy consumption lowers operating costs, yielding greater profits and enhanced competitiveness. Enhancing energy efficiency is a key measure for reducing energy consumption and lowering GHG emissions.	+ Renewable energy layout - Energy resources consumption	●								Continuously improve energy performance in accordance with the PDCA spirit of the ISO 50001 Energy Management System, enhance energy efficiency, promote regional energy integration, and develop green energy to reduce environmental impact.	302 Energy
Social Issues (including Human Right)												
Workplace Health and Safety	Ensure employee safety and health while maintaining stable and normal production operations of the Company.	+ Stable productivity - Impacts on employee health and safety, as well as production and supply chain disruptions	●				●				Identify various risks, formulate contingency measures early, establish the Company's business continuity management plan, and conduct disaster response drills	403 Occupational health and safety
Talent Attraction and Retention	Key drivers of the Group's diversified growth and its ability to maintain technological leadership, enable SAS to remain resilient and sustain its competitive advantage in a rapidly changing global economy.	+ Providing competitive compensation and benefits helps enhance employee well-being and purchasing power. - Loss of key technical talent	●			○	●				Conduct regular salary benchmarking, provide health management programs beyond legal requirements, and implement EAPs	401 Employment

Material Topics and Sustainability Goals

SDGs	Strategies	2025 Targets	Achieved/ Not Achieved	2026 Long-term Goals
Governance	Topic–Corporate Governance (Material Topics), Integrity & Ethics (Material Topics), Economic Performance (Material Topics), Legal Compliance			
	• Uphold the corporate culture of ethical management • Promote the long-term integrity management policy • Strengthen information disclosure transparency	Maintain ranking in the top 5% of all listed TPEx companies during Corporate Governance Evaluation	Achieved	Maintain ranking in the top 5% of all listed TPEx companies during ESG Evaluation.
	• Establish and implement anti-corruption policies, with specific requirements stipulated in the Procedures for Ethical Management and Guidelines for Conduct. • Conduct ongoing education, training, and awareness programs • Perform cross-functional internal audits across the Group to identify potential risks and enhance internal management effectiveness.	Continue to provide employees with ethics and compliance training and maintain zero corruption incidents.	Not achieved Note 1	• Deliver training programs to all new employees, including: Integrity Management Training, Responsible Business Alliance (RBA) Labor and Ethics Training, Insider Trading Prevention Awareness Training, and ensure a 100% participation rate for all new hires. • Maintain ethics risk monitoring controls (e.g., email keyword monitoring and whistleblowing channels), achieving zero incidents of unethical conduct, integrity violations, or corruption.
	• Continuous education, training, and advocacy • Regular self-evaluation system for reviewing legal compliance • Strengthen internal organization and rectification • Implement cross audits within the group to discover potential risks and improve internal management	Continuously monitor updates to domestic and international laws and regulations, expand the notification scope to companies included in the Group's consolidated financial statements, and provide employee training when material changes occur.	Achieved	• Continuously monitor updates to domestic and international regulations, expand the notification scope to companies included in the Group's consolidated financial statements, and provide training to employees when significant changes occur. • Ensure that all business operations comply with industry-relevant and applicable regulatory requirements, including but not limited to: Anti-corruption, Competition laws, Trade secret protection, Whistleblower protection, Labor and human rights regulations, Export control regulations and Personal data protection laws.
		• Ensure that overseas affiliates comply with applicable local regulations by conducting personal data inventories, deleting unnecessary personal data, and establishing proper records and inventories of retained data. • Maintain compliance with applicable personal data protection regulations and ensure that no violations of personal data protection laws occur.	Achieved Achieved	• Conduct personal data inventories, require responsible data-owning units to comply with applicable laws, delete expired data, and establish data retention registers. • Ensure that the collection, processing, and use of personal data by responsible units comply with applicable personal data protection laws, with no violations occurring. • Provide personal data protection training to responsible units, with overseas regulatory requirements incorporated into the training materials.
	• Continuously enhance product competitiveness and market value. • Strengthen transparency in information disclosure and investor communication mechanisms. • Integrate sustainable development considerations into Board governance and capital allocation decisions.	-Not identified as a material topic ; no target was set.	-	• Maintain sustainable profitability while ensuring the effective utilization of corporate funds and providing appropriate dividend distributions to shareholders. • Disclose financial information on a quarterly basis and hold investor conferences to enhance transparency and strengthen investor confidence. • Plan and allocate sustainable finance instruments to enhance the Company's long-term financial resilience. • The Sustainability Development Committee reports quarterly to the Board of Directors, strengthening the Board's oversight and sustainability governance functions.

SDGs	Strategies	2025 Targets	Achieved/ Not Achieved	2026 Long-term Goals
Governance	Topic–Risk Management (Material Topics: Information Security)			
	• Establish risk management policies and procedures. • Conduct risk identification and assessment in accordance with procedures, categorize risks, manage them by level and hierarchy, and report regularly to the Board of Directors. • Strengthen information security protection measures and establish a comprehensive backup system. • The Company has implemented and maintains an Information Security Management System (ISMS) certified to ISO 27001:2022 to effectively manage and safeguard its information assets. Through established mechanisms for planning, implementation, operation, and continuous monitoring, the Company protects the confidentiality, integrity, and availability (CIA) of its information assets.	Maintain the validity of the ISO 27001:2022 certification.	Achieved	• Target: Zero information security incidents. • Maintain the validity of the ISO 27001:2022 certification.
Environmental	Topic–Energy Management (Material Topics), Climate Change Strategy and Carbon Management (Material Topics), Waste Management, Water Management			
	• In terms of climate change "mitigation" actions, start from greenhouse gas/carbon footprint inventory to GHG reduction implementation • Actively achieve the greenhouse gas emissions reduction goal through green design, green factory, energy management, efficient energy creation, energy conservation, as well as energy conversion products and solutions • Collaborate with the renewable energy development and obtain international green power certifications as the main development direction to create a clean and green energy environment in response to the climate change related challenges	• Implement IFRS S1/S2 Sustainability Disclosure Standards	Achieved	• Reduce Scope 1 and Scope 2 greenhouse gas emissions by 19.38% from the 2022 baseline. • Increase the proportion of renewable energy use to more than 2%. • 100% renewable energy use by 2050: Renewable energy use target achievement phases: 20% by 2030, 35% by 2035, 50% by 2040, 100% by 2050

SDGs	Strategies	2025 Targets	Achieved/ Not Achieved	2026 Long-term Goals
	• Continue to introduce the concepts of product life cycle and circular economy 4R, develop product process design and development from the ecological consideration perspective, implement green design and clean production, improve process designs and technologies, increase unit production capacity, and reduce raw material consumptions	• Chunan Branch annual energy saving rate > 1% • Yilan Branch annual energy saving rate > 1.5%	Achieved Achieved	• Chunan Branch: cumulative energy-saving rate from newly added energy-saving measures during 2022–2026 > 11%. • Subsidiary Sustainable Sunrise Co.: annual power-saving rate > 1.5%.
	• Set improvement goals every year and continue to implement water recycling and waste reduction measures to facilitate environmental management system promotions • Install sufficient pollution prevention equipment with considerable processing capacity to reduce the harmful impacts on the environment • Conduct regular maintenance and inspection for pollution prevention and control equipment to maintain equipment treatment efficiency • Assign professional personnel to operate in accordance with relevant regulations	• Chunan Branch recycled over 50% of the wastewater from drilling process	Achieved	• Achieve a process water recycling rate of more than 80% at the Chunan Branch.
		• Recycle 1,200 tons of cooling tower discharge water each month at the Yilan branch for reuse.	Not achieved Note 2	• Subsidiary Sustainable Sunrise Co. has adopted effluent discharge standards that are more stringent than regulatory requirements, with the following control targets: COD < 200 mg/L (Regulatory standard: ≤ 480 mg/L), SS < 120 mg/L (Regulatory standard: ≤ 320 mg/L), NH_3-N < 50 mg/L(Regulatory standard: ≤ 75 mg/L), NO_3-N < 40 mg/L(Regulatory standard: ≤ 50 mg/L).
	• Transfer traditional cleaning and disposal into the concept of effective resource management in order to reduce waste generation. • Enhance audit management on waste clearance companies to ensure that waste is disposed in an appropriate manner.	• Chunan Branch and Sunrise subsidiary achieved a plant-wide waste recycling rate of 90%.	Achieved	• Achieve a waste reuse and recycling rate of 92%.

SDGs	Strategies	2025 Targets	Achieved/ Not Achieved	2026 Long-term Goals
People	Topic–Talent Attraction and Retention (Material Topics), Talent Development			
	• Planning the next year's education and training based on the Company's operating goals, various department KPIs, functional requirements, etc. • Review training performance and the goal achievement status each quarter as a reference for future improvement.	• All employees must complete at least one DEI-related training	Achieved	• All employees must complete at least one DEI-related training, and provide feedback on their learning outcomes to enhance their understanding of diversity and inclusion.
		• Managers and above must undergo multi-faceted assessments	Achieved	• All supervisors at section manager level and above undergo multi-dimensional performance evaluations. • All managerial employees complete at least one management-related training course. • Maintain an average of at least 24 training hours per employee per year.
	• A comprehensive performance-linked remuneration system • Provide subsidies for in-service employees to pursue further education • Sign contracts with key executives • Through employee stock ownership trust • Present long-service award plaques	• Maintain a turnover rate between 5 % and 10 %	Not achieved Note 3	• Achieve an employee satisfaction survey participation rate of at least 75%. • Achieve an employee satisfaction survey score of at least 3.75 points. • Maintain a turnover rate between 5 % and 10 %, excluding internal transfers between facilities and involuntary turnover.
People	Topic–Workplace Health and Safety (Material Topics), Human Rights			
	• Foster a friendly working environment to ensure workplace safety, care for employees' physical and mental well-being, and promote health initiatives that balance work and life. • Continuously promote an occupational safety and health management system; focus on social expectations, management level, and employee participation; and look at occupational safety and health under the perspective of sound operation and sustainability.	• Reduce the disabling injury frequency rate (FR) by 20 % (< 6.12)	Achieved	• The Frequency-Severity Indicator (FSI) in 2026 shall be equal to or lower than the 2025 level.
		• Achieve 100 % assessment completion among emergency response team members	Achieved	• Achieve 100 % assessment completion among emergency response team members
		• All employees are required to complete at least one hour of human rights-related training annually.	Achieved	• All employees are required to complete training courses on labor relations, ethical conduct, and workplace equality. • At least 90% of employees indicate that they have not experienced workplace violence, harassment, discrimination, or other unlawful workplace misconduct in the workplace misconduct survey.

SDGs	Strategies	2025 Targets	Achieved/ Not Achieved	2026 Long-term Goals
Economic	Topic–Sustainable Supply Chain Management (Material Topics), Customer Relationship Management			
	• Practice product safety and non-toxic requirements from upstream supply chain. • Produce customized polysilicon related application products through technical cooperation. • Establish product quality monitoring mechanism and early warning system. • Collect customer feedbacks on service, quality, cost, innovation, etc., as the direction of continuous improvement.	Achieve a score above 8.5 in the quality dimension of the customer satisfaction survey at the Chunan and Yilan branches (Sustainable Sunrise Co.)	Achieved	Achieve a score above 8.5 in the quality dimension of the customer satisfaction survey at the Chunan and Yilan branches (Sustainable Sunrise Co.)
		Achieve a score above 8.5 in the service dimension of the customer satisfaction survey at the Chunan and Yilan branches (Sustainable Sunrise Co.)	Achieved	Achieve a score above 8.5 in the service dimension of the customer satisfaction survey at the Chunan and Yilan branches (Sustainable Sunrise Co.)
	• Require suppliers, in accordance with SAS's Supplier Code of Conduct and Supplier Commitment, to pledge anti-bribery and anti-corruption practices, compliance with social and environmental responsibilities, exclusion of conflict minerals, adherence to trade regulations, avoidance of infringing products, prohibition of silicon products containing forced-labor elements, and compliance with green procurement, thereby improving management performance and reducing operational risks. • Enhance sustainability management practices by continuously evaluating and monitoring suppliers across the quality, environmental, and social dimensions. • Implement supply chain localization to shorten material transportation costs, enhance delivery flexibility, reduce inventory turnover levels, and eliminate unnecessary costs; it also lowers supply chain carbon emissions, promotes green industry development, and creates local employment opportunities. • Advocate climate change mitigation actions to suppliers.	• Require all new suppliers to sign SAS's Supplier Code of Conduct and Supplier Commitment, achieving a 100 % completion rate.	Achieved	• Require all new suppliers to sign SAS's Supplier Code of Conduct and Supplier Commitment, achieving a 100 % completion rate. • Require 100% of suppliers to countersign the Responsible Minerals Commitment.
		• Annual audit Achieve a 100 % compliance rate for supplier improvements verified through written review. Achieve a 100 % compliance rate for supplier improvements verified through on-site audits.	Achieved	• Annual audit: Achieve a 100 % compliance rate for supplier improvements verified through written review Achieve a 100 % compliance rate for supplier improvements verified through on-site audits
		• Increase the proportion of local procurement: Achieve a 75 % proportion of localized procurement by value. Achieve an 85 % proportion of localized procurement by value, excluding silicon raw materials.	Not achieved Note 4	• Achieve an 85.5% proportion of localized procurement by value, excluding silicon raw materials and silicon wafers.
		• At least 8 suppliers obtain ISO 14064-1, GHG Emissions verification, or ISO 14067 product carbon footprint verification certificates.	Achieved	• At least 12 suppliers obtain ISO 14064-1, GHG Emissions Verification, or ISO 14067 product carbon footprint verification certificates.

Note 1: In 2025, one corruption incident was confirmed at a subsidiary. An internal investigation was conducted in accordance with established procedures, and appropriate disciplinary actions were taken.

Note 2: Due to unstable overall order volume and production output throughout the year, the project was suspended.

Note 3: In response to the global energy transition trend and the rapidly increasing demand for green energy among enterprises, SAS actively carried out organizational transformation in 2025. Many employees were reassigned to subsidiaries and newly established subsidiaries in alignment with the Company's operating strategy. The restructuring process also affected the willingness of some employees to remain with the Company, resulting in workforce attrition.

Note 4: Total procurement spending in 2025 increased by 20% from 2024, primarily due to silicon raw materials and silicon wafers. Because silicon ore is sourced and silicon wafers are mainly manufactured outside Taiwan, even when silicon raw materials are excluded, higher procurement volumes and prices for key raw materials affected the local procurement ratio by value.

Climate Strategy and Actions

Climate Disclosure Framework and Reporting Boundary

The Company refers to the core framework of IFRS S2 Climate-related Disclosures, issued by the International Sustainability Standards Board (ISSB), to disclose its climate-related risk and opportunity management approach across the four pillars of Governance, Strategy, Risk Management, and Metrics and Targets. The reporting boundary for climate-related financial information is consistent with the scope used in the preparation of SAS's standalone financial statements.

Governance Structure and Responsibility

SAS recognizes climate change as a material operational issue. In terms of climate governance and oversight, the Board of Directors serves as the highest governing body. To ensure the effective implementation of climate strategies, the Board delegates specific oversight responsibilities to its functional committees according to their respective authorities, as outlined below:

- Board of Directors: Serves as the highest decision-making body for climate governance. Establishes the Company's Risk Management Policy and Procedures. Supervises and approves the Group's overall climate management strategies, mechanisms, and vision. Regularly reviews the effectiveness of climate strategy implementation.
- Nomination and Sustainability Committee: Oversees sustainability and climate strategies. Formulates specific policies and monitors progress toward sustainability and climate objectives. Provides comprehensive oversight of Environmental, Social, and Governance (ESG) matters. Responsible for the nomination, succession planning, and performance evaluation of directors and senior executives.
- Audit Committee: Oversees the Group's business operations and financial condition. Ensures compliance of climate-related disclosures with applicable domestic and international standards and regulations.
- Remuneration Committee: Responsible for evaluating the remuneration of senior management. Incorporates ESG and climate-related performance indicators into remuneration assessments.

Management-Level Execution and Cross-Functional Operating Mechanism

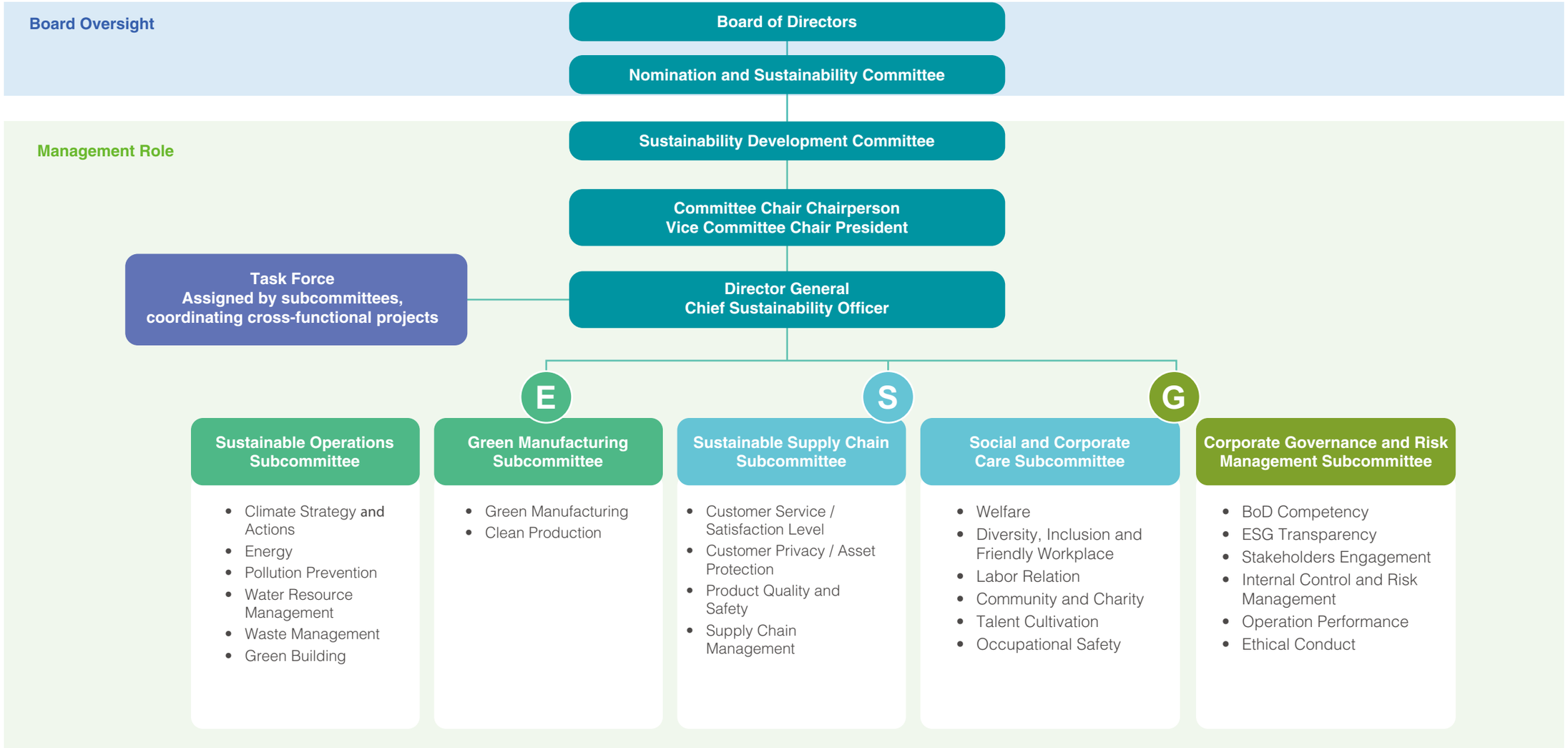
At the management level, the Company has established the Sustainability Development Committee under the supervision of the Nomination and Sustainability Committee as the primary body responsible for implementing climate-related initiatives. The Committee is chaired by the Chairperson, with the President serving as Vice Chairperson. In addition, the Board appoints a Chief Sustainability Officer (CSO) and an Executive Secretary to oversee the Committee's daily operations. The Committee's primary responsibilities include: Planning and implementing climate-related initiatives; Promoting the establishment of climate-related management systems; Periodically reviewing progress toward climate-related targets and commitments. To ensure the accuracy and effective control of climate-related performance data, the Sustainability Development Committee is composed of heads of cross-functional departments. The Committee convenes regularly to establish climate data collection and approval mechanisms and to conduct ongoing reviews and improvements regarding progress toward climate targets.

Communication and Oversight Mechanism

The Company has established regular reporting mechanisms through the Board of Directors and its functional committees to ensure effective management of climate-related risks and opportunities. Major communication and oversight activities conducted during 2025 were as follows:

- Board of Directors: Received quarterly reports from the Sustainability Development Committee on the implementation of climate strategies and progress toward climate-related targets. The Board reviewed the results of the previous year's climate action plans and examined the implementation progress of the current year's climate risk and opportunity response strategies and targets.
- Nomination and Sustainability Committee: Received quarterly reports from the Sustainability Development Committee on climate strategy implementation results and related work plans. Key matters reviewed during 2025 included: Progress of IFRS S1 and IFRS S2 implementation; Net-zero emissions strategies; Management progress regarding climate-related risks and opportunities; and Other significant climate-related matters.

SAS Sustainability Governance Structure



Climate Risk Management

The Board of Directors is responsible for risk governance and authorizes the Audit Committee to review the Company's business operations and financial condition, including ensuring compliance of climate-related disclosures with applicable domestic and international standards and regulations.

The Sustainability Development Committee, operating under the Nomination and Sustainability Committee, is responsible for managing and implementing climate- and environment-related sustainability initiatives. Its responsibilities include developing the Company's climate change targets, strategies, and action plans, as well as managing climate-related risks and opportunities. The scope of risks considered includes, but is not limited to, carbon-related policies and regulations, natural disasters, and water resource utilization, as well as other potential risks that may affect the Company's operations and supply chain.

In response to the challenges posed by climate change, SAS conducts climate-related risk and opportunity identification and assessment every two years with reference to the requirements of IFRS S2. Through scenario analysis and financial impact quantification, the Company develops appropriate response strategies and mitigation measures.

Climate Risk and Opportunity Identification Process

Collection

Collect domestic and international research reports and identify industry-related risks.

- Review domestic and international regulations, industry trends, and peer benchmarks.
- Incorporate changes in internal operations to develop a list of potential climate-related risks.

Assessment

Conduct cross-functional assessments of risk events.

- Convene cross-functional teams to assess and rate potential risk events.
- Conduct a comprehensive assessment based on four dimensions: industry relevance, value chain impact, time horizon, and level of preparedness.

Materiality Identification

Identify and prioritize material risks.

- Submit the assessment results to senior management for review.
- Determine materiality thresholds and priorities, taking available risk management resources into consideration.

Strategy Development and Financial Impact Analysis

Develop response strategies and assess the financial impacts of material risks and opportunities.

- Develop response strategies for material issues and identify potential climate-related opportunities.
- Assess the expected financial impacts, including anticipated costs and benefits, and continuously monitor performance.

Material Climate-Related Risks and Opportunities

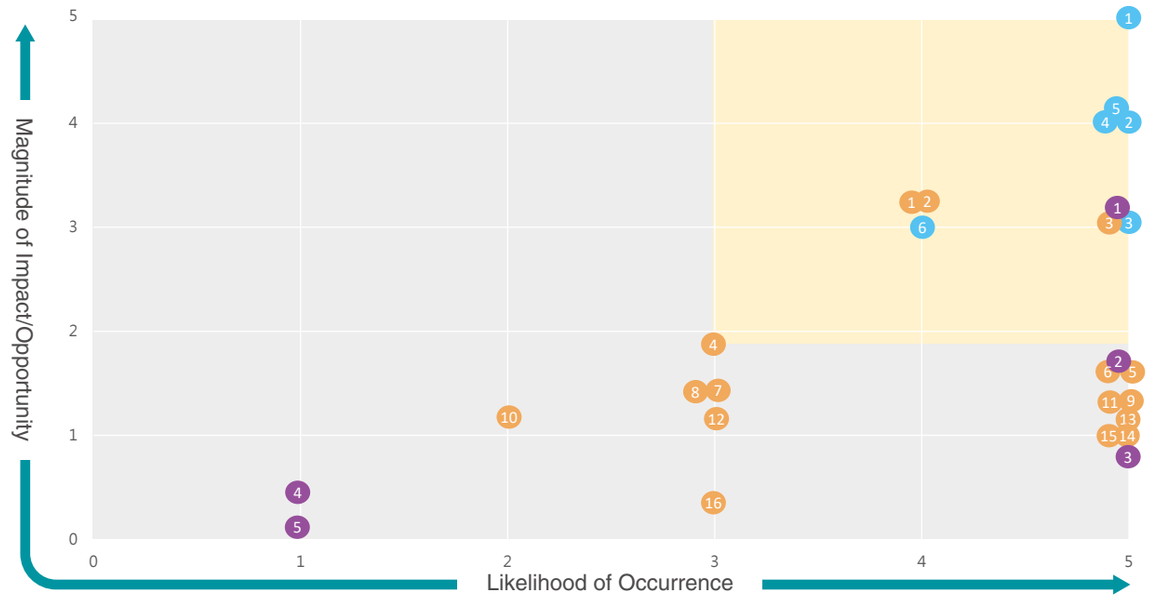
Based on its operational characteristics and industry profile, SAS identified 16 transition risks, 5 physical risks, and 6 climate-related opportunities. A cross-functional team subsequently assessed each item based on its likelihood of occurrence and potential impact. The assessment of impact severity was conducted by considering four key dimensions: Industry relevance; Scope of impacts across the value chain; Expected timing of occurrence; and the Company's existing level of preparedness.

The assessment results were reviewed by senior management, who also considered the optimal allocation of risk management resources when determining the materiality threshold. Based on this process, SAS identified five material climate-related risks and six climate-related opportunities as priority areas for management attention.

- Material Climate Risks:
  Transition Risks: Carbon fees; Rising raw material prices; Changes in demand and pricing for recycled materials; failure of investments in new technologies or investee businesses.
  Physical Risk: Severe typhoons.
- Material Climate Opportunities: Transition to low-carbon energy; Improved energy efficiency; Enhanced resource efficiency; Development of low-carbon and circular products; Product and market diversification resilience; and Operational resilience to extreme weather events.

For the material climate-related issues identified above, the Company has further assessed their potential financial impacts on operations and, based on the assessment results, developed corresponding mitigation and adaptation strategies, as well as related management objectives.

Climate Change Risk and Opportunity Matrix



Opportunities

1. Transition to Low-Carbon Energy
2. Improved Energy Efficiency
3. Improved Resource Efficiency
4. Development of Low-Carbon and Circular Products
5. Product and Market Diversification and Resilience
6. Operational Resilience to Extreme Weather Events

Transition Risks

1. Carbon Fees
2. Rising Raw Material Prices
3. Changes in Demand and Prices for Recycled Materials
4. Failure of Investments in New Technologies or Investee Businesses
5. Renewable Energy Share Requirements
6. Industry Value Chain Expectations for Carbon Neutrality
7. Carbon Border Taxes
8. Caps on Total Greenhouse Gas Emissions
9. Investor Expectations
10. Increased Exposure to Climate-Related Litigation
11. Low-Carbon Alternatives to Existing Products and Services
12. Transition to Low-Carbon Technologies
13. Investment, Financing, and Insurance Support
14. Increasing Climate-Related Disclosure Requirements
15. Rising Energy Costs
16. Adoption of Carbon Capture and Storage (CCUS) Technologies

Physical Risks

1. Severe Typhoons
2. Rising Temperatures
3. Droughts
4. Sea-Level Rise
5. Flooding

Short term (within 3 years)
Medium term (4–6 years)
Long term (more than 7 years)

Climate-Related Financial Impact Assessment and Mitigation Strategies

	Climate Risk	Current and Anticipated Financial Impacts	Climate Opportunity	Current and Anticipated Financial Impacts	Responses
Transition Risks and Opportunities	Carbon Fees	To comply with carbon-related regulations, the Company may be required to pay carbon fees or bear carbon costs passed on by suppliers, resulting in higher operating costs.	Transition to Low-Carbon Energy	The procurement of renewable energy will result in additional operating expenses while reducing expenditures on non-renewable grid electricity.	**Current/Future** Enter into green power purchase agreements and purchase renewable energy certificates. In conjunction with the Company's renewable energy roadmap, progressively achieve its renewable energy usage targets.
			Improved Energy Efficiency	1. Investments in energy-saving equipment and improvement projects will increase capital expenditures. 2. Reducing energy demand will lower production costs and carbon fee expenses.	**Current** Implement various energy-saving initiatives, including improvements to the thermal fields of crystal growth furnaces, replacement of motors with energy-efficient models, and optimization of equipment operating parameters. **Future** Replace major energy-consuming equipment, including air-conditioning systems, and upgrade the intelligent energy management and monitoring system.
	Rising Raw Material Prices	Driven by the overall transition toward net-zero emissions and the effects of inflation, changes in the costs of raw materials required by suppliers during manufacturing may increase production costs.	Improved Resource Efficiency	1. Resource reduction initiatives or the adoption of alternative materials will increase testing and verification expenses. 2. Reducing raw material demand will lower production costs.	**Current/Future** The Company has established an improvement proposal evaluation system. Relevant departments submit annual improvement plans covering resource reduction, alternative raw material development, and operational optimization.
	Changes in Demand and Prices for Recycled Materials	In response to the net-zero transition, the Company may introduce recycled materials, resulting in additional procurement or processing expenses and higher operating costs.	Development of Low-Carbon and Circular Products	1. Introducing recycled or green materials will incur research and development, verification, or processing expenses, thereby increasing production costs. 2. Meeting market expectations and demand for low-carbon products may generate additional orders and attract new customers.	**Current/Future** Continue investing in research and development to develop low-carbon products.
	Failure of New Technology Investments or Strategic Investments	1. Strategic investments in companies that enhance the Group's renewable energy synergies will increase capital expenditures and may expose the Company to potential investment losses. 2. Continuous research and development of new technologies and manufacturing processes will increase operating expenses.	Product and Market Diversification and Resilience	1. Strategic investments aligned with market developments and future net-zero trends may increase revenue. 2. New technology products that meet market expectations and demand may generate additional revenue.	**Current/Future** Continue identifying investment opportunities that enhance the Group's renewable energy synergies and investing in research and development to develop low-carbon products.
Physical Risks and Opportunities	Typhoons	Disruptions to production may result in financial losses and declining revenue.	Operational Resilience to Extreme Weather	Enhancing the Company's ability to withstand natural disasters will strengthen operational resilience and increase operating expenses while reducing business interruption risks and potential losses.	**Current/Future** 1. Establish typhoon risk management mechanisms, including pre-event inspections and emergency response procedures, with supplier notification mechanisms. 2. Maintain appropriate inventory levels to address short-term disruptions caused by typhoons.

Upstream Own Operations Downstream

Climate Risk Financial Impact Assessment

Climate Scenario Analysis

In accordance with international climate-related guidelines, SAS assesses the potential impacts of climate change on the Company's global operating sites and supply chain by setting different greenhouse gas emissions scenarios. For transition risks, considering the relevance of carbon pricing to operating costs, the Company refers to the World Energy Outlook 2024 (WEO 2024) published by the International Energy Agency (IEA), and adopts the Net Zero Emissions by 2050 Scenario (NZE) and the Stated Policies Scenario (STEPS) to assess the financial impacts of future changes in carbon costs. For physical risks, the Company refers to the Sixth Assessment Report (AR6) issued by the Intergovernmental Panel on Climate Change (IPCC), and uses the SSP5-8.5 very high emissions scenario as the basis to examine the physical risks posed by extreme climate events to plant facilities and supply chain operations.

	Scenario Source	Selected Scenario	Scenario Description and Impacts	Estimated End-of-Century Warming
Transition Risks	IEA WEO 2024	STEPs Stated Policies Scenario	This scenario explores possible pathways for the development of the energy system based on decarbonization policies and measures already implemented by governments. Under this scenario, future carbon emissions are expected to remain close to current levels, making it difficult to achieve net-zero emissions by 2050.	2.5℃
		NZE 2050 Net Zero Emissions by 2050 Scenario	To limit the increase in the global average temperature to 1.5℃ above pre-industrial levels, the global energy sector must achieve net-zero emissions by 2050.	1.5℃
Physical Risks	SSP5-8.5 Very High Emissions Scenario		The global economy remains heavily dependent on fossil fuels and the rapid development of energy-intensive industries, with no constraints imposed by climate policies. Consequently, global carbon dioxide emissions continue to rise and are projected to reach approximately twice the 2015 level by 2050.	4.4℃ (3.3℃ ~5.7℃)

Transition Risks and Opportunities | Analysis of Carbon Pricing Impacts and Low-Carbon Transition

Considering that Taiwan's carbon fee system will be implemented starting in 2026, based on actual carbon emissions in 2025, SAS's greenhouse gas emissions in 2025, including Scope 1 and Scope 2 emissions, have not yet reached the Ministry of Environment's carbon fee threshold of 25,000 metric tons of CO_2e. Therefore, the Company does not immediately face pressure to pay carbon fees. However, some upstream suppliers operate in industries that are also categorized as high-carbon-emission sectors and may become subject to regulation by the Ministry of Environment. If such circumstances occur, they may lead to increases in SAS's corporate operating costs and business costs.

Taking future development trends into consideration, the Company selected two scenarios for this risk event, the Stated Policies Scenario (STEPS) and the Net Zero Emissions by 2050 Scenario (NZE 2050), to estimate the potential impacts of future carbon fees on SAS. Under different scenarios, the Company assumes the possible impact pathways through which carbon fees may affect SAS, and conducts financial impact analysis by collecting and researching relevant information and data based on these impact pathways.

Financial Impact Assessment

The impact analysis is conducted from two time perspectives, the current situation and the future, covering the impacts on the Company's own operations and supply chain. From the perspective of the current situation, carbon fee-related events may indirectly cause SAS to invest in relevant initiatives and process improvement expenses during its own operations, with the aim of reducing its own greenhouse gas emissions and lowering the risk of becoming subject to carbon fee regulation. From the perspective of different future scenarios, suppliers in SAS's upstream supply chain also include industries with high carbon fee risks, such as basic chemical material manufacturing, other chemical product manufacturing, petroleum refining, paper manufacturing, textile manufacturing, and other manufacturing industries. If these suppliers are affected by the imposition of carbon fees in Taiwan, such costs are expected to be passed on to raw material costs. For the Company, this would be reflected in increased procurement costs. Under the IEA STEPS scenario, SAS's raw material costs are expected to increase by 0.5% to 3.5% from 2026 to 2030. Under the more stringent NZE 2050 net-zero emissions scenario, SAS's raw material costs are expected to increase by 5% to 8% from 2026 to 2030, thereby affecting operating costs.

In terms of the Company's own operations, to mitigate the potential impacts of carbon pricing described above and simultaneously promote climate-related opportunities such as low-carbon energy transition and improvement of energy efficiency, SAS has planned a greenhouse gas reduction roadmap. For short- and medium-term targets, the Company plans to continue investing capital expenditures in the replacement of high-energy-consuming equipment within its plants, process energy efficiency optimization, and renewable energy procurement, such as signing power purchase agreements (PPAs), with the aim of controlling energy consumption and carbon emissions at the source.

For long-term goals such as organizational RE100 commitments or net-zero emissions, the Company will also evaluate the allocation of resources to the purchase of external carbon credits based on regulatory and market scenario requirements. The equipment investments, namely CAPEX, as well as recurring operating expenses and carbon credit costs, namely OPEX, arising from the response to climate transition risks and the implementation of climate-related opportunities are expected to affect the Company's future resource allocation and financial expenditures. The detailed financial impact assessment results are shown in the table below.

Transition Risks and Opportunities | Assessment Results of Carbon Pricing Impacts and Low-Carbon Transition

Assessment Scope	Assessment Indicator	Current Status (2025)	STEPS Scenario (Projected to 2030)	NZE Scenario (Projected to 2030)
Supply Chain	Expected increase in raw material procurement costs	Taiwan has not yet officially begun collecting carbon fees; therefore, no material impact has been observed.	The procurement cost per unit of raw material is expected to increase by approximately 2.5%–3.5%.	The procurement cost per unit of raw material is expected to increase by approximately 7%–8%.
Own Operations	Decarbonization investments and carbon-related costs as a percentage of total revenue	Capital expenditures on equipment improvements for greenhouse gas reduction and renewable energy procurement costs together accounted for less than 1% of the year's total revenue.	By 2030, capital expenditures on decarbonization equipment and related operating expenses are estimated to account for approximately 1%–2% of total revenue.	By 2030, decarbonization-related capital expenditures and the cost of purchasing external carbon credits to achieve carbon neutrality are expected to account for approximately 2%–3% of total revenue.

Note 1: (Definition of Financial Impacts): The financial impacts on "Own Operations" presented in this table represent the estimated proportion of total revenue attributable to capital expenditures and operating expenses required to achieve greenhouse gas reduction targets, including equipment upgrades, process improvements, and carbon credit purchases. Financial impacts on the "Supply Chain" represent the estimated increase in the Company's procurement costs resulting from suppliers passing through carbon fee-related costs.

Note 2: (Carbon Price Assumptions under the STEPS Scenario): The carbon price assumptions for the Company's Taiwan operations under the Stated Policies Scenario (STEPS) are based on the carbon fee framework announced by Taiwan's Ministry of Environment, under which the initial carbon fee rate is expected to be NT$300 per metric ton of CO_2e in 2026. Taking into account the recommendations of the Fifth Carbon Fee Rate Review Committee, the carbon fee is expected to gradually increase to between NT$1,200 and NT$1,800 per metric ton of CO_2e by 2030. Consistent with a conservative assessment approach, this financial impact analysis adopts NT$1,200 per metric ton of CO_2e as the basis for calculation.

Note 3: (Carbon Price Assumptions under the NZE Scenario): The carbon price assumptions under the Net Zero Emissions by 2050 (NZE) scenario are based on projections published by the International Energy Agency (IEA) in its World Energy Outlook (WEO). Considering the geographic locations of the Company's principal operations and supply chain activities, the assessment adopts the 2030 carbon price assumption for emerging markets and developing economies, which is estimated at US$90 per metric ton of CO_2 equivalent, under the NZE scenario.

Physical Risks and Opportunities | Extreme Weather Impacts and Operational Resilience Building

With reference to the IPCC AR6 Shared Socioeconomic Pathway (SSP) scenarios, SAS selected the Very High Emissions Scenario (SSP5-8.5) and utilized information from the National Science and Technology Council's Climate Change Projection Information and Adaptation Knowledge Platform to conduct physical risk scenario analysis. The assessment examined potential short-, medium-, and long-term climate-related risks affecting the Company's operating sites, including the Headquarters and the Chunan Branch, covering risks such as flooding, drought, severe typhoons, rising temperatures, and sea-level rise. Among these risks, severe typhoons were identified as the most significant physical risk, while other risks, including flooding, drought, rising temperatures, and sea-level rise, were assessed as not material to SAS. While mitigating physical climate risks, the Company also seeks to transform such challenges into opportunities to strengthen operational resilience. To address the potential risk of operational disruptions caused by severe typhoons, SAS has established standardized emergency response and recovery mechanisms. In addition, the Company continues to enhance supply chain stability and business continuity through investments in the following four key areas:

- Supply Chain and Logistics Response: Establish emergency communication procedures for suppliers. Require suppliers to follow standardized reporting procedures during climate-related disasters and promptly notify the Company of damages incurred and potential impacts on delivery schedules, enabling SAS to initiate material allocation and contingency measures in advance.
- Preventive Protection of Plant Facilities: Implement standardized typhoon preparedness procedures. Upon the issuance of a typhoon warning and prior to landfall, manufacturing sites strictly follow typhoon preparedness checklists, including drainage system inspections, relocation of outdoor objects, and reinforcement of equipment and facilities to minimize potential losses caused by flooding or equipment damage.
- Employee Attendance and Safety Management: Prioritize employee safety and well-being. For shift employees required to maintain essential operations during typhoon events, the Company provides attendance allowances and transportation arrangements, including ride-sharing taxi services, to reduce commuting risks. Safety reporting mechanisms are implemented at the shift level to ensure timely monitoring of employee safety conditions.
- Production Scheduling and Inventory Resilience:
  - ○ Safety Stock Mechanism: Maintain safety stock levels for key raw materials and finished products on a routine basis to mitigate operational impacts arising from temporary logistics interruptions or supply chain delays.
  - ○ Flexible Capacity Allocation: The Company maintains production flexibility and reserve capacity within its existing manufacturing facilities. In the event of temporary downtime caused by typhoons, backup production capacity can be activated immediately upon the restoration of operations to recover delayed production schedules and ensure customer delivery commitments are fulfilled.

During the 2025 reporting period, SAS did not experience any material asset impairment or significant operational disruptions resulting from severe typhoons or other climate-related events. No abnormal cash outflows were incurred as a result of such events. Nevertheless, to strengthen climate resilience and maintain stable production and supply operations, the Company continues to invest management resources in facility protection measures, logistics contingency planning, and business continuity management. During the reporting period, the combined value of: safety inventories of raw materials and finished goods maintained to mitigate potential supply chain disruptions; and depreciation expenses associated with equipment capacity reserved to maintain production flexibility, represented approximately 10% of the Company's standalone revenue in 2025. These ongoing resource allocations are intended to reduce the potential impacts of extreme weather events on production schedules and customer deliveries, thereby supporting overall operational stability and supply reliability.

Climate Strategy

SAS recognizes that the impacts of climate change on business operations are not sudden events but rather a long-term and evolving process. Therefore, the Company has integrated climate risk response plans into its daily operations and management practices. Through the establishment of a systematic risk management framework, continuous monitoring, internal audits, and cross-functional assessments, SAS proactively identifies potential climate-related threats at an early stage. By adopting a forward-looking management approach and conducting regular emergency response and recovery drills, the Company ensures operational stability and business continuity throughout the climate transition process.

Response Strategies for Material Climate Risks

In response to the material climate risks identified above, including carbon fee implementation, raw material price fluctuations, changes in the recycled materials market, new technology investment risks, and extreme weather events, the Company has developed corresponding management strategies and mitigation measures. Through regular reviews of resource allocation, implementation progress, and management effectiveness, SAS can dynamically adjust its risk mitigation measures and strengthen its resilience against climate-related risks. Whenever deficiencies in management plans are identified or expected outcomes are not achieved, corrective actions and enhancement measures are promptly implemented. This continuous improvement mechanism not only strengthens the Company's climate risk management framework but also enhances its ability to respond effectively to rapidly evolving climate challenges, thereby supporting long-term sustainable growth and maintaining its competitive advantage in a changing business environment.

Major Climate Risks	Management Strategies
Carbon Fees	Focus on reducing emissions at the source and improving energy efficiency. The Company aligns its climate actions with its existing science-based targets under the Science Based Targets initiative (SBTi) and its RE100 commitment. By progressively increasing the use of renewable energy and implementing energy-saving projects in its manufacturing processes, the Company aims to reduce its absolute greenhouse gas emissions and effectively mitigate the potential financial impact of future statutory carbon fee payments.
Rising Raw Material Prices	Adopt a dual-track strategy of source diversification and material consumption reduction: • Proactively identify and qualify second-source suppliers or alternative materials to diversify single-source procurement risks and alleviate price volatility. • Continuously optimize production parameters and improve yield rates to reduce raw material consumption per unit of product, thereby mitigating the impact of rising material costs on gross profit margins.
Changes in Demand and Prices for Recycled Materials	Strengthen circular economy practices and green material procurement. While ensuring product performance and compliance with customer quality requirements, the Company continues to evaluate and optimize the use of recycled materials in its products. It also actively expands and establishes stable supply channels for high-quality recycled materials. By diversifying and optimizing its raw material mix, the Company can respond to customer demand for green products, reduce its dependence on a single type of virgin material, and mitigate overall procurement cost and price volatility risks.
Failure of New Technology Investments or Strategic Investments	In response to the global energy transition, the Company has actively expanded its renewable energy business portfolio in recent years and is committed to providing integrated services covering solar products, energy storage systems, solar PV project operation and maintenance, and green electricity development and sales. To effectively manage the parent company's strategic investment risks in these areas, the Company adopts the following mitigation strategies: • Rigorous assessment of investment synergies and market alignment: Before making investment in other businesses or merger and acquisition decisions, the Company conducts rigorous due diligence. The assessment focuses on the vertical integration benefits between the investment target and the Company's existing businesses. It also ensures that the target's technological development is aligned with future domestic and international policies and actual market demand, thereby avoiding excessive or unfocused expansion. • Strategic alliances and dynamic monitoring mechanisms: The Company establishes strategic partnerships with professional enterprises possessing specific technological advantages or proven market experience to share the initial risks associated with introducing new technologies and developing markets. It also regularly monitors and reviews the operating performance and financial health of its investee businesses to ensure efficient capital allocation and maintain financial soundness.
Severe Typhoons	Adopt a dual-track mitigation strategy combining financial risk transfer and enhanced physical resilience: • Financial risk transfer: Regularly review insurance coverage and maintain adequate property insurance. Commercial insurance mechanisms are used to transfer the risks of significant asset damage and financial losses from business interruptions caused by extreme weather events. • Enhanced infrastructure protection: When planning factory repairs or new construction projects, incorporate historical climate data on extreme rainfall and strong winds into environmental assessments. Ensure that building structures, electromechanical systems, and drainage facilities meet the required protection standards, thereby fundamentally strengthening the Company's physical capacity to withstand climate-related disasters.

Greenhouse Gas Reduction and Transition Strategy

Science-Based Targets (SBTi) and Net-Zero Transition Pathway

To support the global ambition of limiting temperature rise to 1.5℃, SAS has successfully obtained validation from the Science Based Targets initiative (SBTi), ensuring that its decarbonization pathway is aligned with internationally recognized scientific standards. Using 2022 as the base year, the Company commits to reducing its absolute Scope 1 and Scope 2 greenhouse gas emissions by 63% by 2035. For Scope 3 emissions, using 2024 as the base year, the Company commits to reducing absolute emissions by 37.5% by 2035 across key categories, including Purchased Goods and Services, Capital Goods, and Fuel- and Energy-Related Activities.

To achieve these short-, medium-, and long-term targets, the Company focuses on the following three key decarbonization pillars:

- Energy Efficiency Improvement: Continue implementing lighting system upgrades, cooling water temperature optimization, and replacement of aging high-energy-consuming equipment, including motors, cooling tower fans, and thermal insulation materials used in crystal growth furnaces. Future plans include the installation of high-efficiency chillers and upgrades to the Energy Management System (EMS), which are expected to reduce chiller energy consumption by approximately 30%. In addition, optimization of air compressor system configurations is expected to further reduce energy losses by approximately 15%.
- Renewable Energy Adoption: Leverage the Group's long-term investments in solar photovoltaic and offshore wind energy by adopting a diversified Power Purchase Agreement (PPA) strategy. Through joint procurement agreements with renewable energy developers and international partners, the Company plans to progressively increase the proportion of renewable electricity consumption and steadily advance toward its goal of achieving 100% renewable electricity use (RE100) by 2050. The Company will continuously adjust PPA procurement volumes based on operational requirements and supplement renewable electricity sourcing with Renewable Energy Certificates (RECs) and carbon credit purchases to support its net-zero transition pathway.
- Value Chain Engagement (Scope 3 Emission Reduction): Launch supplier engagement programs and formally incorporate carbon management performance into supplier evaluation criteria. Guided by the principles of energy security, affordability, and sustainability, the Company seeks to integrate low-carbon manufacturing processes and circular economy practices while collaborating with upstream and downstream partners to build a climate-resilient net-zero supply chain.

Internal Carbon Pricing Mechanism

To address the potential financial impacts of increasingly stringent global carbon pricing policies—such as domestic carbon fees, cap-and-trade systems, and the EU Carbon Border Adjustment Mechanism (CBAM) —the Company formally introduced an Internal Carbon Pricing mechanism starting in 2024.

This mechanism utilizes a "shadow price" model, with rates centrally approved by Group Headquarters. Simulated pricing is then conducted based on the actual Scope 1 and Scope 2 carbon emissions of each plant. Regarding rate setting, the Company performs annual dynamic adjustments by referencing external indicators, such as EU CBAM certificate prices. Through this mechanism, management can more effectively track and analyze carbon emission hotspots across plants and internalize climate-related external costs. This, in turn, drives each unit to implement energy-saving and carbon-reduction projects, ensuring that corporate resource allocation effectively supports the achievement of RE100 and SBTi reduction targets.

Performance and Targets

SAS has established management metrics and targets for climate-related risks and opportunities. In accordance with the requirements of IFRS S2, disclosures related to the Company's Cross-Industry Metrics Categories, relevant SASB Semiconductor Industry metrics, and other climate-related information have been correspondingly presented throughout this Sustainability Report and referenced in the related appendix index. For the material climate-related risks and opportunities identified above, the key performance indicators, targets, and recent implementation progress are summarized as follows:

Climate-Related Risk and Opportunity Metrics and Targets

Risk Item	Corresponding Opportunity	Assessment and Management Indicator	Targets	2025 Progress Toward Targets
Carbon Fees	Transition to Low-Carbon Energy	Share of renewable energy use	• 2030: RE20 • 2035: RE35 • 2040: RE50 • 2050: RE100	• The percentage of renewable energy use reached 2.3%.
		Absolute greenhouse gas emissions reduction aligned with the SBTi pathway	• Scopes 1 and 2: Reduce absolute carbon emissions by 63% by 2035, compared with the 2022 base year. • Scope 3: Reduce absolute carbon emissions from "Purchased Goods and Services," "Capital Goods," and "Fuel- and Energy-Related Activities" by 37.5% by 2035, compared with the 2024 base year.	• Absolute Scope 1 and 2 carbon emissions decreased by 58.6%. • Absolute Scope 3 carbon emissions decreased by 58.2%.
	Improved Energy Efficiency	Cumulative energy savings rate	• Short-term target: Implement additional energy-saving measures from 2022 to 2026 and achieve a cumulative energy savings rate of more than 11%.	• The annual energy savings rate reached 2.81% in 2025. • The cumulative energy savings rate reached 9.89% from 2022 to 2025.
Rising Raw Material Prices	Improved Resource Efficiency	Introduction of second-source suppliers; process water recovery rate	• Short-term targets: - Introduce one second-source supplier for designated raw materials. Note - Achieve a process water recovery rate of 80% in the processing area. • Medium-term target: Introduce two second-source suppliers for designated raw materials. Note	• One second-source supplier was introduced for designated raw materials. • The process water recovery rate in the processing area reached 80.6%.
Changes in Demand and Prices for Recycled Materials	Development of Low-Carbon and Circular Products	Recycled material utilization rate for ingots; number of qualified recycled material sources	• Short-term target: Achieve a recycled material utilization rate of 42% for ingots. • Medium-term target: Establish two qualified recycled material sources.	• The recycled material utilization rate for ingots reached 49.7%.

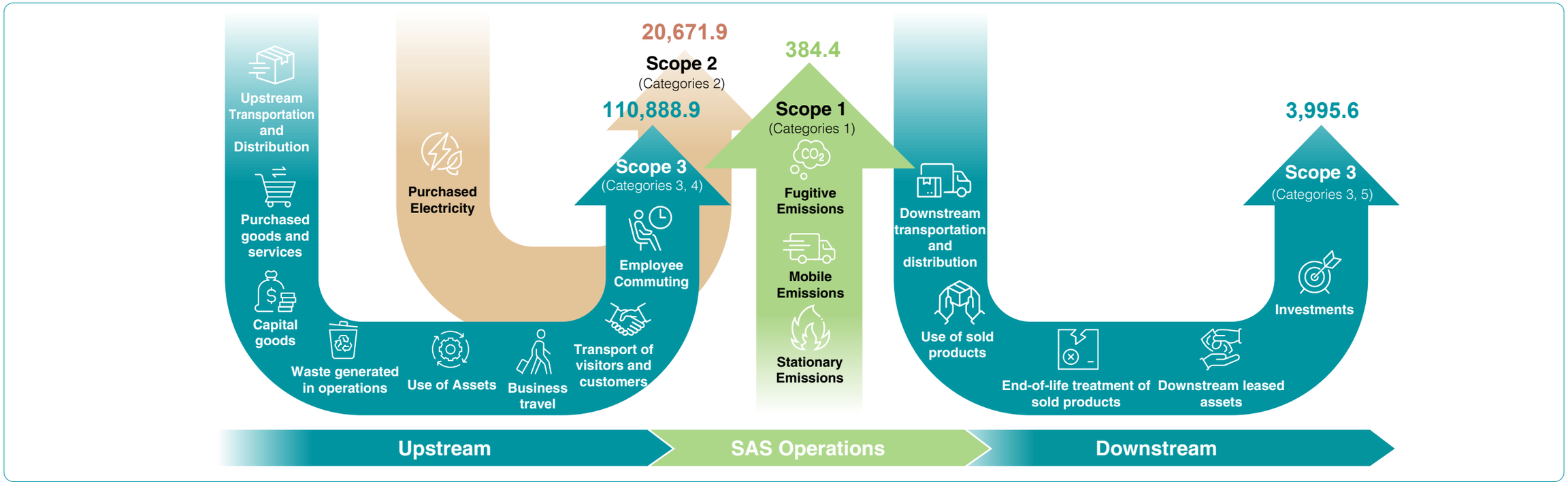
Note: Designated raw materials include silicon raw materials, crucibles, and hot-zone components.

Carbon Emissions Management

Since 2021, SAS has progressively established and completed a systematic greenhouse gas (GHG) inventory and emissions database. The reporting boundary covers the Headquarters, Chunan Branch, and Yilan Branch, and also includes Sunrise Subsidiary and SGE Hsu-Hsin Branch, which were restructured from branches into subsidiaries during the 2025 reporting period. As 2025 marks the first year in which SAS conducted a comprehensive inventory of Scope 1, Scope 2, and Scope 3 greenhouse gas emissions in accordance with the GHG Protocol and obtained third-party verification, the Company has designated 2025 as the baseline year. To monitor greenhouse gas emission trends and evaluate the effectiveness of emission reduction initiatives, greenhouse gas emissions data from 2021 to 2024, prepared in accordance with ISO 14064-1:2018, are also disclosed as trend references.

The Company adopts the operational control approach to define its organizational boundary. The inventory scope includes both direct greenhouse gas emission sources (Scope 1) and indirect greenhouse gas emission sources (Scope 2 and Scope 3). Greenhouse gases covered by the inventory include seven categories: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The primary quantification method applied is the emission factor approach. Emission factors are mainly referenced from the Ministry of Environment's Greenhouse Gas Emission Factor Management Table (Version 6.0.4, June 2019), the Ministry of Environment's Carbon Footprint Calculation Service Platform, the Ecoinvent database, and relevant literature. Global Warming Potential (GWP) values are based on IPCC AR6 (WG1, 2021). The greenhouse gas emissions identified through this inventory primarily comprise CO_2, CH_4, N_2O, and HFCs, while no greenhouse gas emissions from PFCs were identified.

SAS Greenhouse Gas Emissions in 2025



Unit: tonCO_2e

Scope 1 and Scope 2

In 2025, SAS reported 384.4 metric tons of CO_2e for Scope 1 (direct greenhouse gas emissions) and 20,671.9 metric tons of CO_2e for Scope 2 (indirect greenhouse gas emissions from purchased energy). Overall, combined Scope 1 and Scope 2 emissions totaled 21,056.3 metric tons of CO_2e, representing a 20.5% decrease from the previous year and a 58.6% reduction from the 2022 target base year. These results demonstrate the Company's continued commitment to greenhouse gas inventory management and carbon reduction initiatives, resulting in ongoing improvements in overall emissions performance.

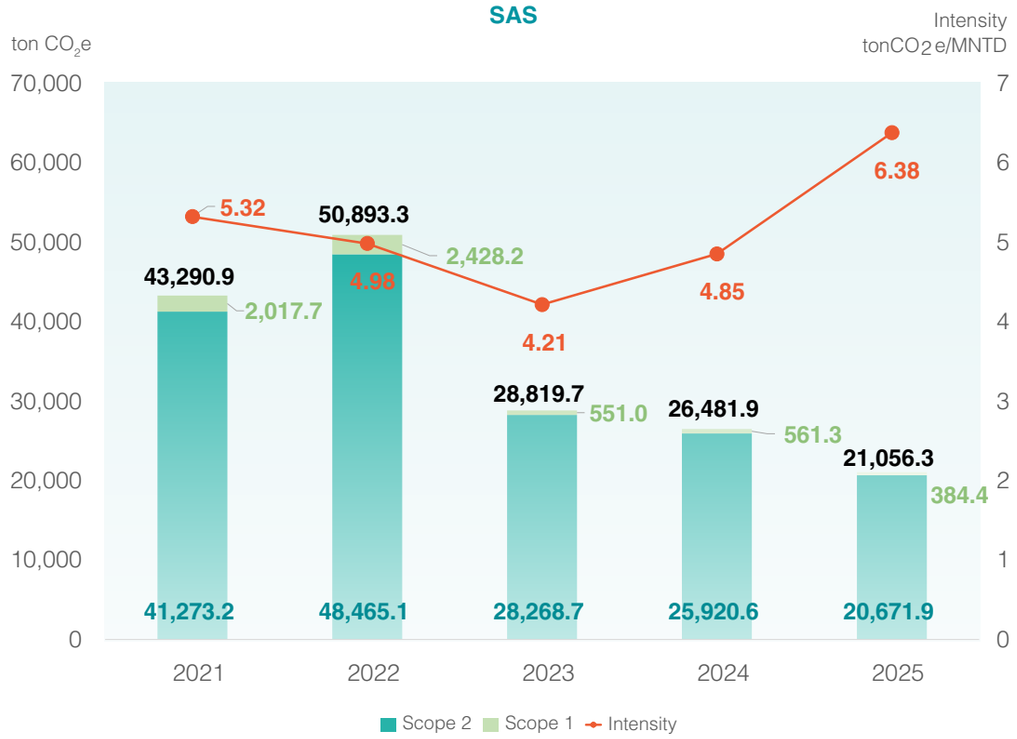
To enhance year-on-year comparability and more accurately assess the effectiveness of operational improvements and carbon reduction measures, the Company additionally conducted a comparative analysis of Scope 1 and Scope 2 emissions using the 2024 electricity emission factor as a consistent basis. Based on this consistent emission factor, combined Scope 1 and Scope 2 emissions in 2025 decreased by 17.2% from the previous year and by 55.7% from the 2022 base year. (For reference, the recalculated combined Scope 1 and Scope 2 emissions under the same basis amounted to 25,432.5 metric tons of CO_2e in 2024 and 47,560.7 metric tons of CO_2e in 2022.)

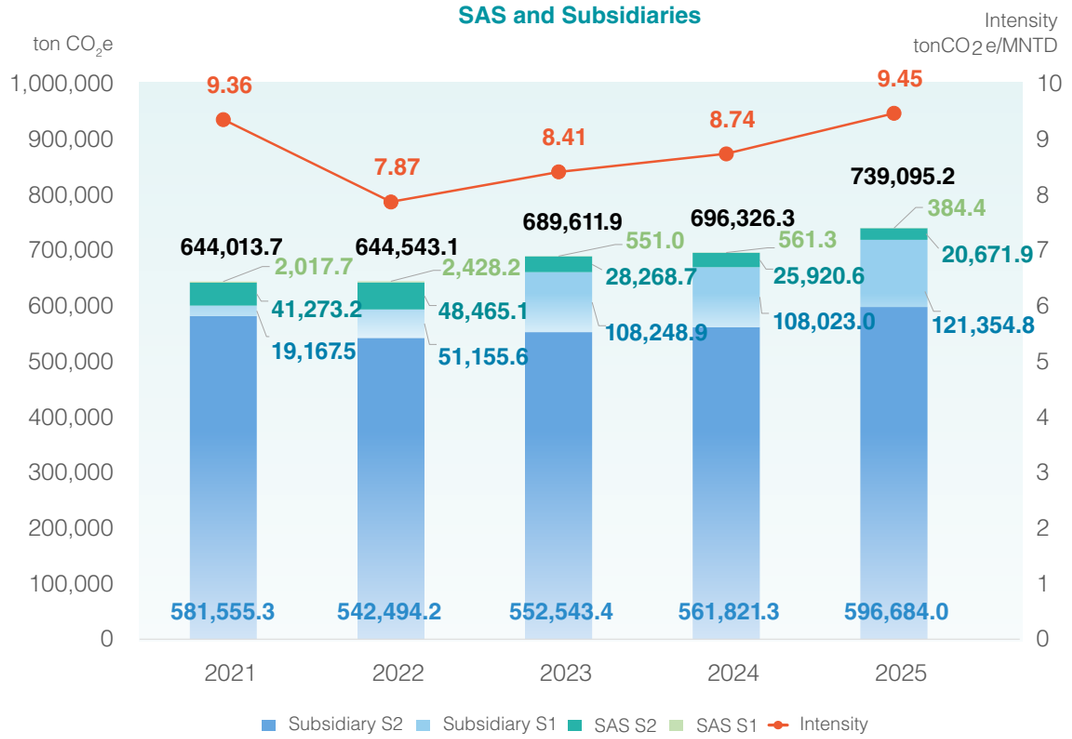
In 2025, SAS recorded a Scope 1 and Scope 2 emissions intensity of 6.38 metric tons of CO_2e per NT$1 million of revenue, representing an increase from the previous year. Emissions intensity reflects not only greenhouse gas performance but is also influenced by operational factors such as revenue scale, product mix, and capacity utilization. Although total Scope 1 and Scope 2 emissions decreased in 2025 compared with the previous year, revenue declined at a greater rate than emissions, resulting in an increase in emissions intensity. Looking ahead, the Company will continue implementing energy conservation and carbon reduction measures while further strengthening emissions intensity management through improvements in operational efficiency and low-carbon management practices.

Scope 1 and Scope 2 Emission Sources

Emissions Category			Emission Sources
Scope 1	Direct Greenhouse gas Emissions	Direct Emissions from Stationary Combustion	Fuels used by generators and brush cutters
		Direct Emissions from Mobile Combustion	Fuels used by mobile equipment, including company vehicles and forklifts
		Direct fugitive emissions from the release of greenhouse gases in anthropogenic systems	Greenhouse gas emissions from septic tanks, stationary-source exhaust ducts (VOCs), wastewater treated through anaerobic processes, fire suppression equipment, refrigerants, and other sources
Scope 2	Energy indirect Greenhouse gas Emissions	Indirect Emissions from Purchased Electricity	Purchased electricity

Scope 1 and Scope 2 Emissions





Note:

1. SAS Reporting Boundary
   2021: Chunan Branch (Plant 2) and Yilan Branch (Plants 1 and 3).
   2022–2024: Headquarters, Chunan Branch (Chunan Plant and Plant 2), Yilan Branch (Plants 1 and 3), and Hsu-Hsin Branch.
   2025: Headquarters, Chunan Branch (Chunan Plant and Plant 2), Yilan Branch, Sunrise Subsidiary, and Hsu-Hsin Branch.
2. Subsidiary Reporting Boundary (Based on the year each entity was incorporated into the consolidated financial statements.)
   2021: GlobalWafers (excluding Taiwan Speciality Chemicals Corporation (TSC) and Sustainable Energy Solution (SES), which had not yet conducted GHG inventories).
   2022: GlobalWafers, TSC, SES, and AWSC (newly added subsidiary).
   2023: GlobalWafers, TSC, SES, AWSC, and Actron (newly added subsidiary).
   2024: GlobalWafers, TSC, SES, AWSC, and Actron.
   2025: GlobalWafers, TSC, SES, AWSC, Actron (including Mosel Vitelic Inc.), SGE, and Anneal.
3. Among SAS and its subsidiaries included in the greenhouse gas inventory boundary above, the emissions of all entities except Anneal were subject to third-party verification.
4. For facilities located in Taiwan, the electricity emission factor is based on the value announced by the Energy Administration, Ministry of Economic Affairs. The electricity emission factor for 2024 was 0.474 kg CO_2e/kWh.
5. Greenhouse gas emissions intensity is calculated as: Total Scope 1 and Scope 2 Emissions (tCO_2e) / Revenue (NT$ million). For SAS, the denominator consists of SAS standalone revenue plus the revenues of Sunrise Subsidiary and Hsu-Hsin Branch. For SAS and its subsidiaries, the denominator is based on the Group's consolidated revenue.
6. The Global Warming Potential (GWP) values adopted by SAS are based on the IPCC Sixth Assessment Report (AR6).

Scope 3

In 2025, SAS reported 114,884.489 metric tons of CO_2e for Scope 3 (other indirect greenhouse gas emissions), representing a 58.2% decrease compared with the previous year, which also serves as the Scope 3 emissions reduction baseline year (2024). The decrease in emissions during the reporting year was primarily attributable to lower raw material demand and corresponding reductions in upstream emissions resulting from production capacity adjustments at certain facilities. In addition, the Company continued to promote supplier carbon management through its procurement practices by encouraging suppliers to establish product carbon footprint data. For certain raw materials, supplier-provided product carbon footprint data were adopted as emission factors, enabling Scope 3 emissions calculations to more accurately reflect actual supply chain conditions. Overall, the change in Scope 3 emissions during the reporting year was mainly influenced by changes in business activity levels and updates to certain emission factor data sources.

Scope 3 Emissions by Categories 1–15

Unit: ton CO_2e

Emission Category	2025
Category 1 Purchased goods and services	104,708.452
Category 2 Capital goods	646.770
Category 3 Fuel- and energy-related activities	4,878.565
Category 4 Upstream transportation and distribution	330.177
Category 5 Waste generated in operations	74.939
Category 6 Business travel	6.663
Category 7 Employee commuting	243.312
Category 8 Upstream leased assets	None
Category 9 Downstream transportation and distribution	164.072
Category 10 Processing of sold products	Not quantified
Category 11 Use of sold products	None
Category 12 End-of-life treatment of sold products	None
Category 13 Downstream leased assets	3,831.540
Category 14 Franchises	None
Category 15 Investments	Not quantified
Total	114,884.489

Note: The reporting boundary covers Headquarters, Chunan Branch (Chunan Plant and Plant 2), Yilan Branch, Sunrise Subsidiary, and Hsu-Hsin Branch.

Scope 3 (Other Indirect Greenhouse Gas Emissions) Emissions in Recent Years

Unit: ton CO_2e

Emission Sources	Corresponding Inventory Standard Categories	2022	2023	2024	2025
Upstream Emission	GHG Protocol: Category 1-8	786,364.123	274,706.716	270,310.320	110,888.877
	ISO 14064-1: 3.1, 3.3-3.5, and 4.1-4.4				
Downstream Emission	GHG Protocol: Category 9-15	5,480.914	4,946.785	4,334.774	3,995.612
	ISO 14064-1: 3.2 and 5.1-5.4				
Total		791,845.037	279,653.501	274,645.094	114,884.489

Note: Data for 2021–2024 were compiled in accordance with ISO 14064-1:2018. Data for 2025 were compiled in accordance with the GHG Protocol and were subject to third-party verification.

01 Governance and Operation

1.1 Corporate Governance

1.2 Operational Performance

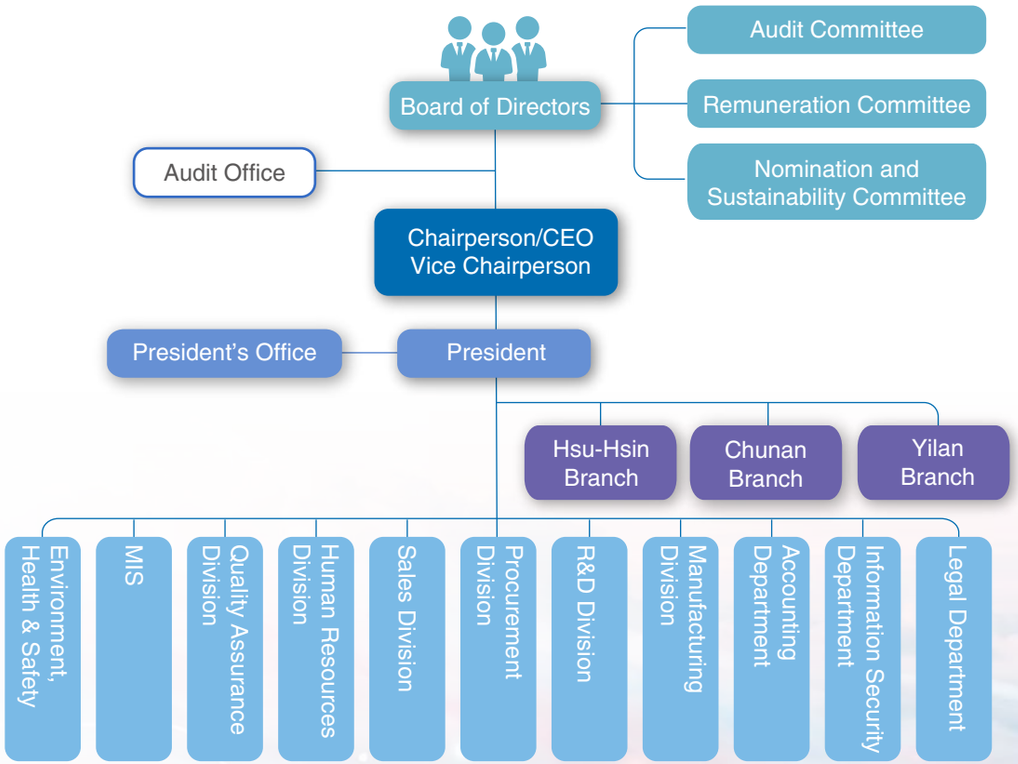
1.3 Risk Management

1.1 Corporate Governance

Sino-American Silicon (SAS) has consistently advanced its ethical operations policy and enhanced information disclosure transparency to reinforce an ethical corporate culture. For 12 consecutive years, SAS has been ranked in the top 5% of all TPEx-listed companies in Corporate Governance Evaluation, demonstrating the Company's steadfast dedication to sustainable business practices.

1.1.1 Corporate Governance Structure

SAS Organizational Chart



Summary of key points for the corporate governance organization

- Among the 11 directors, 4 are independent directors.
- Among the 11 directors, 1 is a female director.
- The Audit Committee and Remuneration Committee both consist of independent directors.
- The Nomination and Sustainability Committee has 6 members of whom 4 are independent directors.
- The organizational charter of all committees is publicly disclosed in the corporate website.
- The Board of Directors and functional committees conduct annual self-performance evaluations and commission an external independent organization to perform board performance assessments, with the evaluation results disclosed on the Company's website.
- A corporate governance supervisor has been established to implement corporate governance and strengthen the functions of the board of directors.

Board Operations

The Board of Directors is the Company's highest governance body. SAS's board of directors comprises 11 members, including 4 independent directors, each bringing substantial expertise and experience to the Company. The directors' strong academic backgrounds and extensive industry knowledge empower them to effectively supervise management and make informed business decisions. All significant proposals requiring board approval are first submitted to the audit committee for preliminary review and discussion before being presented to the board for resolution. Board decisions are published on the Company's website to ensure transparency and safeguard shareholder interests.

To further enhance directors' professional competencies and legal knowledge, the Company requires each board member to complete a minimum of six hours of relevant training annually. SAS has instituted the "Directions for the Implementation of Continuing Education for Directors," which addresses key areas in corporate governance, including finance, risk management, operations, commerce, law, accounting, and corporate social responsibility. In 2025, director training courses covered trends and risk management in data governance and artificial intelligence, the impacts of Trump 2.0 tariffs and related tax policies, the current global economic situation and corporate risk responses, ESG, global net-zero initiatives, climate change, and other sustainability topics. For details of directors' continuing education, please refer to the Company's Annual Report.

Board Diversity

The Company's "Corporate Governance Best-Practice Principles" set out requirements for the composition of the Board and the collective competencies expected of its members. The Company has also established a board diversity policy. The composition of the board of directors has been determined by taking diversity into consideration, and appropriate policy on diversity based on the Company's business operations, operating dynamics, and development has been formulated, as the following two general standards:

I. Basic requirements and values: Gender, age, nationality, and culture.

II. Professional knowledge and skills: A professional background (e.g., law, accounting, industry, finance, marketing, technology), professional skills, and industry experience.

The Company values gender equality on the Board and has set a target of maintaining at least one female director, although it does not impose a mandatory gender diversity ratio as a selection criterion. To further enhance gender diversity, the Company will consider gender diversity in future director nominations and elections and give priority to professionally qualified candidates of different genders, with the aim of building a more inclusive and professional governance structure.

Board members possess diverse expertise and experience in operations management, industry knowledge, finance, and strategic management to implement the Company's board diversity policy. For details on directors' professional qualifications and the implementation of diversity, please refer to the Annual Report.

Board Member Recusal

The Rules of Procedure for Board of Directors Meetings and the organizational charter of the Audit Committee include the following provision: If a director or a juristic person represented by a director has an interest related to an agenda item, the director is required to disclose relevant details of the relationship at the meeting. When this relationship could potentially affect the interests of the Corporation, the director may present opinions and answer questions but is not permitted to participate in discussion or voting on the agenda item and must recuse themselves from both. Additionally, such directors may not vote as proxies for other directors.

SAS directors (including independent directors) are elected through a candidate nomination system in accordance with Article 192-1 of the Company Act. Shareholders elect directors from a nominated list, with each director serving a three-year term. In 2025, the SAS board of directors held five meetings, with an average attendance rate of 98%. Further details regarding the board's organization, members' professional and educational backgrounds, and attendance records are provided below:

Main academic (experience) background and attendance status of board members in 2025

Title	Name	Gender	Primary professional (educational) background	Actual no. of attendance	No. of presence by proxy	Actual presence (attendance) rate (%)	Notes
Chairperson	Hsiu-Lan Hsu	Female	• MA in Computer Science from University of Illinois • President of Sino-American Silicon	5	0	100%	Reelected on 2023.06.21
Vice Chairperson	Tang-Liang Yao	Male	• MA Degree from the Graduate Institute of Management at Tamkang University • Assistant Vice President of the Manufacturing Division of Lite-On Power Semi / President of Sino-American Silicon Products Inc.	5	0	100%	Reelected on 2023.06.21
Director	Ming-Kuang Lu	Male	• Honorary Doctor of Engineering, NCTU / Honorary Doctorate of Engineering, Datong University / Completed Entrepreneur Training Course, NCCU MBA Program • President of Lite-On Semiconductor Corp. / President of Lite-On Power Semi / Vice President of Silitek Corp. / Chairperson and CEO of SAS / Academician of ITRI	5	0	100%	Reelected on 2023.06.21

Title	Name	Gender	Primary professional (educational) background	Actual no. of attendance	No. of presence by proxy	Actual presence (attendance) rate (%)	Notes
Director	Wen-Huei Tsai	Male	• Accounting Department, National Chengchi University • Director of Easywell biomedical Inc. / Director of Ene Technology Inc.	5	0	100%	Reelected on 2023.06.21
Director	Feng-Ming, Chang	Male	• Master of Computer Engineering, USC / Master of Economics, Texas A&M University • Director of TECO Electric & Machinery Co., Ltd. / Director of Syntec Scientific Corp.	5	0	100%	Reelected on 2023.06.21
Director	Kai Jiang Co., Ltd. Representative: Hau Fang	Male	• MA in International Business Management from National Chengchi University • Vice President of Taiwan United Medical Inc.	5	0	100%	Reelected on 2023.06.21
Representative: Hau Fang	Kun-chang Investment Company Representative: Edward Andrew, Ow	Male	• Department of Energy Economics, U.C. Berkeley • Chairman of Edison's Co., Ltd. / Director of VIA Faith and Love Charity Foundation / Director of Chinese Christian Faith and Love Foundation	4	1	80%	Reelected on 2023.06.21
Independent Director	Jin-Tang, Liu	Male	• Bachelor of Accounting, Tamkang University • CPA of KPMG / 21st Council Member of CPA Associations R.O.C. (Taiwan) / Teaching Assistant, Tamkang University	5	0	100%	Reelected on 2023.06.21
Independent Director	Hou-Chung, Kuo	Male	• PhD, Electrical Engineering and Computer Science, University of Illinois, Urbana-Champaign	5	0	100%	Reelected on 2023.06.21
Independent Director	Shao-Lun, Li	Male	• PhD in Materials Science, University of California/ Executive Vice President of Lam Research / Director of TVBS / Supervisor of HTC Corporation / President of Chander Electronics corp.	5	0	100%	Reelected on 2023.06.21
Independent Director	Chien-Yung Ma	Male	• Master of Material Science and Engineering, National Taiwan University/Ph.D. in Metallurgy from the University of Stuttgart, Germany • Chairperson of Solar Applied Materials Technology Corp./Section Leader at the Institute of Materials and Optoelectronic, Chung-Shan Institute of Science & Technology/Director of Highlight Tech Corp./Chairperson of Forcera Materials Co., Ltd.	5	0	100%	Elected on 2023.06.21

Remuneration Committee

SAS has established a Remuneration Committee to implement a systematic remuneration system. The Remuneration Committee is in charge of formulating and reviewing performance assessment and remuneration policies, systems, standards, and structures for directors and managers.

- Regular assessment of corporate governance and operational performance of directors and managers by the Remuneration Committee
- Ensure that the performance of directors and managers are consistent to their personal remuneration.
- Propose amendments and assist the board of directors in the implementation and evaluation of the Company's overall remuneration, welfare policies, and the remuneration of directors and managers.
- Evaluation and review for the future shall include sustainable performance within the scope of remuneration evaluation.

A total of 3 meetings were held in 2025, with an average attendance rate of 92%.

For details on Remuneration Committee resolutions, please refer to the SAS 2025 Annual Report.

▲ Remuneration Committee Charter

Audit Committee

SAS has an Audit Committee composed entirely of independent directors to provide oversight as part of its corporate governance framework. The Audit Committee's responsibilities include reviewing and discussing financial reports, overseeing the qualification, selection, dismissal, independence, and performance of CPAs, evaluating public CPA expenses, implementing and amending the Company's internal control system, monitoring legal compliance, and identifying existing or potential risks for the Company.

In 2025, the Committee convened five times, with an average attendance rate of 90%.

For details on Audit Committee resolutions, please refer to the SAS 2025 Annual Report.

▲ Audit Committee Charter

Nomination and Sustainability Committee

In response to evolving corporate governance and sustainable development trends, and to strengthen the Board of Directors' oversight of ESG-related matters, the Company's 4th Board Meeting of the 15th Board of Directors, held on November 7, 2025, approved the renaming of the "Nomination Committee" to the "Nomination and Sustainability Committee." The Committee's responsibilities were expanded to include sustainability-related matters within its scope of authority. The Committee consists of six directors, including four independent directors. Its primary responsibilities include establishing and enhancing the organizational structure of the Board of Directors and its committees; identifying, reviewing, and nominating candidates for directors and senior executives based on the Board's needs for professional knowledge, skills, experience, diversity attributes (including gender), and independence; formulating and reviewing directors' continuing education programs; and overseeing succession planning for directors and senior executives. From a sustainability perspective, the Committee is also responsible for overseeing the Company's fulfillment of its corporate social responsibility commitments and sustainable development strategies, including the planning, implementation, and monitoring of environmental, social, and governance (ESG) initiatives.

A total of 1 meeting was held in 2025, with an average attendance rate of 100%.

For details on the resolutions of the Nomination and Sustainability Committee, please refer to the SAS 2025 Annual Report.

▲ Nomination and Sustainability Committee Charter

Performance Evaluation of the Board of Directors and Functional Committees

To implement corporate governance and improve the functions of the Board of Directors and its committees, the Company sets performance targets to support operational efficiency. According to the "Rules for Performance Evaluation of Board of Directors and Functional Committees," annual evaluations are conducted for the board and its committees. Results are compiled and submitted to the Board of Directors by the end of the first quarter of the following year. Additionally, the Board's performance is evaluated by external professional independent organizations or expert teams at least once every three years, with results also submitted to the Board.

Implementation Status of the Annual Internal Evaluation for the Board of Directors and Functional Committees

At the end of each year, the President's Office coordinates the internal evaluation process. Internal questionnaires are collected, and evaluations are completed through self-assessment by board members and committee members. The scope includes evaluations of the entire Board, individual directors, and functional committees. Criteria include participation in company operations, decision-making quality, composition and structure, selection and training, and internal controls. In addition, ESG-related indicators and oversight of sustainable development are incorporated into the evaluation criteria to strengthen the linkage between directors' performance and the Company's sustainability objectives. The 2025 performance evaluation result was rated as excellent. The Board of Directors and all functional committees operated effectively and met the Company's corporate governance requirements.

Implementation Status of External Evaluation for the Board of Directors

In addition to internal performance evaluations, the Company conducts an external board performance evaluation at least once every three years. In October 2024, the Company engaged the Taiwan Corporate Governance Association as an external independent evaluator for the Board's performance. The assessment covered five areas: board composition and division of responsibilities, guidance and oversight, authorization and risk management, communication and collaboration, and board self-discipline and continuous improvement. Questionnaires and on-site visits were used for the review, with findings and recommendations provided by the Association.

The Company reported the above evaluation results to the Board of Directors on February 27, 2025. For the board performance evaluation results, please refer to SAS website.

Linking Board Governance and Sustainability Performance

The Company evaluates directors' performance and remuneration by considering not only customary industry standards and role-based compensation benchmarks but also operational outcomes and level of engagement. This includes factors such as attendance, communication frequency, contributions made, and both financial (e.g., revenue and profit attainment) and non-financial metrics (e.g., legal compliance, adherence to internal controls, ESG performance, and notable accomplishments). Remuneration decisions incorporate a thorough assessment of these elements along with an evaluation of future risks, ensuring alignment between compensation, managerial responsibilities, and overall director performance.

For non-financial measures, in support of the Company's commitment to sustainable development, ESG (Environmental, Social, and Governance) criteria are integrated into senior executive performance reviews—including those for the President, Vice President, and Plant Managers. The specific ESG indicators and their respective weightings are tailored for each executive according to their unique duties and scope of responsibility. Examples include domestic and international ESG ratings, climate change initiatives (such as greenhouse gas reduction, achievement of energy-efficiency and carbon-reduction targets, and ratio of renewable energy usage), and promotion of occupational health and safety. The weighting of ESG-related indicators is determined separately and is limited to within 20%. During the performance evaluation process, senior executives are assessed based on the achievement of the aforementioned individual ESG performance indicators and their respective weighting percentages. The resulting ESG performance evaluation is incorporated into the calculation of remuneration.

Board of Directors

- Submission of motions to the board of directors for discussion in accordance with the laws.
- Comply with Directors' Avoidance of Conflicts of Interest.
- Review the Company's accounting system, financial status and financial reports, audit reports, and tracking status.
- Board directors and certification accountants conduct communication. In events of new accounting bulletins or major adjustments in financial reports, there will be meetings for Q & A with accountants and for discussions.
- Assessment and monitoring of existing or potential risks.
- Whether board directors have all completed the training hours as required by governing authorities.
- Attendance rate of each board meeting is 2/3 and above.
- Over 1/2 directors attended the shareholders meeting.
- Board directors and the Company's management executive maintain an excellent communication channel.

Remuneration Committee

- The Remuneration Committee Chairperson is able to direct meeting proceedings and thereby ensures effective and efficient discussions and resolutions.
- All Remuneration Committee members possess professional knowledge of the industry and compensation management competence.
- All remuneration committee members are all fully aware of the core targets of the organizational operation, and familiar with all remuneration plans within the Company as well as all composition factors of the board directors' and managers' salaries.
- Formulate and regularly review the Company's salary policies, systems, standards and structure.
- The assessment results of the board directors' and managers' performance indicators are applied as the key basis for remuneration planning and distribution so as to make objective and fair decisions.
- Formulate and regularly review the board performance assessment system to see if it connects with the payment guidelines for the board emoluments.
- Regularly report to the board of directors the remuneration committee's discussion and resolutions.

Audit Committee

- Clear understanding of the roles and responsibilities of the entire Audit Committee and its individual members.
- Regularly report to the board of directors the audit committee's activities, problems uncovered and relevant suggestions.
- All Audit Committee members possess professional knowledge of the industry including diverse experience and professional backgrounds.
- Annually and regularly review the audited and non-audited public funds and services provided by certification accountants and affirm the scope of audit services provided.
- Review, along with certification accountants, any audit-related problems and challenges, as well as response of the governing authorities.
- Regularly meet with internal auditor to assess the effectiveness of internal audit results. Meet with individual auditors at least once a year or whenever necessary.
- During the review process, the audit committee effectively identify and assess major risks and evaluate the necessary steps to take for risk control.
- Has evaluated and monitored the Company's existing or potential risks.
- Review with prior approval of proposed transactions with interested parties to ensure conformity to relevant policies and report approved transactions to the board.

Nomination and Sustainability Committee

- Provide due care as good managers, faithfully perform their duties, and submit their suggestions to the board of directors for discussion.
- Seek, review, and nominate candidates for directors and senior managers based on the professional knowledge, technology, experience, gender, and other diverse backgrounds as well as independence needs of board members and senior managers.
- Construct and develop the organizational structure of the board of directors and the various committees; and conduct performance evaluations of the board of directors, committees, and directors in order to evaluate the independence of independent directors.
- Formulate and review director training and succession plans for directors and senior managers.
- Oversee the planning, implementation, and effectiveness of the Company's corporate social responsibility and sustainable development strategies, covering environmental, social, and governance (ESG) aspects.

1.1.2 Integrity & Ethics

Core Values

Honesty and integrity are fundamental values at SAS. To foster an environment grounded in ethical management, SAS has established comprehensive regulations and communication channels for all directors, executives, and employees. By implementing stringent management systems, the Company mitigates risks related to integrity while continuously creating value for customers and generating returns for shareholders and other stakeholders.

Internal Regulation System

SAS enforces integrity management through key internal policies such as the "Ethical Corporate Management Best Practice Principles," "Codes of Ethical Conduct," and the "Procedures for Ethical Management and Guidelines for Conduct." These documents outline precise expectations for directors, managers, and employees during business operations, including standards for integrity, ethical conduct, prohibition of undue hospitality or improper gain, protection of intellectual property rights, avoidance of anti-competitive practices, and management of conflicts of interest. All documents are accessible on both the Company's public and internal websites, ensuring that staff can regularly consult them to enhance compliance and ethical awareness.

For colleagues involved in marketing and procurement, the importance of ethics and integrity is reinforced through "Sales Management Measures" and "Procurement Management Measures." A robust legal compliance framework addresses issues like fair competition, due diligence, trade controls (including trading counterparts, subject matter, intended use, cash flows, and applicable trade restrictions), anti-corruption, anti-bribery, and mechanisms for preventing and managing conflicts of interest. SAS also employs supply chain oversight to ensure adherence to conflict-free mineral requirements.

Anti-Corruption Policies

SAS maintains a zero-tolerance stance towards corruption, as stated in its "Anti-Corruption Policy": no bribery, no acceptance of bribes, and no solicitation of bribes. This policy is detailed within the "Ethical Corporate Management Best Practice Principles" and the "Procedures for Ethical Management and Guidelines for Conduct," which stipulate that employees are prohibited from offering, promising, requesting, or receiving improper benefits during business activities. Specific procedures require employees to document and report incidents involving threats or offers of illicit benefits to their supervisor and the compliance unit; When benefits are offered or promised by others, employees shall return or decline such benefits and report the matter to their supervisor and notify the compliance unit; any unreturnable items must be submitted to the legal compliance office within three days of receipt. To align with the electronics industry's RBA Code of Conduct 8.0, SAS has expressly stipulated in its "Procedures for Ethical Management and Guidelines for Conduct" the cost and frequency limits applicable to gifts given to or received from suppliers or customers. Specifically, where gifts are exchanged based on business needs during domestic or overseas visits, reception of guests, business promotion, communication, or coordination activities in accordance with local courtesy, practices, or customs, the market value of such gifts shall not exceed NT$800. In addition, benefits received from the same party shall not exceed NT$2,000 per year.

SAS arranged Anti-corruption and Anti-bribery Training for directors, department-level managers and above, and all new employees in 2025 (Note: this training was incorporated into the Ethical Corporate Management Training Program and the Responsible Business Alliance Labor and Ethics Code of Conduct Training Program. For participation statistics, please refer to Section 1.1.4 "Regulatory Compliance".) The training was designed to clearly communicate proper ethical concepts, enhance legal compliance awareness, and ensure that corruption risks are appropriately controlled:

1. Remain vigilant of interests that could influence business decisions.
2. Refrain from giving, accepting, or demanding bribes under any circumstances.
3. Avoid providing gifts or gratuities before or after transactions.

SAS has identified higher-risk units and personnel with elevated corruption risks at its Headquarters, Chunan Branch, Yilan Branch, and subsidiaries (GlobalWafers, Sunrise, and SGE) through the use of tools such as self-assessments, email monitoring, qualitative interviews, and donation reviews. Based on the assessment results, the Company prepares and submits an "Integrity Risk Assessment Report" on an annual basis. According to the 2025 assessment results, no systemic risks that could potentially lead to significant corruption were identified, and the existing prevention and control mechanisms were confirmed to remain effective and comprehensive.

In addition, considering that the sales and procurement departments, by the nature of their responsibilities, serve as frontline external-facing units and are therefore exposed to a greater number of internal and external incentives and opportunities for unethical conduct (such as money, gifts, services, entertainment, and facilitation payments), SAS has incorporated anti-bribery and anti-corruption provisions into its Sales Management Regulations and Procurement Management Procedures, respectively. These provisions prohibit any form of bribery or corruption, including directly or indirectly offering, promising, providing, requesting, or accepting bribes, unreasonable gifts, entertainment, or any other improper benefits from any third party. Any violations are subject to disciplinary actions in accordance with the Company's employee reward and disciplinary regulations and may result in criminal and civil liabilities. If such conduct causes damage to SAS, the responsible party shall also be liable for compensating the Company for all losses incurred.

In addition to the internal risk control measures described above, SAS expects all suppliers and customers to adopt the highest standards for corruption prevention. Through its Supplier Code of Conduct and Customer Code of Conduct, the Company communicates its anti-bribery and anti-corruption principles to all counterparties. SAS requires suppliers and customers not to offer or accept bribes to or from SAS or its representatives under any circumstances for the purpose of influencing transaction decisions. Furthermore, SAS requires sales and procurement personnel to complete the Customer/Distributor/Agent Integrity Management Assessment and the Supplier Integrity Management Assessment, respectively, prior to establishing business relationships, as part of the process for evaluating transaction risks.

Through continuous anti-corruption and anti-bribery training programs, SAS employees have developed a high level of awareness regarding the prevention of corrupt practices.

For more information, please refer to the SAS website.

Recusal for Conflicts of Interest

SAS places great emphasis on ethical integrity, as codified in the "Ethical Corporate Management Best Practice Principles," "Procedures for Ethical Management and Guidelines for Conduct," and "Codes of Ethical Conduct." Directors, managers, and relevant participants with conflicts of interest regarding board proposals must disclose such conflicts; when conflicts could adversely affect the Company, affected individuals are recused from deliberation and voting.

To prevent conflicts of interest, SAS stipulates that employees shall not use their positions within the Company to obtain improper benefits for the following persons or entities:

- Themselves, their spouses, parents, children, or relatives within the second degree of kinship;
- Enterprises in which the aforementioned persons directly or indirectly hold substantial financial interests;
- Enterprises in which the employee concurrently serves as chairperson, director, independent director, or senior executive.

SAS has established appropriate channels through which directors, independent directors, and managers may voluntarily disclose whether they have any actual or potential conflicts of interest with the Company. In addition, in accordance with the RBA Code of Conduct 8.0 adopted by the electronics industry, SAS has established the "Employee Conflict of Interest Declaration and Acknowledgement Form." The form is distributed to and signed by all new employees upon onboarding. It is used to communicate the key principles and management measures relating to conflict-of-interest avoidance, confirm that employees do not have conflicts of interest, and ensure that employees clearly understand their obligation to proactively report any actual or potential conflicts of interest.

Insider Trading Prevention and Anti-Money Laundering

To enhance corporate governance and prevent insider trading, Sino-American Silicon has established the "Procedures for Prevention of Insider Trading," which require insiders, quasi-insiders, and recipients of information to refrain, in accordance with the law, from buying or selling the Company's listed shares, shares traded on securities firms' business premises, or other equity-type securities, or from selling the Company's listed or OTC-traded non-equity corporate bonds, when they have actual knowledge of material information, during the period after such material information has become definite but before it is publicly disclosed, or within 18 hours after its public disclosure. This is intended to prevent people who become aware of material information from inadvertently crossing the insider trading red line due to unfamiliarity with applicable laws and regulations. In addition, the "Management Procedures for Preventing Insider Trading" stipulate that directors, managers, and natural persons designated to exercise duties on behalf of corporate shareholders pursuant to Article 27, Paragraph 1 of the Company Act shall not trade the Company's shares during the closed periods of 30 days prior to the announcement of the annual financial report and 15 days prior to the announcement of each quarterly financial report. The Company assigns the President's Office to notify the regulated person of the prohibited trading closed periods each year after the board meeting schedule for the following year has been arranged, and the President's Office reviews the compliance status of such regulated persons during the monthly shareholding declaration process.

In addition, with respect to anti-money laundering issues, considering that Sino-American Silicon's principal businesses are the sale of solar ingots, wafers, cells, modules, and energy storage products, as well as the development, operation and maintenance, management of photovoltaic project sites, and the sale of green electricity, and that the Company is not a financial institution subject to anti-money laundering regulations, and taking into account factors such as the origin of money and routing of money, the Company assesses that its risk of involvement in money laundering is very low, as explained below:

1. Source of Funds: The Company mainly generates operating revenue as consideration through legitimate and proper business activities, such as product sales and the provision of photovoltaic project site services. Therefore, there is no possibility that the Company's operating activities would generate illegal proceeds, and there is no concern of money laundering.
2. Flow of Funds: The risk that the Company's operating activities involve money laundering or assist customers in money laundering is very low. Since the Company does not primarily engage in purchasing agency or distribution as its main business model, nor does it conduct procurement based on specific material sources designated by customers, it is not involved in transaction structures with higher money laundering risks. For example, the Company does not participate in arrangements where a customer designates a specific supplier affiliated with the customer and, through triangular trade, converts funds derived from the customer's illegal proceeds into legitimate revenue recorded by the customer's affiliated enterprise. Accordingly, the Company is unlikely to become a tool for others to transfer or conceal illicit funds, and there is little possibility that the Company would assist in money laundering.

Information Management and Confidentiality Measures

To prevent information-related violations of ethics and integrity, Sino-American Silicon has established comprehensive information management and confidentiality measures. These measures provide holistic management covering internal personnel, external stakeholders such as customers and suppliers, and institutional mechanisms, to ensure that the confidential information and intellectual property rights of the Company and its stakeholders are properly protected.

1. Internal Personnel Information Confidentiality Management

   The Company signs the "Intellectual Property Rights and Confidentiality Agreement" with all employees, clearly stipulating that employees shall not disclose to others any Company trade secrets learned through the performance of their duties, and prohibiting employees from inquiring about or collecting Company trade secrets unrelated to their duties, thereby implementing the principles of legitimacy and necessity in the use of information. In addition, the Company has established the "Procedures for Handling Material Internal Information" to set up confidentiality firewall operations at both the personnel and information levels, ensuring that Company information is not improperly disclosed.
2. Confidentiality Mechanism for External Stakeholders

   The Company requires units that have close external interactions, such as marketing and procurement, to sign non-disclosure agreements (NDA) with suppliers and customers before establishing cooperative relationships. Confidentiality requirements are incorporated into the contracting process to ensure that confidential information exchanged during business dealings is not improperly disclosed, thereby protecting the rights and interests of both parties.
3. Intellectual Property Rights Management System

   The Company has established the "Intellectual Property Management Manual" to build a comprehensive management system for the acquisition, maintenance, protection, and utilization of intellectual property, as well as intellectual property from external suppliers or customers, such as trade secrets. Sino-American Silicon has obtained Level A certification under TIPS (Taiwan Intellectual Property Management System), demonstrating the maturity of the Company's intellectual property management and its continuous efforts for improvement.

Reporting Channel and Informant Protection

The Company has enacted the "Measures for the Report on Illegal, Unethical and Dishonest Acts" to support ethical management and clearly define disciplinary and appeals processes. Multiple confidential reporting channels—including suggestion boxes, dedicated email addresses, and hotlines—are available via the internal website. SAS commits to protecting whistleblowers from retaliation. The Company's 'Measures for Handling Reports of Illegal, Unethical, or Dishonest Conduct' expressly permit anonymous reporting in accordance with the "Ethical Corporate Management Best Practice Principles for TWSE/TPEx Listed Companies" and the "Guidelines for the Adoption of Codes of Ethical Conduct by TWSE/TPEx Listed Companies." (Website: https://www.saswafer.com/contact-2/).

Based on recommendations from external experts, Sino-American Silicon completed the sixth revision of the "Measures for the Report on Illegal, Unethical and Dishonest Acts" in 2025. The main optimization measures include the following:

1. Integrate an independent and trustworthy coordinating unit for reported cases, namely the Legal Affairs unit. When each responsible unit receives a report, it shall uniformly notify the Legal Affairs unit.
2. Add a "notification to independent directors" procedure, enabling independent directors to simultaneously and promptly understand the status of reported cases and supervise subsequent handling, thereby further strengthening the whistleblower mechanism.
3. Add the principle that handling personnel shall recuse themselves in the event of a conflict of interest.

Personnel involved in verifying and handling reports shall provide written assurance to whistleblowers that their identities and report contents will be kept confidential. When a violation is confirmed, appropriate disciplinary action is taken based on severity. The reporting process and contact points are outlined below:

1. Acceptance Unit and Accepted Party

Acceptance Unit	Accepted Party
Spokesperson	1. Shareholders, 2. Investors, 3. Other interested parties
Personnel manager	1. Company insiders, 2. Customers, 3. Suppliers, 4. Contractors
Legal Affairs and Independent Directors	Same as spokesperson and personnel supervisor accepted parties

3. Processing Unit and Procedure

The Accused	Processing Unit
Non-managerial Employees	Human Resources Legal Affairs may assist
Managerial Employees	Human Resources and Legal Affairs
Director	The Audit Committee shall handle the case itself or designate appropriate personnel to handle it.

2. Reporting Procedure

When the acceptance unit receives a report, it shall uniformly notify the Legal Affairs Department.

The Legal Affairs Department shall report to the Chairperson for case assignment and simultaneously notify the independent directors.

4. Procedure for Management

Steps	Responsible Unit	Content
1. Investigate the Facts	Human Resources, Legal Affairs	• Investigate the relevant facts immediately; if it is believed that there is indeed a risk of unethical behavior, submit the case to the Chairperson of the board of directors for case delegation. • The relevant personnel handling the case shall issue a written disclosure to keep the identity of the informant and the content of the report confidential. • Written records of report acceptance and investigation shall be kept for 5 years.
2. If verified to be true	Human Resources, Legal Affairs	• The perpetrator is required to stop the relevant behaviors and shall be properly disciplined via the Company's internal procedures or legal procedures. • Information such as the job title, date of violation, facts of violation, provisions violated, and handling status shall be disclosed on the Market Observation Post System. (the same shall apply to those receiving immunity from the board of directors) • If necessary, report to the competent authority or transfer the case to the judicial authority for investigation. • The relevant unit of the perpetrator shall review the internal control system and operating procedures, and propose improvement measures. • The investigation results shall be recorded in writing and be kept for 5 years.
3. Relief	Human Resources	• Give the perpetrator the opportunity to appeal and convene a Personnel Appraisal Committee hearing if necessary.
4. Report to the board of directors	Legal Affairs	• Submit the case reported, the handling method, and the subsequent review and improvement measures to the board of directors.

In 2025, Sino-American Silicon provided employees with "Training on the Use of Reporting Channels" (Note: this training was incorporated into the Ethical Corporate Management training course. For the training participants and number of participants, please refer to Section 1.1.4 "Legal Compliance"). The content included the methods of using reporting channels and their applicable scope. The Company communicated to employees that anonymous reporting is permitted, that all reported cases are kept confidential throughout the entire process and handled impartially, and that the Company is committed to protecting whistleblowers to ensure that they will not be retaliated against for making reports, thereby enhancing employees' understanding of and trust in the reporting system.

Statistics on Violations of Integrity and Ethics

In 2025, one corruption incident was confirmed at a subsidiary of Sino-American Silicon. The internal investigation was completed in accordance with established procedures, and appropriate disciplinary action was taken. At the same time, the Company continues to strengthen its internal control and integrity management mechanisms, including reviewing supplier management and optimizing relevant operating procedures. In addition, through ongoing ethical corporate management training, the Company reinforces employees' awareness of and compliance with its Ethics and integrity principles. Apart from this incident, in 2025 the Company had no other cases involving violations of the Ethical Corporate Management Best Practice Principles, such as providing illegal political contributions, improper charitable donations or sponsorships, involvement in corruption, or failure to report and recuse in accordance with regulations in the event of conflicts of interest. There were also no incidents involving the unlawful leakage of confidential information. In addition, in 2025, Sino-American Silicon's operating activities did not involve any violations of competition laws or infringement of privacy rights, the Company's business did not involve any money laundering activities, and no directors or managers engaged in insider trading. Sino-American Silicon will continue to review and optimize the details of each work item, striving to eliminate any room for unethical or dishonest conduct.

Personal Data Protection

Sino-American Silicon has established the "Privacy Policy" for any data from internal or external sources that can directly or indirectly identify a natural person, and has disclosed it on Sino-American Silicon's official website. To implement personal data protection, SAS has established a "Privacy Policy" applicable to all companies in the SAS Group. The Policy covers any data subject involved in business operations, including but not limited to employees, counterparties (including customers), and contractors, where the data can directly or indirectly identify a natural person. The "Privacy Policy" is intended to explain the standards and procedures that Sino-American Silicon shall follow in the process of collecting, processing, using, accessing, and disclosing data that can identify a specific natural person, namely personal data. Its specific content includes three aspects: "Privacy Protection," "Collection, Processing, and Use of Personal Data," and "Security Measures," as explained below:

（1）Privacy Protection:

- The Company adheres strictly to all relevant privacy and personal data protection laws and regulations.
- The Company and its personnel shall fulfill their duty of care and adopt confidentiality measures for personal data throughout the entire process to prevent any unauthorized information disclosure or access to data by unauthorized personnel. The Company is committed to ensuring that the methods of collecting, processing, using, accessing, and disclosing personal data are sufficient to fully protect the privacy characteristics of such data.
- Personal data accessed by employees shall be based on the principle of need-to-know for the performance of business duties. The use of personal data shall be limited to the minimum extent necessary for business operations and shall not go beyond the original purpose for which the data were collected.

（2）Collection, Processing, and Use of Personal Data:

- Proportionality Principle: Personal data is collected, processed, and used only to fulfill legitimate business objectives, with strict limitations placed on type, volume, duration, and retention.
- Right to be Informed: Prior to data collection, the Company explicitly communicates the intent and scope to the data subject. When mandated by law, the subject is informed verbally or in writing regarding collection intent, duration, retention period, methods, recipients, and statutory rights. Where legal consent is required, it is duly obtained.
- Purpose Limitation: Usage of personal data is confined to the specific, original purposes of collection except where expanded scope is permitted by law or consent is granted by the data subject.

（3）Security Measures:

- All responsible units within the Company undertake reasonable actions to protect personal data security.
- In cases of data theft, alteration, damage, loss, unauthorized use, or leakage, prompt emergency measures are enacted and affected data subjects are notified alongside details of the incident and corresponding countermeasures.
- The Compliance Unit conducts regular audits and coordinates personal data protection training to ensure ongoing adherence to legal requirements across all data-related activities.

Beyond the aforementioned "Privacy Policy," the Company has instituted "Regulations for Personal Information Protection Management" to oversee data handling and regulate employee conduct associated with personal information collection, processing, and usage in business operations. The Company's Legal Compliance unit conducts regular audits once every two years and organizes "Personal Data Protection Education and Training." It requires the units responsible for data to conduct inventories of personal data involved in business activities, ensuring that the collection, processing, and use of personal data by such responsible units are all carried out in compliance with the Personal Data Protection Act.

In 2025, the Human Resources unit arranged "Privacy Protection Training" (incorporated into the Responsible Business Alliance Labor and Ethics Code of Conduct Training). Training materials were made available on the internal employee system. Participation among all employees at Headquarters, Chunan Branch, Yilan Branch, and the subsidiaries (GlobalWafers, Sunrise, and SGE) reached 100%, totaling 1,822 employee participations; participation among new employees also reached 100%, totaling 317 participations.

In 2025, in accordance with the requirements of the "Privacy" indicator under Section D6 of the RBA Code of Conduct 8.0, the Company issued the Global Data Protection Survey to conduct audits of overseas sites. For any deficiencies identified, the Company provided guidance in accordance with local laws and regulations to establish or improve policies, measures, and procedure documents, and to sign documents required by local regulations, such as the PDPA Transfer Agreement, to ensure the continuous implementation of personal data protection at the highest standards. In 2025, the Company did not experience any unlawful incidents involving infringement of privacy rights, such as personal data leakage, theft, alteration, damage, loss, or disclosure.

1.1.3 Professional and Independent Internal Audit

The Audit Office reports directly to the Board of Directors and assists the Board and management in designing appropriate internal control mechanisms to promote efficient company operations and achievement of strategic objectives, including the following:

- Operational effectiveness and efficiency in areas such as profitability, performance, and asset protection.
- Reliability, timeliness, transparency, and regulatory compliance of both financial and non-financial reporting.
- Adherence to all applicable laws and regulations.

Internal auditors are expected to maintain objectivity and independence, exercising professional judgment and due care. Reports are regularly submitted to the Audit Committee (comprised of independent directors), and the audit supervisor attends board meetings to present findings. Audit staff must uphold integrity and ethical conduct, refraining from any actions that contravene the "Internal Audit Best Practice Principles" or the "Code of Ethics for Internal Auditors."

Against the backdrop of trends in international capital markets and stakeholders' growing emphasis on corporate sustainable development, the corporate governance unit has incorporated sustainability topics into the overall management framework in addition to monitoring operating performance. The Audit Office participates in relevant management or third-party assurance activities and assists responsible units in establishing internal control systems. It adjusts the focus and direction of audit work accordingly to provide reasonable assurance regarding the reliability of sustainability-related information and the effective operation of internal controls.

Implementation activities include:

Establishment and Self-assessment of Internal Control Systems:

Assist managers in designing appropriate internal control mechanisms and conduct the "Internal Control System Self-Assessment Operation." Each department conducts a self-assessment of the implementation status of internal controls within its scope of authority and responsibility. This not only achieves the effect of self-review, but also strengthens the internal control concepts of the departments being evaluated.

Resolution and Follow-up of Audit Issues:

Improvement strategies are discussed with audited units, and progress is tracked to ensure effective remediation.

Annual Audit Plan Development and Execution:

Risk-based audit plans are formulated and carried out for operating procedures, with identified deficiencies addressed via recommendations to improve control proficiency.

Reporting:

Audit results are communicated to the Audit Committee and board of directors, highlighting control weaknesses and facilitating improved supervision and governance.

Project Audits and Advisory Services:

Conduct project audits in response to potential risks, including fraud and corruption, proposed by senior executives, and provide recommendations accordingly to enhance the soundness of internal controls.

Subsidiary Audit Operations:

Support is provided for subsidiaries in establishing audit mechanisms and performing self-assessments; findings are pursued until resolved, and annual plans are executed with follow-up as needed.

1.1.4 Regulatory Compliance

SAS formulates policies and provisions in accordance with applicable domestic and foreign laws and regulations. The Company requires all employees to adhere to relevant legal requirements through ongoing education, training, promotion efforts, and regular inventory and self-evaluation measures to maintain awareness of legal compliance and ethics. In 2025, SAS conducted several training sessions on compliance-related topics:

- Insider Trading Prevention Training (1 hour):
  To address insider trading risks, the Company schedules insider trading training for directors and department-level managers every two years. This training is also mandatory for new employees and newly appointed directors. Course materials are accessible via the internal employer system. Topics include insider trading regulations, disclosure requirements for material information, judicial interpretations, and obligations concerning changes in insider shareholding.
  In 2025, the designated mandatory participants from the Headquarters, Chunan Branch, Yilan Branch, and subsidiaries (GlobalWafers Taiwan region, Sunrise, and SGE) included 19 directors, 117 department-level managers and above, and 159 new employees. The completion rate for all aforementioned categories of mandatory participants reached 100%.
- Ethical Corporate Management Training (1.5 hours):
  The Company provides ethical management training for directors and department-level managers every two years, and it is required for new employees and newly appointed directors. Materials are provided internally. The course covers trade secret protection, fair trade, anti-bribery, anti-corruption, prevention of conflicts of interest, export control, and other material legal compliance topics relevant to the technology industry, as well as guidance on the use of whistleblower reporting channels.
  In 2025, the designated mandatory participants from the Headquarters, Chunan Branch, Yilan Branch, and subsidiaries (GlobalWafers Taiwan region, Sunrise, and SGE) included 19 directors, 112 department-level managers and above, and 159 new employees.
- Responsible Business Alliance Labor and Ethics Code of Conduct Training (0.5 hours):
  To fully communicate the Company's labor and ethics policies and the relevant requirements of the RBA (Responsible Business Alliance Code of Conduct), The Company provides annual ethics and integrity training to all employees and new hires. The training is conducted through training courses or onboarding handbook training. The content covers RBA-related topics of concern, including the Company's Human Rights Policy, prohibition of forced labor, protection of young workers, anti-discrimination, anti-harassment, freedom of association and collective bargaining, ethical corporate management, anti-corruption, anti-bribery, prevention of conflicts of interest, protection of intellectual property, fair trading, responsible sourcing (prohibition of conflict minerals), privacy protection, and whistleblower protection. Course materials are also made available on the internal employee system for reference. In 2025, the participation rate of all employees at the Headquarters, Chunan Branch, Yilan Branch, and subsidiaries (GlobalWafers Taiwan region, Sunrise, and SGE) reached 100%, totaling 1,822 participants; the participation rate of new employees also reached 100%, totaling 317 participants.

SAS also implements ongoing internal reviews and cross-auditing at each plant to identify potential risks and improve internal management. In 2025, one penalty was imposed within SAS's organizational boundary:

- Subsidiary GlobalWafers was fined NT$10,000 for failing to operate in accordance with the approved water pollution control measures, in violation of Article 18 of the Water Pollution Control Act and Article 4 of the Water Pollution Control Measures and Test Reporting Management Regulations.

SAS has established policies and guidance documents to comply with sector-specific regulations.

Securities regulations	Robust management framework Sino-American Silicon is listed on the Taipei Exchange OTC market and must comply with the Securities and Exchange Act and related regulations. • The President's Office has established effective communication channels with the appropriate regulatory authorities. • Upon verification, the Legal Department shall monitor evolving legal trends, review new regulations and proclamations, and track legislative developments. The department is responsible for notifying relevant divisions to develop appropriate response measures as needed. Should inquiries arise from any division, the Legal Department will research applicable regulations and, after consulting and confirming with the competent authority, provide accurate and informed responses.
Labor Laws and Regulations	Full compliance with labor laws • Set up work systems and management standards in accordance with labour laws and regulations, promote suitable labour conditions and effective communication mechanisms, and facilitate appropriate labour-management interactions among colleagues. • The Company values employee compensation and benefits, actively cultivates talent, and implements labor laws and regulations to protect employees' rights and interests. For significant changes related to pay, benefits, or leave, employees are informed beforehand via labour-management meetings, electronic newsletters, or HR board announcements, with the aim of ensuring their rights are protected.
Data management	• Key policy documents: Employee Employment, Trade Secret Protection, and Intellectual Property Ownership Agreement, Codes of Ethical Conduct, Procedures for Handling Material Internal Information, Intellectual Property Management Manual, and Intellectual Property Rights and Confidentiality Agreement. • Management mechanism: Promote intellectual property and trade secret awareness through posters, slogans, employee training, and confidentiality agreements for relevant staff.
Personal Data Protection	• Key Policy Documents: Privacy Policy, Personal Information Protection Management Regulations • Management Mechanism: Implement periodic inventory audits and conduct training sessions regarding personal data within business operations to ensure that responsible departments collect, process, and utilize personal data in strict accordance with the Personal Data Protection Act.
Corporate governance / Supervision over subsidiaries	• Key policy documents: Ethical Corporate Management Best Practice Principles, Codes of Ethical Conduct, Procedures and Guidelines for Ethical Management, and Measures for the Report on Illegal, Unethical and Dishonest Acts. • Management Mechanism: Incorporate ethical corporate management-related requirements, such as anti-bribery/anti-corruption, prevention of conflicts of interest, and use of reporting channels, into employee education and training content, enabling employees to follow clear codes of conduct.
Environmental/ OSH laws and regulations	• Key policy documents: Identify and manage environmental, occupational safety, health laws, regulations, and related requirements. • Management mechanism: Each month, review compliance with changes in environmental protection, occupational health and safety, and other related laws and regulations or requirements. Regularly assess compliance with other applicable regulatory requirements.

1.2 Operational Performance

In 2024, the renewable energy industry benefited from governments around the world focusing on energy transition, as energy policies were gradually improved and implemented, and the market scale continued to grow. Sino-American Silicon's solar business not only steadily maintained its existing position in the supply chain, but also deepened its downstream system business, strengthened vertical integration to improve operating profit margins, and continued to develop high-conversion-efficiency products to meet market demand. In addition, the Company actively expanded its presence in renewable energy. Its subsidiary SES integrates self-built solar power plants and develops different types of green energy, successfully providing Taiwanese enterprises with diversified green electricity services. SES also became the first electricity retailer in Taiwan to sign an offshore wind Corporate Power Purchase Agreement (PPA), rising to become one of Taiwan's important renewable energy electricity retailers. This not only consolidates Sino-American Silicon's deployment in the renewable energy sector, but also provides strong support for the energy transition of semiconductor supply chain partners. Although end-consumer demand in the semiconductor business remains uncertain, subsidiary GlobalWafers has signed long-term agreements with customers and is actively reallocating global production capacity to maintain stable shipments. In 2025, consolidated revenue was NT$78.17 billion, net income attributable to the parent company was NT$4.11 billion, and earnings per share after tax were NT$6.71. The decline in Sino-American Silicon's net income after tax and earnings per share in 2025 compared with 2024 was affected by the decrease in gross profit at subsidiary GlobalWafers, as part of its overseas capacity expansion had not yet reached economic scale.

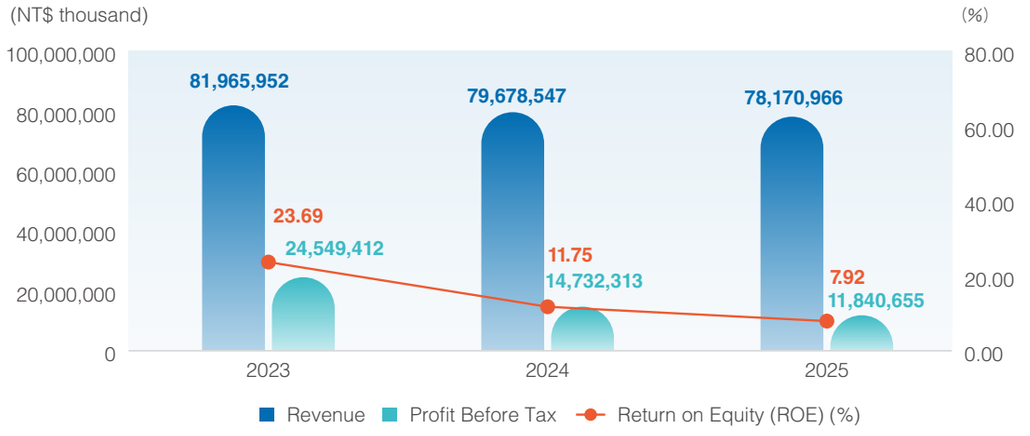
For details on the Company's operating performance and financial information, please refer to SAS Group 2025 Consolidated Financial Statements Page No. 6. For defined benefit obligations and other retirement plans, please refer to Note 8(6)(15), Employee Benefits, of Sino-American Silicon's 2025 parent-company-only financial statements.

In 2025, 100% of SAS's production capacity was sourced from its own facilities. For the relevant production volume data, please refer to the table below.

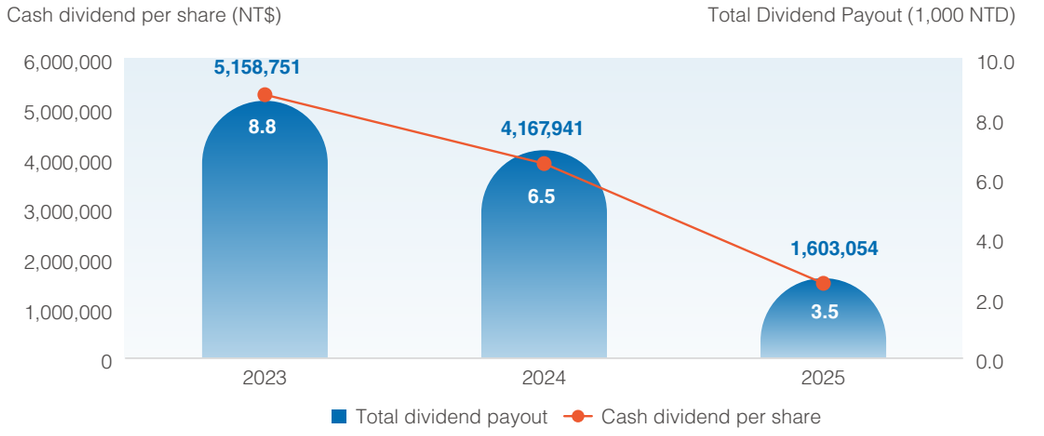
Unit: NT$ Thousand

Year	2025		
Product	Capacity	Production Volume	Production Value
Solar Ingots (thousand kg)	4,507	1,014	909,482
Solar Cells (thousand pieces)	52,800	20,451	1,285,201
Semiconductor Ingots (thousand pieces)	453	331	3,503,133
Semiconductor Wafers (thousand pieces)	48,082	37,910	37,889,368
Total			43,587,184

Financial Performance (Consolidated)



Cash Dividend



2025 Economic Value Analysis

Unit: NT$ thousand

Generated Direct Economic Value	Annual report: revenue	78,170,966
Distributed Economic Value	Operational costs	58,600,109
	Employee salaries & benefits Note1	17,129,894
	Payment to investors	2,244,276
	Payment to the government Note 2	4,451,358
	Community resources Note 3	9,745

Note 1: In 2025, the Human Capital Return on Investment (HCROI) was 5.05
Note 2: Expenses include various taxes (house tax, land value tax, license tax, fuel tax, etc.) as well as customs duties and related fees.
Note 3: Expenses include donations made for participation in public welfare activities.

Overall Economic Environment and Industry Trends

In the renewable energy sector, global investment in clean energy technologies is expected to reach US$670 billion in 2025, exceeding spending on oil and gas for the first time and indicating a major shift in the order of energy investment priorities. Solar photovoltaics, wind power, and battery energy storage systems (BESS) are key drivers of this transition. In response to the global trend of green transition, Taiwan's National Climate Change Committee has also set more proactive carbon dioxide reduction targets. By 2030, carbon emissions will be reduced by 28±2% compared with the 2005 base year; solar installed capacity will reach 31.2 GW; and offshore wind power will expand to 10.9 GW. This means that between 2025 and 2030, renewable energy installed capacity will need to increase by an average of 2.82 GW and 1.17 GW per year, respectively, providing stable policy support for renewable energy demand. Looking ahead, Sino-American Silicon will continue to work closely with the Group's affiliates across different fields, including renewable energy, semiconductors, and automotive components, to steadily enhance operating performance and continue creating strong operating results.

1.3 Risk Management

To address changes in the business environment and maintain the Company's continuous operations and development, Sino-American Silicon has established risk management policies and procedures to assess and monitor risk tolerance and current risk exposure, determine risk response strategies, and ensure compliance with risk management procedures.

Risk Management Organization Framework

- Board of directors: As the highest authority for the Company's risk management, the board of directors is responsible for ensuring legal compliance based on the Company's overall business strategy and environment. It oversees the implementation of risk management, iclearly understands the risks faced by the Company's operations, ensures the effectiveness of risk management practices, and holds ultimate responsibility for risk oversight.
- Senior management: This group implements the risk management directives set by the board of directors and manages cross-departmental coordination and communication regarding risk, with the goal of reducing strategic risk.
- Various functional units: These units analyze, manage, and monitor risks within their respective areas and are tasked with implementing risk control mechanisms and procedures effectively.
- Internal audit: Reporting directly to the board of directors, this independent unit assists in supervising risk management activities, examines the risk response and controls carried out by functional units, and provides recommendations for improving risk monitoring.
- Risk management activities are reported annually to both the Audit Committee and the Board of Directors. The Audit Committee supervises the implementation to help ensure effectiveness and compliance.
- Supervisory unit: The Audit Committee monitors the operation of risk management processes.

Risk Management Process

SAS's risk management process comprises risk identification, assessment, supervision, reporting, and response. This framework is designed to implement and support the Company's risk management strategies in an effective and systematic manner.

SAS adheres to the "Regulations Governing Establishment of Internal Control Systems by Public Companies" issued by the Financial Supervisory Commission and has formulated comprehensive risk management policies and procedures as the foundation for its risk management framework. For quantifiable risks, SAS employs rigorous statistical analysis and advanced analytical techniques, applying a progressive approach to manage these exposures effectively. Qualitative methods are utilized to assess risks that are challenging to quantify, with textual descriptions articulating the likelihood and potential impact of such incidents. Relevant operational and risk management information is disclosed in the Company's Annual Report and on the corporate website.

SAS referred to the Global Risks Report 2026, which identifies the top three short-term risks (within the next two years) as misinformation and disinformation, geoeconomic confrontation, and societal polarization. In assessing the potential impact on the Company's operations, information security-related issues, including misinformation, disinformation, fake news, and AI-related risks, remain at a high-risk level. SAS has established corresponding risk management strategies and implementation mechanisms to address the potential impacts these risks may have on various aspects of its business operations and to ensure that such risks are effectively managed and controlled. With respect to risks arising from societal polarization and geoeconomic confrontation, SAS maintains a high level of vigilance and continuously monitors relevant developments and emerging trends. The Company also requires all functional units and senior management to promptly identify, monitor, and manage such risks. (Source: The Global Risks Report 2026 21st Edition, World Economic Forum)

Information Security

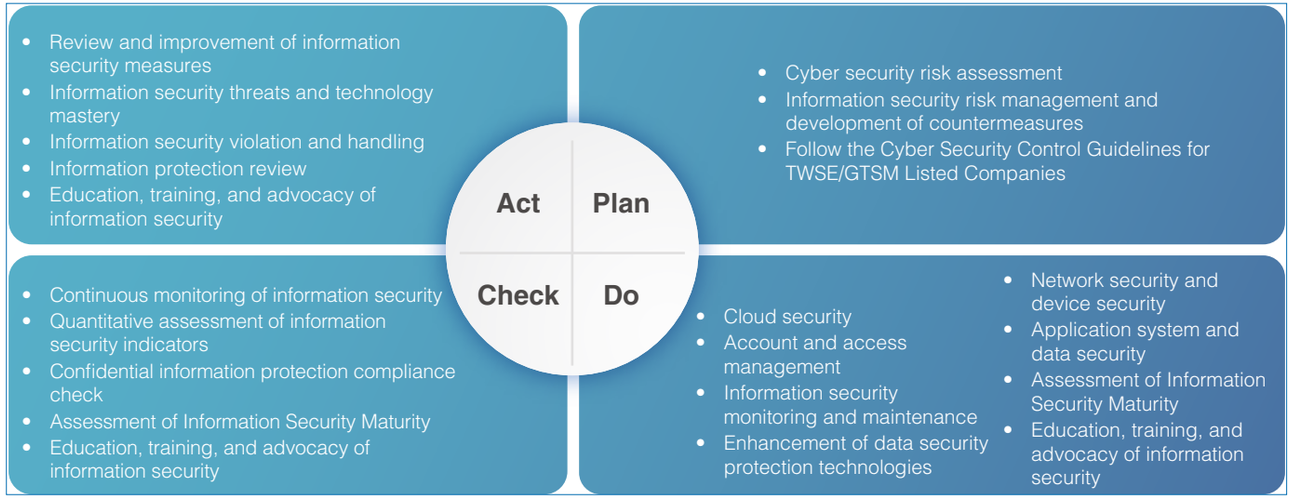
Information Security Organization: On March 1, 2023, SAS established the Information Security Committee (ISC), followed by the formation of Information Security Task Forces at each subsidiary in April 2023. These entities are responsible for advancing information security policies, coordinating relevant resources, and overseeing the execution of information security management programs. The ISC convenes regular meetings on a quarterly basis to monitor task force progress and track related initiatives at all facilities.

In October 2024, SAS achieved ISO 27001:2022 certification for its Information Security Management System (ISMS), affirming the Company's commitment to safeguarding information assets. Protection of confidentiality, integrity, and availability is ensured through systematic planning, implementation, operation, and review processes.

The Company takes "Information Security Governance" as the theme of the information security strategy – pursuit in compliance with the Information Security Policy, with timely introduction of new technologies for the improvement of the capacity in security information governance. "Compliance" – the Company reviews newly enacted legal rules and regulations and introduces new technology products for enhancing information security management. "Application of Technology" – cooperation with reputable professional cybersecurity service provider to make improvement of information security governance capacity in these 3 aspects. Through close cooperation and mutual support, and endless improvement, the Company optimizes its capacity in overall information security defense.

The Company has adopted the PDCA cycle operation model to achieve the objectives and provide continuous improvement, established information security monitoring and vulnerability scanning systems to prevent external hacker intrusions and internal secret theft, and implemented strict software and hardware control (including Internet and personal information equipment) to ensure personal data and internal confidential data protection and security.

Information Security Risk Management and Continuous Improvement Framework:



The specific information security management programs are implemented in three major areas to ensure effective information security protection and reduce risks:

Information System Security Management

- Install endpoint protection software on servers and personal computers or laptops and automatically update virus definitions or signatures.
- Construct email security gateway equipped with information security modules such as spam filtering, malicious file detection, and phishing email detection to enhance email attack protection.
- Important systems and databases are regularly backed up and stored off-site to ensure data availability.
- The information system vulnerability scanning is conducted periodically and the identified system vulnerabilities of the system are fixed.
- The computer operating systems or servers are updated for security based on the cyber risks.
- Established a firewall in the internal network and set up firewall rules to protect important information systems.
- Conduct annual disaster recovery drills for important application systems.

Information System Access Control

- Strictly control the application system and file access setting permissions to ensure confidential information.
- Formulate and implement account/password complexity principles, and update passwords regularly to ensure the validity of identity authentication.
- For employees who have resigned and changed departments, the information department shall adjust the permissions according to documents to ensure real-time and correct data permission & authorization.
- The management procedures are established for non-employees (suppliers and contractors) to apply for accounts and access the systems. Once the application is approved, access will be granted for them to enter the system, and the handling status is recorded.
- No personal terminal device is permitted to be connected with any external storage medium.
- Personal computers are prohibited from connecting to the Company's network and resources, and the device authentication management mechanism is established.

Network Security Management

- Established a firewall to protect the network's external connections and analyzed the firewall's anomaly records to strengthen protection.
- Multiple network routing mechanisms are deployed for both Internet connectivity and internal network interfaces to mitigate potential impacts caused by network disconnection.
- An information service monitoring platform has been set up to monitor network traffic and connection status, which can resolve any network related problems in real time.
- The information department delivers security reminders to all colleagues irregularly to remind colleagues to remain alert for the emails received to prevent the increasingly serious phishing emails.
- The internal staff's computers all must have anti-virus software installed. Once the anti-virus control platform finds a virus, it will send a notification letter to the IT personnel for computer virus removal.
- Remote access to the Company's internal network is restricted to authorized employees with a legitimate business need and must use a secure VPN connection with multi-factor authentication.

Considering emerging cybersecurity threats such as DDoS attacks, ransomware, social engineering, web skimming, and system vulnerabilities, the Company joined the Taiwan Computer Emergency Response Team/Coordination Center (TWCERT/CC) and SP-ISAC of the Industrial Park. Through the annual exchange with famous information security service providers and programs, the Company pays close attention to issues related to information security and planned for proper response. The Company also conducts exercise drills against DDoS and APT under different information security environments to strengthen the capacity of the management staff in response to the situation with a view to detecting and deterring attack once discovered.

Implementation results of the promotion of cyber security measures in 2025:

- Information Security Managers and Information Security Officers of all subsidiaries convene Information Security Committee meetings on a quarterly basis.
- All employees are required to participate in information security awareness and training programs annually. In 2025, each employee completed at least two information security-related training courses.
- Each dedicated information security professional (currently two designated information security personnel) completed an average of 30 hours of professional information security training during 2025.
- The vulnerability scanning and monitoring score for externally facing systems achieved a rating of 96 points.
- The Company engaged a professional cybersecurity service provider to conduct Red Team exercises to enhance its ability to detect, respond to, and defend against potential cyberattacks.
- Information security KPIs are established and periodically audited by the Information Security Committee to enhance the organization's cybersecurity maturity. In 2025, 100% implementation of three key indicators was achieved across all subsidiaries.

02 Products, Services and Values

2.1 Innovation Management

2.2 Customers and Product Services

2.3 Customer Confidential Information Protection

2.4 Product Responsibility

2.5 Supply Chain Management

2.1 Innovation Management

Maintaining the Company's Role as an Energy Supplier

Facing the normalization of extreme climate events worldwide, climate action has entered a deep-water stage of implementation. Following COP 28, which established the goals of tripling renewable energy capacity and doubling energy efficiency by 2030, and COP 29, which reached a climate finance framework of USD 300 billion per year by 2035 (NCQG), the 30th United Nations Climate Change Conference (COP 30), held in Belém, Brazil, formally marked the critical moment of "NDCs 3.0." Countries are not only required to submit more ambitious carbon reduction targets, but also to incorporate "nature-based solutions" and "just transition" into their core strategies. In response to the global green transition trend, Taiwan's National Climate Change Committee has also set more proactive carbon dioxide reduction targets: by 2030, carbon emissions will be reduced by 28±2% compared with the base year of 2005, solar power installed capacity will reach 31.2 GW, and offshore wind power will expand to 10.9 GW. This is equivalent to requiring annual additions of 2.82 GW and 1.17 GW of renewable energy installed capacity, respectively, from 2025 to 2030, providing stable policy support for renewable energy demand. As the Taiwan government promotes simplified procedures for the government-to-government coordination mechanism, tightens import policies, and as enterprises fulfill their ESG commitments, Taiwan's renewable energy market is expected to grow steadily. SAS has diversified its presence across semiconductors, automotive components, specialty gases, compound materials, and chemical materials. Group-affiliated companies including AWSC, Actron, and TSC have delivered strong revenue performance and continue to demonstrate core competitiveness in their respective fields, becoming important foundations for SAS to expand its diversified business reach.

Looking ahead, SAS will continue to play a leading role in Taiwan's renewable energy industry. The Company not only maintains a top three market share in Taiwan for solar cells, but also steadily expands emerging businesses such as green electricity, energy storage, and energy conservation through vertical integration and diversified operations, strengthening the competitive advantage of its one-stop energy service platform. Despite challenges such as changes in the international political and economic landscape, fluctuations in raw material prices, and adjustments to domestic policies, the Company continues to invest in the research and development of high-efficiency products, actively develop new customers and international markets, and deepen cooperation with downstream customers to enhance product added value and market flexibility. The Company expects to benefit from favorable policies and international green energy trends, with a more diversified revenue structure and steadily growing profitability driven by increased penetration of high-efficiency products and services. Overall, SAS will address industry risks with a prudent approach, flexibly adjust its business strategies, and make full use of group resources and technological advantages to continue strengthening its market position and sustainable competitiveness.

Innovation and Development of Products and Technologies

In response to the national net-zero vision, to achieve energy transition and effectively utilize land area, the Sunrise team focuses on innovative research and development of next-generation technologies and is committed to producing high-efficiency solar cells, moving toward the goals of energy conservation, carbon reduction, and sustainable operations. In 2022, the first upgrade of the production line was carried out, and the Company actively invested in the development and mass production of large-size M10 solar cell processes. With the introduction of P-PREC new process technology, mass production efficiency can reach 23.40%; based on production capacity, 23.40% cells can generate 370 MW of electricity per year, equivalent to a carbon reduction of 229,440 metric tons. As market demand in Taiwan has gradually shifted toward large-size solar products since 2023, SAS independently designed, developed, and mass-produced M10 large-size solar cells to provide the market with solar cell options of different sizes. In 2024, the Company invested in the development of N-type TOPCon solar cells and introduced N-type TOPCon process technology, with mass production efficiency reaching 25.40%; based on production capacity, annual electricity generation can reach 400 MW, equivalent to a carbon reduction of 252,498 metric tons. In 2025, the average efficiency of N-type TOPCon solar cells was further increased to 25.87%; based on production capacity, annual electricity generation reached 415 MW, equivalent to a carbon reduction of 257,175 metric tons. In 2025, the Company received the Taiwan Excellent PV Award from the Energy Administration, Ministry of Economic Affairs. In addition, leveraging the team's customized R&D strengths, its solar cells passed the rigorous reliability tests for low-earth-orbit satellites by a U.S. customer, enabling Sunrise to continue contributing to energy transition through reliable energy technology.

Product Innovation

Based on extensive R&D experience, the Company continues to build on the results of its research and development, including the continuous development of silicon material application products and the enhancement of ultra-high-efficiency monocrystalline silicon solar cells. In response to customers' needs for various solar cell products, in 2025, the Company increased the average mass production conversion efficiency of N-type TOPCon monocrystalline cells (G10) to 25.87%. It is expected that in 2026, the average mass production conversion efficiency of N-type TOPCon monocrystalline cells will be further increased to 26.0%. The Company has also developed multiple customized products that meet customers' specific needs and introduced them into mass production, successfully entering high-threshold markets such as Europe and the United States. Some high-end customized products have successfully passed reliability tests for low-earth-orbit satellites by U.S. customers.

Strategic Deployment to Capture the Renewable Energy Market

As the global renewable energy power generation industry continues to grow, SAS has deeply cultivated the solar energy industry for many years. Since 2015, SAS has entered the solar power generation industry through Hsu-Hsin Branch, and in 2020, the Yilan Branch established the Power Plant Development Department to actively capture Taiwan's renewable energy market. Through the planning and investment of rooftop, ground-mounted, and floating solar power plants, the Company continues to expand its renewable energy business footprint.

SAS also actively responds to the government's energy policies. In 2025, SAS integrated the green electricity resources within the Group and established "Susen Green Energy Co., Ltd (SGE)," becoming a comprehensive green energy service platform and expanding the scope of renewable energy services into five major service pillars: power generation system construction, energy storage system construction, energy conservation system construction, system operation and maintenance, and green electricity trading.

Power Generation System Construction Services: Hsu-Hsin Branch under SGE provides power plant development, design, and construction services. The cumulative installed capacity of domestic and overseas solar power plants commissioned by customers and invested in and constructed by the Group reached 167.50 MW.

Energy Storage System Construction Services: In 2025, Billion Watts, a subsidiary of Billion Electric Group's energy business, and SGE under the SAS Group jointly established "Relocate Energy Storage Co., Ltd.," providing energy storage system construction and operation and maintenance services. The Company focuses on high-energy-consuming manufacturing industries, semiconductors, and RE100 companies, offering integrated smart energy management solutions.

System Operation and Maintenance Services: In 2023, a new operation and maintenance site was added in Taoyuan. Currently, power plant operation and maintenance services cover northern, central, southern, and eastern Taiwan, including Yilan, Taoyuan, Miaoli, and Kaohsiung. In addition, the 1.5 MW energy storage system installed at the Yilan Branch was put into the electricity market in 2023 to help stabilize Taiwan's power grid and lay the foundation for future solar-plus-storage integrated solutions. In response to the continuous increase in the number of commissioned solar power plants under management, the Company expanded its operation and maintenance engineering manpower in 2024, continued to strengthen manpower training and assessment mechanisms, and optimized organizational operations to provide higher-quality energy management services.

Green Electricity Trading Services: SES and Anneal are committed to green electricity supply, integrating nearly 1,700 solar power plants with installed capacity exceeding 800 MW and annual power supply of nearly 700 million kWh. Both companies are committed to providing enterprises with solar power and diversified renewable energy solutions, including electricity sales, green electricity wheeling, and certificate application services, helping enterprises achieve their RE100 goals.

Energy Conservation System Construction Services: In 2025, SAS jointly established the joint venture subsidiary EcoSoar Energy Service Co., Ltd. with Sky-Tech Engineering Co., Ltd., focusing on deep energy-saving applications, industrial energy conservation, and server room equipment upgrades. Targeting the energy transition needs of high-energy-consuming major manufacturers such as semiconductor companies, the subsidiary provides energy-saving solutions to help customers improve energy efficiency.

▲ Five Core Services of Renewable Energy

Solar Power Deployment and Achievements

By the end of 2025, SAS had accumulated approximately 167.50 MW of grid-connected solar power generation systems in operation domestically and overseas. The annual power generation reached 188,132,355 kWh, and the estimated reduction in carbon dioxide emissions was approximately 89,175 metric tons.

Solar Power Generation System Construction (Including Commissioned Projects)

Investors	2025 Installed Capacity (MW)	2025 Power Generation (kWh)
SAS	52.83	52,183,578
Affiliated companies of the SAS Group	29.99	37,432,063
External customers	84.68	98,516,714
Total	167.50	188,132,355

Note: Carbon dioxide emissions: Because solar power is used to replace public electricity sales, carbon dioxide emission reduction is estimated based on the Electricity Carbon Emission Coefficient (Electricity Carbon Emission Coefficient for Public Electricity Sales Sector) of 0.474 kgCO_2e/kWh as announced by the Bureau of Energy, MOEA, in 2024.

Collaborative Initiatives for Green Energy Promotion

In 2023, SAS partnered with Hitachi Air Conditioning to install a solar power system with a total capacity of 9.6 MW at the "Hitachi Air Conditioning Taoyuan Factory," Taiwan's largest air conditioning manufacturing site, which was completed in the first half of 2025. In addition, the Company also cooperated with high-speed rail parking lot operators, and the 3.8 MW photovoltaic parking lots at Chiayi High Speed Rail Station and Tainan High Speed Rail Station were grid-connected and put into operation in 2025.

Expansion of Green Electricity Services and Cooperation

To meet enterprises' demand for green electricity, SAS established its subsidiary SES in 2021 to provide green electricity wheeling and professional solutions. In 2025, SES's solar green electricity wheeling volume had grown significantly to rank third in Taiwan. In addition to solar photovoltaics, SES also actively engaged in offshore wind power purchase matching to help enterprises and other Group companies achieve carbon reduction goals. In addition, by merging with another electricity retailer under the Group, Anneal, SES further expanded its green electricity market share, reaching second place in the electricity retail industry in 2025, and providing customers with more comprehensive green electricity solutions.

Behind-the-Meter Energy Storage Market / Energy-Saving ESCO Deployment

According to the government's 2050 Net-Zero Transition Action Plan, the target installed capacity of battery energy storage systems is 1.5 GW in 2025 and will expand to 5.5 GW in 2030, serving as a key measure to enhance renewable energy grid integration and strengthen power grid resilience. The energy-saving market is also expanding rapidly. Through energy-saving services and energy management solutions, users are currently supported from the demand side to improve energy efficiency and reduce overall electricity consumption and carbon emissions. Overall, the SAS Group is leveraging its own experience and one-stop energy service model to connect the supply side and the demand side, creating long-term, stable, and quantifiable economic and sustainability benefits for customers.

Energy Generation (Hsu-Hsin)

With extensive experience in rooftop solar project development, we help companies transform unused factory rooftops into assets that continuously generate green electricity.

Energy Conservation (EcoSoar)

Through professional ESCO services, we conduct energy-efficiency assessments and replace outdated equipment for customers, reducing energy consumption and operating costs at the source.

2.2 Customers and Product Services

Customer Services

SAS is committed to providing customers with the best possible service and firmly believes that service quality is key to improving customer satisfaction and strengthening customer loyalty. Guided by its philosophy of sustainable operations, SAS not only maintains business performance but also recognizes the importance of listening to the voice of the customer. The Company values customer feedback and strives to meet customer needs in order to earn long-term support and achieve sustainable operations.

SAS manufactures solar wafers and cells. Since 2019, the Company has prioritized developing applications based on silicon material technology and completed upgrades to production lines for large-size M10/G12 solar cells in 2023. In 2024, SAS began providing large-size M10 TOPCon high-efficiency monocrystalline cells, supplying the market with updated process technologies and customized product services. By adopting a customer-oriented approach supported by professional expertise, we consider issues from our customers' perspectives and tailor our services to their needs. We strive to provide comprehensive services that enhance customer satisfaction and support sustainable business operations.

Product Quality and Customer Satisfaction

SAS has consistently strived to achieve the goals of "customer satisfaction, conformity with requirements, total quality control, and continuous improvement," thereby strengthening customers' confidence in its products and services. Providing customers with satisfactory services and high-quality products is at the core of SAS's business philosophy. The Company organizes specialized teams for product development, cost management, manufacturing, quality assurance, and customer service. Any customer questions and feedback can be addressed through professional, prompt, and proactive services, assisting customers in handling and resolving issues to earn customers' trust and satisfaction.

Regular meetings with customers are conducted to facilitate communication regarding production, sales quality, and engineering topics. Collaborative product development and technical exchanges with the supply chain are pursued to improve product power conversion. Efforts are also made to manage social resources efficiently and to minimize environmental impact. The overall aim is to maintain collaborative relationships and optimize customer experience related to SAS products, technologies, and services.

We conduct customer satisfaction surveys regularly every six months to collect the voice of customers and compile customer feedback. Dedicated teams then convene dedicated meetings, using customer feedback as an indicator to formulate improvement strategies and directions. For items with lower customer satisfaction or dissatisfaction, we further conduct interviews with customers to clarify the issues, and carry out relevant analyses and develop improvement measures for the deficiencies. We translate the concept of continuously improving customer satisfaction into concrete actions, with the expectation of gaining greater customer trust and recognition, becoming customers' best partner, and achieving sustainable business development together with our customers.

Product Services

SAS is committed to producing high-efficiency cells and continually innovating in the development of advanced products. Through effective supply chain integration and technological collaboration, SAS rapidly incorporates upstream and downstream technological advancements, resulting in accelerated product launches, improved reliability, and greater confidence in product quality—all aimed at meeting end-users' needs more efficiently. Regarding quality assurance, SAS implements rigorous procedures and controls throughout customer information collection, product design, and manufacturing processes. Systematic management at each stage ensures exceptional and consistent product quality. Regular reviews—including daily production meetings, weekly operations evaluations, monthly quality management assessments, and annual review meetings—support ongoing product improvements. Through the ongoing PDCA cycle, the Company enhances products and services, reduces costs, and gives back to society.

Polysilicon Products Customer Satisfaction

In 2022, SAS encountered various challenges, including decreased global market demand, rising raw material costs, higher logistics expenses, and domestic electricity rate increases, which drove up production and operating costs and created pressure from multiple fronts. In response, the Company focused on cost reduction through internal process improvements, second-source verification, and regular cost reviews, aiming to adapt to market developments and maintain competitiveness. Internally, employees are also encouraged to take the initiative to participate and submit proposals for actions that can promote the Company's development, such as process improvement, cost reduction, productivity enhancement, waste reduction, and quality advancement. Through the efforts of all employees, the Company's operations are stabilized, and SAS continues to pursue a balance between cost and quality in order to achieve customer recognition and satisfaction.

Customer satisfaction with polysilicon products increased from 2022 onward. By 2025, the weighted average customer satisfaction score reached 9.9 out of 10.0, the highest in the Company's records. This not only demonstrates customers' high recognition of the Company's core competencies, but also highlights the results of our ability to maintain outstanding operational resilience under a complex market environment. The score for the "quality Dimension" was 9.6 points (most satisfied), reflecting the Company's unremitting pursuit of product stability and compliance; the scores for both the "innovation Dimension" and the "service Dimension" were 10.0 points (most satisfied). Even the "business Dimension," which has been listed as a key area for enhancement over the years, was rated 10.0 points (most satisfied) by customers in 2025. In summary of the 2025 performance, through continuous technological improvement and organizational refinement, SAS is committed to exceeding customer expectations and earning customer trust, which is reflected in its outstanding customer satisfaction results.

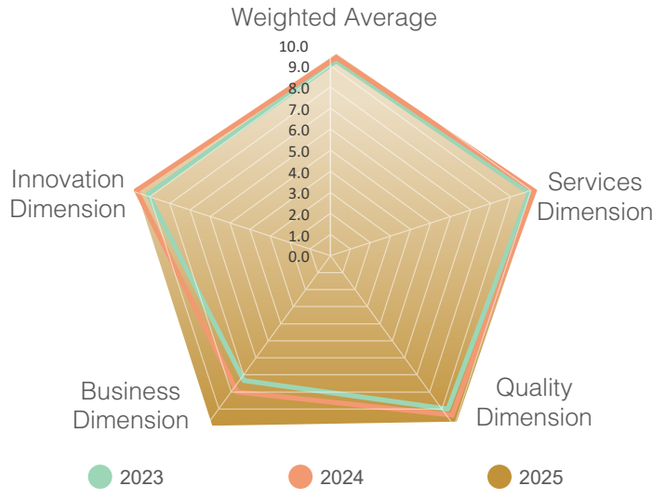
Solar Cell Customer Satisfaction

Customer satisfaction is divided into five major Dimensions for evaluation, with the expectation of understanding market customers' needs through different Dimensions in order to enhance customer satisfaction and product competitiveness. These five major Dimensions are the service Dimension, innovation Dimension, quality Dimension, Business Dimension, and weighted average (overall evaluation). Each item is scored out of 10 points, with 10 points representing "most satisfied," and any score of 6 points (representing "acceptable") or below requiring internal improvement. Weakness analysis or improvement directions are carried out based on the satisfaction scores of each detailed item within the five major aspects, serving as the strategic direction for SAS's subsequent internal continuous improvement.

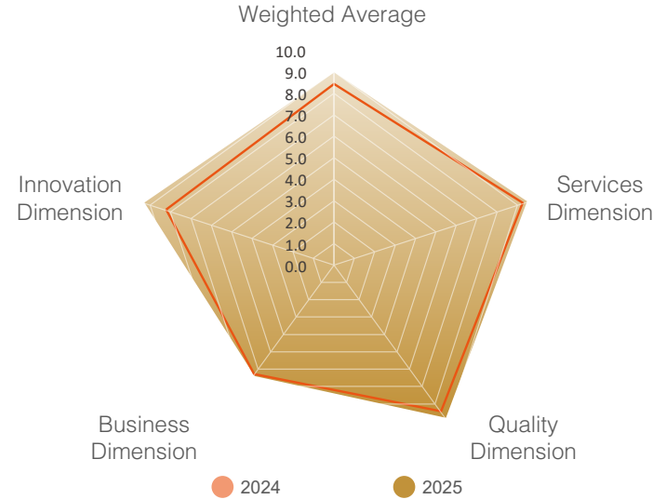
In 2025, SAS was affected in the Taiwan market by stricter green electricity reviews and imports of modules imported from third countries, resulting in delays to many medium- and large-scale project sites and a rapid contraction in demand. SAS used flexible production line switching and product diversification to meet customers' specific project sites, while continuing efforts to reduce solar cell production costs and improve conversion efficiency in order to maintain product competitiveness. In 2025, the overall weighted average customer satisfaction score for solar cells was 8.5. In terms of cost, the Company continued to improve the usage of chemicals and materials to reduce production costs, and also reduced electricity costs through energy-saving measures such as equipment standby and adjustments to the startup time of offline equipment. In terms of innovation, the Company continued to cooperate with overseas customers to develop niche and customized products, building deeper relationships with customers and satisfying unique needs to enhance product satisfaction. In terms of quality, the Company continued to improve the conversion efficiency of N-type TOPCon cells, enabling customers' module power output to meet market demand and ensuring that SAS's N-type TOPCon cell products maintain market competitiveness.

SAS still aims to constantly increase customer satisfaction and provide high-quality products and services in accordance with the quality policy and goals of the Company. Improvement measures are proposed and tracking of progress is implemented for unsatisfied goals through quality system management tools to clearly demonstrate the commitment of SAS to constant improvements and thereby achieve continued enhancement in the field of service quality and competitiveness.

Dimensions of the Polysilicon Product Customer Satisfaction Survey



Dimensions of the Solar Cell Customer Satisfaction Survey



2.3 Customer Confidential Information Protection

Customer Privacy

SAS provides customer service with a focus on privacy and confidentiality. Agreements are signed with customers to protect customer confidential information, and all staff must comply with SAS intellectual property policies and safeguard customer data during business interactions according to established procedures.

When delivering services, SAS supplies professional advice and addresses the confidentiality of information and customer privacy, reflecting industry requirements. Confidentiality agreements are routinely established with clients to support mutual interests. Internally, SAS enforces adherence to intellectual property guidelines to protect customer information and facilitate secure business operations. Regular audits are performed to identify potential risks of data breaches. As a result of confidentiality mechanisms and audit management measures, there were no complaints or penalties from customers or regulatory authorities in 2025. This contributed to the Company's reputation and intangible asset development.

Customer Service Principles

Protection of Intellectual Property

Since 2010, SAS has introduced the Taiwan Intellectual Property Management System (TIPS), sequentially established management procedures, and passed TIPS certification. In terms of system implementation, the head of the R&D unit serves as the management representative, and implementation representatives from each unit jointly form a promotion team. Internal audits and management reviews are conducted regularly every year. Through the establishment of systematic management, the Company has strengthened and enhanced its intellectual property management capabilities. In 2024, the Company continued to pass the Taiwan Intellectual Property Management System (TIPS) Class A audit certification, and in 2025, it again passed external sampling inspection and participated in external verification to ensure the implementation of the management system.

SAS has adopted "encouraging innovation proposals from all employees" and "establishing a confidentiality management mechanism" as its two major intellectual property management policies; in alignment with its operational and R&D strategies, and taking into consideration SAS's goal of becoming "a globally technology-leading green energy solution provider" and its R&D strategy of "continuously innovating and developing key technologies and expanding product application fields," the Company has sequentially established procedures for patent management, confidentiality management, R&D management, and outsourcing management, such as industry-academia collaboration. In terms of intellectual property management, green technology proposals have also been incorporated as intellectual property objectives to expand the Company's green technology deployment, serving as an important tool for the Company's sustainable operations; the Company has also strengthened its technological patent deployment and trade secrets, continuously optimized its patent proposal system and patent maintenance evaluation system, and established a comprehensive confidentiality management mechanism, enabling the Company to continuously maintain its competitiveness and safeguard the rights and interests of the Company and its customers.

In recent years, the Company has continuously strengthened its confidentiality management system to reduce the risk of information leakage. Confidentiality management is controlled through four major aspects: (1) personnel control: providing intellectual property education and training to enhance employees' awareness of confidentiality control and sense of risk, and signing NDAs with key employees; (2) confidential document control: for documents, each department inventories and controls managed documents, classifies confidentiality levels, and sequentially implements level labeling, access permission control, circulation control, and destruction control; (3) equipment control: usage controls are implemented for emails and electronic storage devices; and (4) environmental facility control: controlled areas are established for important server rooms or production operation areas, with access control and photography control implemented. Each year, internal audits are used for self-review to confirm the degree of implementation of confidentiality controls by each department.

In 2025, SAS maintained zero violations of confidentiality control. The number of internal audit checks on confidentiality control has increased year by year, demonstrating employees' understanding of and attention to confidentiality management and shaping the Company's culture of confidentiality management. The Company has introduced a trade secret registration system and strives to protect the rights and interests of the Company and its customers through sound intellectual property management, thereby achieving the benefits of enhancing customer trust and increasing product market share.

2.4 Product Responsibility

Product Safety and Responsibility

Given the diverse applications of silicon-based products, SAS is committed to ensuring all items comply with international regulations such as the EU RoHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) and meet customers' requirements regarding hazardous substances. To that end, SAS mandates comprehensive testing of its products by independent certified third-party laboratories. In 2025, all SAS products were verified to satisfy EU RoHS standards. Furthermore, suppliers of raw and packaging materials are required to submit periodic inspection reports for hazardous substances, issued by impartial accredited third-party laboratories, to uphold product safety, non-toxicity, and reinforce environmental stewardship.

In addition, SAS understands that solar cells and their downstream module products involve certain risks, such as the environmental impact of chemical substances during the product manufacturing process, risks associated with the final use of products under different environments, and risks at different stages after products reach the end of their life cycle. In the solar cell management system, we implement rigorous source control from raw material procurement to production and manufacturing to ensure that raw materials comply with RoHS regulatory requirements. In addition, we also regularly commission independent accredited third-party testing organizations to conduct hazardous substance testing on solar cell products to ensure that the products comply with the highest international environmental protection standards and provide customers with the safest and most reliable green products.

In 2025, there were no cases of product labeling non-compliance reported by stakeholders. In terms of marketing, SAS provides detailed descriptions of potential product risks through media such as product specifications, and complies with the regulations, environmental requirements, and customer requirements of each sales region.

2.5 Supply Chain Management

Amid increasing globalization and market competition, organizations have come to understand the critical importance of sustainable development alongside financial performance. The supply chain, as a cornerstone of operational activity, influences environmental, social, and economic outcomes significantly.

2.5.1 Supplier Selection and Evaluation

To ensure that supply chain operations are consistent with SAS's sustainability commitments, SAS has established a comprehensive supplier screening and evaluation mechanism and incorporated environmental, social, and corporate governance considerations into its procurement management procedures.

Through institutionalized reviews and continuous supervision, SAS is committed to promoting responsible supply chain management.

SAS suppliers are subject to supplier evaluation processes according to the categories of raw materials, engineering contractors, and non-engineering contractors. When a new supplier is established, an integrity management review is conducted, and the supplier is required to sign the "Supplier Code of Conduct & Supplier's Declaration." For raw material suppliers, third-party certifications for environmental and quality systems are further required; if such certifications are not available, on-site audits will be conducted jointly with units such as quality assurance, R&D, production, or environmental protection personnel.

New Supplier Evaluation Process (contractor)

New supplier Evaluation(Contractor)

Ethical corporate management

Compliance with Regulatory Standards

Sign the "Supplier Code of Conduct and Supplier's Declaration"

Results

>90: Low-risk supplier
>80: Mid-risk supplier
<80: High-risk supplier

New Supplier Evaluation Process (Raw Material Supplier)

New Supplier Evaluation (Raw Material Supplier)

Ethical corporate management

Compliance with Regulatory Standards

Sign the "Supplier Code of Conduct and Supplier's Declaration"

Risk Assessment

Document review (Supplier Questionnaire or External Provider Questionnaire, as well as valid ISO 9001 or IATF 16949 and ISO 14001 certificates.)

If no relevant certificates are available, an on-site audit is required
(Self-evaluation conducted using the Supplier Quality System Survey Form and Supplier Corporate Social Responsibility Survey Form)

Result

Approved suppliers
(Holds valid ISO 9001 or IATF 16949 and ISO 14001 certificates)

1. Qualified Supplier :Score above 80;or a score of at least 70 with all identified nonconformities corrected
2. Unqualified Supplier: Score below 70. The supplier will not be included in the Qualified Supplier List, unless otherwise determined at a meeting convened by the Quality Assurance Department.

Based on the Evaluation Process Described Above, SAS Added Six New Qualified Raw Material Suppliers in 2025.

Year	2022	2023	2024	2025
Number of newly approved suppliers	6	2	8	6
Total number of approved suppliers	80	82	80	75

Supplier Performance Management

Under SAS's supplier management system, all qualified raw material suppliers are evaluated monthly based on quality, delivery, cost, and service. For key raw material suppliers, procurement cost, environmental impact, social responsibility, and quality improvement needs are incorporated into the annual evaluation criteria. Annual evaluations are conducted through document reviews or on-site audits to ensure that delivery quality meets requirements and to continuously improve suppliers' sustainability management.

All SAS suppliers are considered long-term partners with a consistent record of strong performance. In 2025, in response to adjustments to certain products and changes in procurement needs, the list of qualified suppliers was adjusted, with nine qualified suppliers removed and four qualified suppliers added. The relevant suppliers had no non-conformities in quality, delivery, cost, or service. In 2025, the total number of qualified suppliers decreased by five compared with 2024. Through continuous review of the supplier structure, the Company maintains the appropriateness of its procurement practices and ensures that the supplier management mechanism can effectively support operational efficiency.

In 2025, none of the suppliers received a monthly evaluation score below 60, which would trigger termination of cooperation. Among the 75 qualified suppliers, 32 were selected for annual audit evaluations, including 26 document reviews and six on-site audits. No major deficiencies were identified in the audit items, and follow-up improvements have been completed. There were no suppliers whose cooperation was terminated due to a score below 70 this year.

Ongoing evaluation process for qualified suppliers

Environment:

1. Evaluate whether the supplier complies with government environmental regulations, including requirements related to air pollutant emissions, water resource management, and waste disposal.
2. Confirm whether its products and raw materials comply with green procurement standards, such as RoHS, REACH, WEEE, and others.
3. Review whether the supplier has obtained valid certification for the ISO 14001 environmental management system to ensure that its environmental management has systematic and continuous improvement capabilities.

Social:

1. Evaluate whether the supplier complies with the social responsibility and labor human rights management requirements stipulated in the Responsible Business Alliance Code of Conduct (RBA), including the prohibition of forced labor and child labor.
2. Do not procure metals produced in conflict-affected areas, and require suppliers and their upstream supply chains not to procure or use conflict minerals.

Corporate Governance:

1. Review whether the supplier complies with the principles of fair trade and ethical business conduct, and meets SAS's relevant anti-corruption requirements.
2. Ensure that the products and services provided by the supplier do not raise concerns regarding infringement of intellectual property rights, and that the supplier complies with relevant trade systems and regulatory requirements.

Product Quality:

1. Confirm whether the supplier has obtained valid certification for the ISO 9001 quality management system.
2. Review whether the supplier's process management complies with established quality management requirements to ensure product quality stability.

Ongoing Evaluation Process for Qualified Suppliers

Monthly Evaluation

Monthly Evaluation of Qualified Suppliers

Delivery, price, quality, and service performance

Results

Approved suppliers
Qualified suppliers: Score ≥71
Suppliers scoring 61–70: Qualified after completing corrective actions

Non-compliant suppliers
Score ≤60; disqualified from the Qualified Supplier List

Annual Evaluation

Annual Evaluation of Approved Suppliers

Delivery, price, quality, service performance, Environmental Impact, Labor Safety, Social Responsibility, and Carbon Emissions

Annual Audit

Document review
(Self-evaluation conducted using the Supplier Quality System Survey Form, supplier environmental-related survey form)

On-site audit
(Self-evaluation conducted using the Supplier Quality System Survey Form, supplier environmental-related survey form)

Result

Approved suppliers
Score ≥80
Suppliers scoring 70–79: Qualified after completing corrective actions

Non-compliant suppliers
Score <70; disqualified from the Qualified Supplier List

Supplier Audit Implementation Statistics

Implementation Items	Number of Audited Suppliers in 2024	Number of Audited Suppliers in 2025	Audit Results
Document review	24	26	Number of terminated suppliers: 0
On-site audit	6	6	Number of terminated suppliers: 0
Total	30	32	Number of qualified suppliers: 75

Percentage of Audit Deficiencies Among Suppliers

Audit Items	Environment	Labor	Health and Safety	Business Ethics	Quality Management
Non-conformity rate	0%	21%	14%	0%	7%
Improvement rate	100%	100%	100%	100%	100%

Note 1: Non-conformity rate = (Number of Deficient Suppliers / Total Number of Audited Suppliers) × 100%
Note 2: Improvement rate = (Number of Suppliers with Improvements / Total Number of Audited Suppliers) × 100%

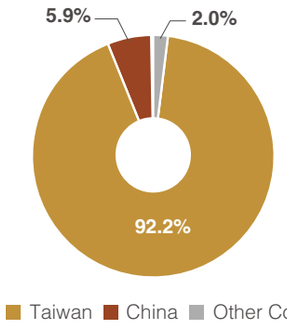
2.5.2 Local Procurement in the Supply Chain

SAS continues to promote supply chain localization to enhance supply chain resilience and fulfill its sustainability commitments. By prioritizing local suppliers, the Company can shorten material transportation distances, reduce logistics costs and inventory carrying requirements, improve supply flexibility, and avoid unnecessary environmental impacts. In addition, upholding the concept of green procurement, the Company gives priority to products with low energy consumption and products certified by the Ministry of Environment in order to reduce energy consumption, lessen environmental burdens, promote the development of green industries, and drive local employment.

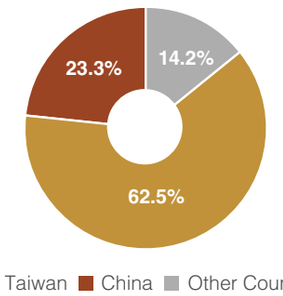
In 2025, SAS had a total of 510 suppliers, of which 470 were local suppliers, accounting for 92.2%; the local procurement amount accounted for 62.5% of the total procurement amount. Key raw materials for daily operations include silicon raw materials, dopants, silicon wafers, and conductive paste. Due to geographical constraints and the economies of scale of the international supply chain, such products cannot all be sourced from Taiwan. To strengthen the diversified supply of key raw material sources, for key raw material suppliers, the Company continues to evaluate the introduction of second-source suppliers based on product characteristics, the degree of supply risk, and actual operational needs, in order to reduce the risk of supply chain disruption. At present, the evaluation or introduction of second sources has been completed for some key raw materials; however, due to requirements related to product mix, process compatibility, and customer certification for certain key raw materials, quality testing and customer approval are still required, and therefore full introduction is not yet possible.

Excluding silicon raw materials and silicon wafers that cannot be sourced locally, among the procurement of other items, the proportion of local procurement amount increased to 83.9% (calculated based on the procurement amount excluding silicon raw materials and silicon wafers), indicating that the Company has achieved a high proportion of local procurement for other items.

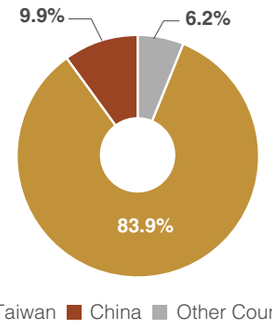
Supplier Location Distribution



Supplier Location Distribution by Procurement Amount



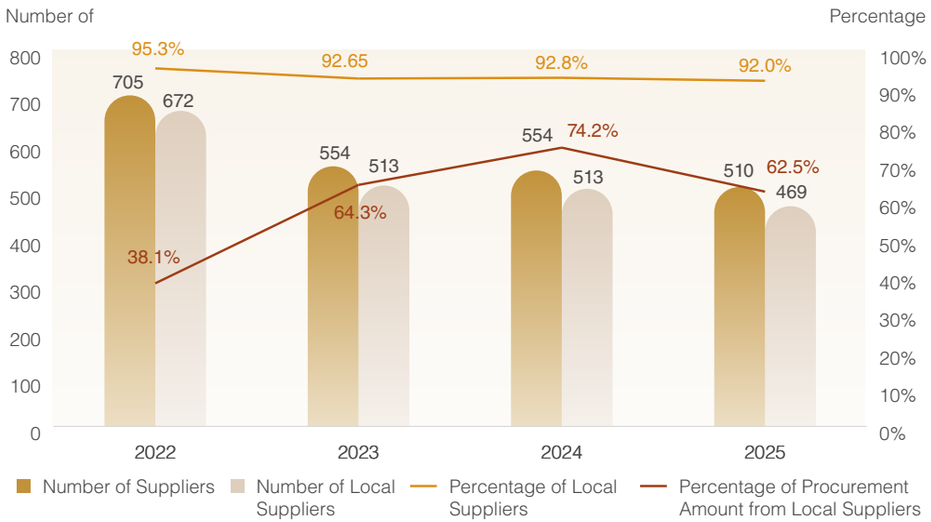
Supplier Location Distribution by Procurement Amount (Excluding Silicon Raw Material and Silicon Wafers)



The Percentage of Localized Companies and Their Respective Amounts Over the Years

Year	2022	2023	2024	2025
Number of Suppliers	705	554	545	510
Number of Local Suppliers	672	513	506	469
Percentage of Local Suppliers	95.3%	92.6%	92.8%	92.0%
Percentage of Procurement Amount from Local Suppliers	38.1%	64.3%	74.2%	62.5%

Percentage of Supplier Localization



2.5.3 Conflict Minerals Management

SAS upholds the core values of business integrity and respect for human rights, attaches importance to the transparency of raw material sources, and supports international responsible mineral sourcing initiatives, in order to avoid procuring minerals that may contribute to armed conflict or involve human rights violations.

SAS does not use conflict minerals in its manufacturing raw materials. To ensure supply chain transparency and compliance, SAS incorporates conflict minerals issues into the management of its new supplier review process. Suppliers are required to commit to and comply with the responsible sourcing principles set forth in the "Supplier Code of Conduct & Supplier's Declaration," and not to use conflict minerals from high-risk areas. If a supplier's products involve relevant minerals, the supplier must provide the latest version of the Responsible Minerals Initiative (RMI) Conflict Minerals Reporting Template (CMRT) and Extended Minerals Reporting Template (EMRT). To date, all cooperating suppliers have completed the countersigning of the "Supplier Code of Conduct & Supplier's Declaration" and have committed that the products they supply do not use conflict minerals.

2.5.4 Climate Change "Mitigation" Advocacy

To respond to global climate change issues and implement green management goals, in addition to continuously strengthening internal carbon reduction management, SAS also actively promotes climate change mitigation actions across the supply chain. SAS requires suppliers to increase their attention to carbon reduction issues and formulate corresponding strategies, in order to jointly build a resilient green supply chain. Since 2023, SAS has encouraged suppliers to initiate greenhouse gas inventories, product carbon footprint calculations, and other related carbon management actions to enhance the transparency of carbon emissions in the supply chain. In 2025, in addition to key raw materials with high carbon emissions, the scope of advocacy was further expanded to cover suppliers accounting for at least 90% of the procurement amount, promoting their acquisition of third-party verification statements such as ISO 14064-1 (greenhouse gas inventory) and ISO 14067 (product carbon footprint).

Action Promotion Indicators

Climate Change Mitigation Action Promotion Indicators	2025 Target	2025 Achievement	2026 Target	2030 Target	2035 Target
Number of Companies Completing ISO 14064-1 Verification	7	8	12	20	28
Number of Companies Completing ISO 14067 Verification	1	7			

03 Energy (Resource) and Environment Management

3.1 Energy Management and Development

3.2 Water Resource Management

3.3 Air Pollution Prevention and Control

3.4 Resource Circularity

3.5 Biodiversity

SAS consistently integrates environmental management into its daily operations, establishing comprehensive environmental and energy management systems in compliance with relevant environmental protection laws and regulations. These systems encompass areas such as energy consumption, water resource management, pollution prevention, and waste disposal. Each facility develops and implements management plans tailored to site-specific concerns and operational requirements, advancing initiatives in energy conservation, carbon reduction, resource efficiency, and risk mitigation.

Specifically, the Chunan Plant and Sunrise Subsidiary (formerly the Yilan Plant) have adopted the ISO 14001[Note 1] Environmental Management System and the ISO 50001[Note2] Energy Management System, having successfully obtained third-party certification. Details regarding these certifications and their validity periods are available on the Company's official website. The Company continues to enhance pollution prevention and resource conservation through a robust management framework and internal audit processes, striving to minimize the environmental impact of business activities while promoting operational sustainability and resilience.

Note 1: ISO 14001 certification period: 2025.03.12–2028.03.11
Note 2: ISO 50001 certification period: 2025.02.22–2028.02.21

▲ Energy Policy

▲ Water Resource Management Policy

▲ Biodiversity Policy

3.1 Energy Management and Development

SAS's energy consumption encompasses electricity, diesel, and gasoline, with electricity comprising the majority share. Accordingly, energy conservation initiatives should be prioritized, and any proposed solutions must fulfill the criteria of being Safe, Affordable, and Sustainable (SAS) to be considered optimal energy strategies.

3.1.1 Energy Consumption

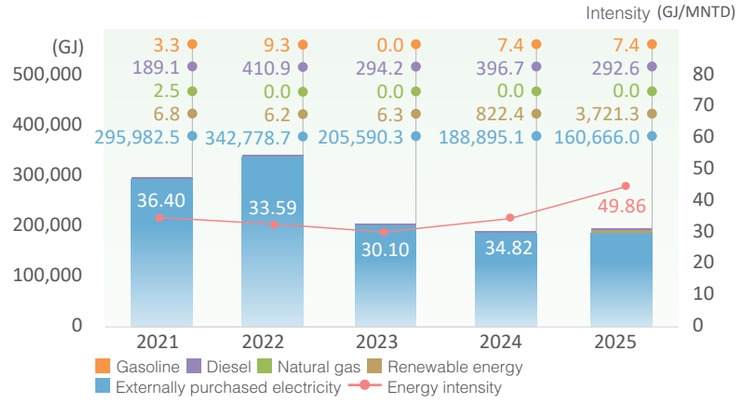
Energy Consumption

In recent years, SAS's primary source of energy has been purchased electricity. In 2025, purchased electricity represented 97.56% of total energy consumption, while renewable energy accounted for approximately 2.3%[Note] of total energy consumption. Energy intensity in 2025 experienced a marginal increase compared to 2024, due primarily to fluctuations in the market environment and reduced industry demand, which resulted in lower annual revenue and a corresponding decrease in energy efficiency per unit of output.

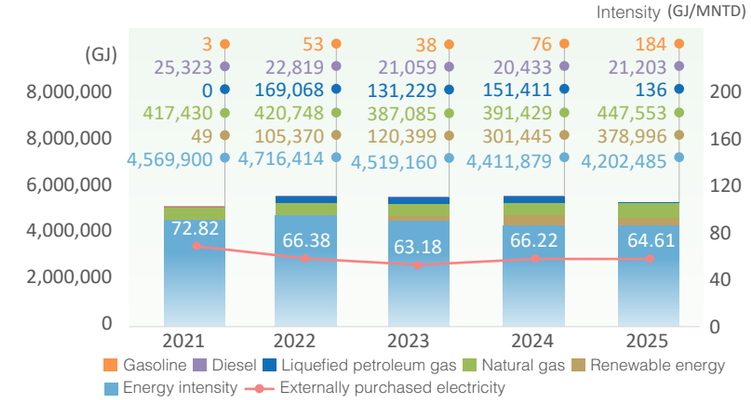
Note: Renewable energy use efficiency = renewable energy (GJ)/total energy used (GJ)

Quantity of Energy Consumption

SAS



SAS and Its Subsidiaries



Note:

1. Conversion units: 1 kWh electricity = 0.0036 GJ; 1 cubic meter of natural gas = 0.0477 GJ; 1 liter of diesel = 0.0315 GJ; 1 liter of gasoline = 0.0327 GJ; 1 liter of liquefied petroleum gas = 27.762 GJ.
2. Scope of SAS:

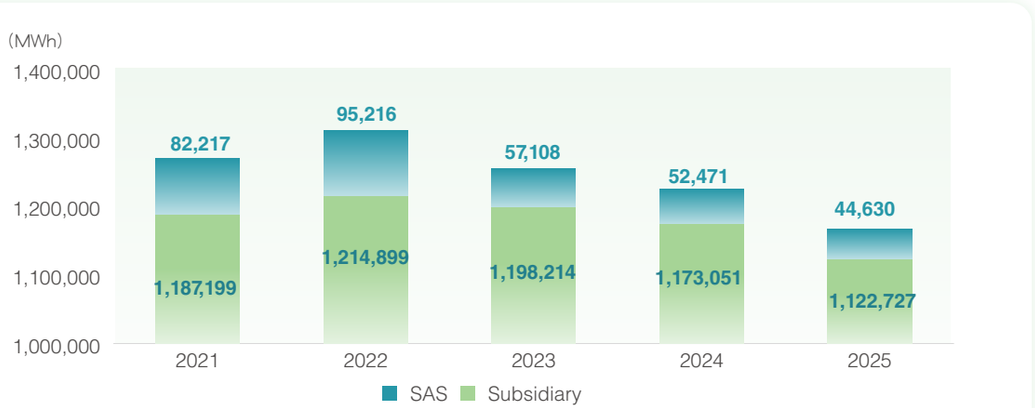
Chunan Branch (Plant 2) and Sunrise Subsidiary; the headquarters and SGE Hsu-Hsin Branch are located within the buildings of GlobalWafers' Hsinchu Plant and SAS Chunan Branch, respectively, and lease office space without production processes. Since no independent meters are installed to record energy use, their energy consumption is not separately accounted for, but actual energy use is included in the totals for GlobalWafers' Hsinchu Plant and SAS Chunan Branch.

3. Scope of subsidiaries: (in accordance with the years included in the consolidated financial statements)

2021–GlobalWafers (Energy consumption information for TSC was not disclosed for that year because TSC had not yet conducted a greenhouse gas inventory.)
2022–GlobalWafers, TSC, and AWSC (newly added subsidiaries in that year)
2023–GlobalWafers, TSC, AWSC, and Actron (newly added subsidiary in that year)
2024–GlobalWafers, TSC, AWSC, and Actron
2025–GlobalWafers, TSC, AWSC, and Actron

4. Energy intensity: Energy consumption (GJ) divided by revenue (MNTD); SAS intensity uses parent company only revenue, while SAS and subsidiaries' intensity uses consolidated revenue.

Externally Purchased Electricity



3.1.2 Renewable Energy

Most of the electricity generated by SAS's solar power generation systems is sold. In 2025, electricity sold amounted to 1,759,796 kWh (6,335 GJ). To actively fulfill its carbon reduction commitments under RE100 and SBTi, SAS regards energy transition as a core strategy. Through diversified approaches such as signing renewable energy power purchase agreements (PPAs) and procuring renewable energy certificates (RECs), SAS is gradually increasing the proportion of green energy use. For SAS's short-, medium-, and long-term renewable energy targets and specific pathways, please refer to the "Climate-Related Risk and Opportunity Metrics and Targets" section under "Climate Strategy and Actions."

Unit: kWh

Item	Item		2021	2022	2023	2024	2025
Item	Electricity sold (solar power)	Headquarters	85,524	126,455	128,508	124,260	123,472
		Sunrise Subsidiary	1,771,991	1,653,130	1,655,553	1,568,745	1,531,310
		SGE Hsu-Hsin Branch	129,298	118,596	123,445	121,490	105,014
Total			1,986,814	1,898,181	1,907,506	1,814,496	1,759,796

Note: The solar power generation system at the Chunan Branch is for self-generation and self-use, with no electricity sold.

3.1.3 Energy Management and Conservation

Energy Management

Previous energy conservation efforts in the factories were primarily one-time initiatives, which may not have achieved optimal energy savings due to the absence of a formal management framework. Since 2021, SAS has applied the Energy Management System (ISO 50001:2018) across its manufacturing sites. Both the Chunan Branch and Sunrise Subsidiary currently operate under a systematic PDCA (Plan-Do-Check-Act) management cycle. This approach includes assessing equipment energy consumption within facilities to identify significant energy users and those needing improvement. Identified devices are regularly monitored and measured, with specific action plans developed for efficiency enhancements. Energy baselines and performance indicators are established according to each plant's features and energy use analysis, and these metrics are reviewed monthly for relevance and accuracy as part of ongoing energy efficiency assessment.

2025 Energy Conservation Results

In 2025, the Chunan Branch and Sunrise Subsidiary reduced electricity usage by 1,290,393 kWh(4,645 GJ), corresponding to an estimated reduction of 611.6 metric tons of carbon emissions compared to the prior year. Additionally, including energy conservation data from GlobalWafers–Taiwan, total electricity savings in 2025 amounted to 5,247,127 kWh(18,890 GJ), equating to an estimated decrease of 2,487.1 metric tons of carbon dioxide emissions.

2025 Power Conservation Results for Chunan Branch and Sunrise Subsidiary

Category	Measures		Energy Savings (kWh)	Energy Savings (GJ)	Reduction in Carbon Dioxide Emissions ($kgCO_2e$)
Manufacturing process	1. 2025 G7 ingot unit energy consumption reduction project • OC-02 heat zone insulation optimization • Evaluation of new thermal insulation materials • Optimization of Multicrystalline Silicon Furnace Chamber Insulation • Crystal Growth Furnace G7-35/36 process parameter optimization	• Crystal Growth Furnace G7-37/38 process parameter optimization • HF Carbon • Electricity savings estimate: Difference in electricity consumption per ingot produced by each crystal growth furnace before and after improvement × ingot output • Electricity savings calculation period: 2025/1–2025/12	540,702	1,947	256,293
Lighting improvement	1. Turn off some lights in the production area and install separate switches • Install separate switches for lights in unused areas of the production area and turn them off when not in use.	• Electricity savings estimate: Number of lights turned off × wattage × hours • Electricity savings calculation period: 2025/1–2025/12	8,640	31	4,095
Air conditioning system	1. Add air handling units to reduce the load of other air handling units Add two air handling units into operation to reduce the overall frequency of the air handling units and reduce power consumption. • Electricity savings estimate: Measured difference in electricity consumption before and after improvement • Electricity savings calculation period: 2025/1–2025/12 2. Add FRIGAID energy-saving additive to air conditioning chiller CH-04 Add FRIGAID refrigerant additive to the refrigerant side of the chiller evaporator in the plant. Added into the system together with the refrigerant, it can remove the oil film originally attached to the inner walls of the heat exchanger tubes and form a protective film on the surface, preventing microbial attachment and avoiding scaling in the piping, while also improving heat exchange efficiency. • Electricity savings estimate: Difference in energy efficiency of the chiller before and after improvement × cooling water volume • Electricity savings calculation period: 2025/2–2025/12 3. Increase the inlet temperature of cooling water for the crystal growth process Increase the inlet temperature of cooling water for the crystal growth process from 23.5±0.5° C to 27±0.5° C to reduce cooling water consumption. • Electricity savings estimate: Difference in chiller load of the crystal growth process before and after improvement × operating time of the crystal growth process × energy consumption of the cooling water system • Electricity savings calculation period: 2025/1–2025/2 4. AHU-F202 air handling unit induction motor replacement with permanent magnet motor project Replace the air handling unit induction motor with a high-efficiency permanent magnet motor. • Electricity savings estimate: Motor electricity savings × operating days • Electricity savings calculation period: 2025/5–2025/12	5. Wet dust #3 scrubber circulation pump energy-saving project Add constant (variable) flow control logic; through flow setting confirmation, the inverter output flow can normally meet the air pollution control permit regulatory requirements and achieve frequency reduction energy-saving performance. • Electricity savings estimate: electricity savings × operating days • Electricity savings calculation period: 2025/5~2025/12 6. Marley cooling tower replacement with energy-saving fan project–CT5 Replace the traditional aluminum blades of the cooling tower in the plant; this type of blade has a heavier material and greater wind resistance, and is more power-consuming during operation. Replace with fan blades of light material / low wind resistance to reduce power loss and reduce the use of energy resources. • Electricity savings estimate: fan electricity savings before and after replacement × operating days • Electricity savings calculation period: 2025/7~2025/12 7. Marley cooling tower replacement with energy-saving fan project–CT4 Replace the traditional aluminum blades of the cooling tower in the plant; this type of blade has a heavier material and greater wind resistance, and is more power-consuming during operation. Replace with fan blades of light material / low wind resistance to reduce power loss and reduce the use of energy resources. • Electricity savings estimate: fan electricity savings before and after replacement × operating days • Electricity savings calculation period: 2025/9~2025/12	263,553	949	124,924

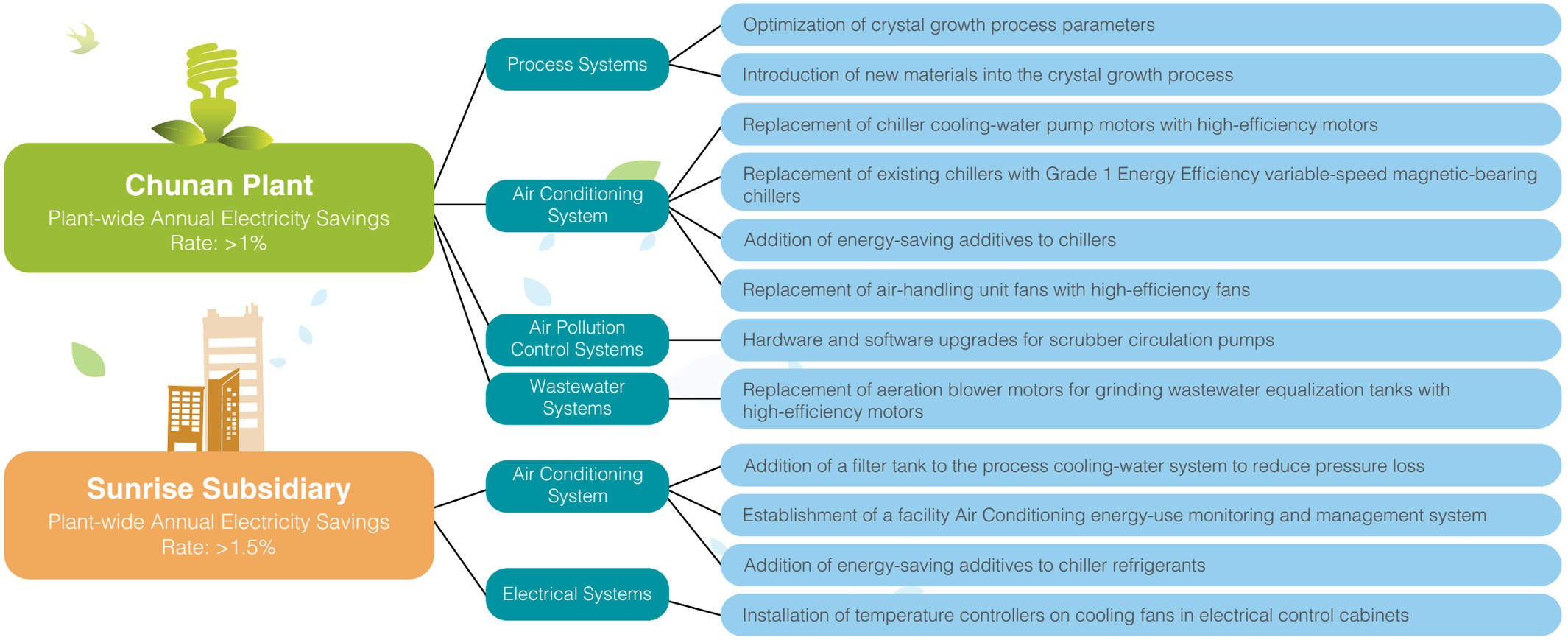
Category	Measures	Energy Savings (kWh)	Energy Savings (GJ)	Reduction in Carbon Dioxide Emissions ($kgCO_2e$)
Other	1. Add an air compressor unit at the end of the compressed air pipeline to reduce energy consumption Install one new variable-frequency air compressor and dryer at the end of the compressed air pipeline to reduce the outlet pressure of the air compressor; the outlet pressure can be lowered by 1.0 kg/cm^2. • Electricity savings estimate: measured electricity savings before and after improvement • Electricity savings calculation period: 2025/3~2025/12 2. Shut down the organic wastewater blower The wastewater volume of the organic biological system decreased by 80%; the aeration volume of the aerobic tank should be able to be reduced simultaneously. An attempt was made to shut down one 7.5 HP blower, and after testing, the required dissolved oxygen value in water (2~4 mg/L) could still be achieved.–Completed in March • Electricity savings estimate: measured electricity savings before and after improvement • Electricity savings calculation period: 2025/3~2025/12 3. Adjust the intake and exhaust air volume of the chemical warehouse Install inverters on the intake and exhaust fans of the chemical warehouse to reduce the operating frequency. • Electricity savings estimate: measured electricity savings before and after improvement • Electricity savings calculation period: 2025/3~2025/12 4. Improvement of the temperature control system for the LID electrical control box fan Install a temperature control system in the circuit of the electrical control box fan (>30° C start, ≤30° C stop). • Electricity savings estimate: fan power × shutdown hours • Electricity savings calculation period: 2025/10~2025/12	477,497	1,719	266,334
Total		1,290,393	4,645	611,646

Note:
1. The electricity emission coefficient is based on the announcement by the Bureau of Energy, MOEA, which is 0.474 ($kgCO_2e/kWh$) for 2024
2. 1 kWh electricity = 0.0036 GJ (gigajoules)
3. Annual electricity savings according to the Bureau of Energy, MOEA, announcement: The annual electricity conservation via power-saving measure implementation shall be calculated from the month following the implementation date, and is limited to 12 months. However, if the calculation period spans across multiple years, the electricity consumption conserved will be calculated on an annual basis.
4. The reported energy-saving performance primarily reflects energy-saving measures newly implemented during the year.

2026 Annual Energy Conservation Targets and Countermeasures

Each SAS plant annually sets the "annual electricity-saving rate of total plant electricity consumption" as a short-term target. Through energy review, high-energy-consuming equipment in each major electricity-consuming system is identified, improvement opportunities are actively sought, and specific countermeasures are formulated and implemented accordingly.

2026 Energy Conservation Countermeasures for the Chunan Plant and Sunrise Subsidiary



3.2 Water Resource Management

3.2.1 Water Resources Management

Water Resource Management and Conservation

In recent years, affected by climate change, the temporal and spatial distribution of rainfall in Taiwan has become increasingly uneven, and drought and flood conditions have tended to become extreme, bringing challenges to overall water supply stability and industrial operations. Facing the situation of rising water resource risks, the Company continues to strengthen its water resource management strategies, incorporates water conservation and recycling use into key points of operational management, and prudently responds to the impacts of climate change on water resource supply and demand.

In terms of promoting water conservation, SAS reduces the water use intensity per unit product through process optimization, equipment efficiency improvement, and refinement of water use monitoring mechanisms; at the same time, it actively introduces water recovery and reuse technologies to increase the process wastewater recovery rate and system recycling utilization rate, in order to reduce reliance on tap water and surface water resources.

In addition, SAS regularly reviews the water use performance and improvement results of each plant area, and continues to invest resources in the research and development of water conservation technologies and the optimization of management systems, to ensure the stable improvement of water resource use efficiency. Through the above measures, SAS demonstrates its commitment to sustainable water resource management, and creates value with both environmental and economic benefits for environmental protection and long-term corporate development.

Plant Area	2025 Performance	2026 Target	2030 Target
Chunan Plant Area	1. Prevention (control) equipment 100% complies with emission standards 2. Pollutants (COD, SS) removal rate ≧ 80%	1. Prevention (control) equipment 100% complies with emission standards 2. Pollutants (COD, SS) removal rate ≧ 85% 3. It is estimated that the recovery rate of this process >80%, and the annual recovered water volume is approximately 19,272 m^3/year	1. Prevention (control) equipment 100% complies with emission standards 2. Pollutants (COD, SS) removal rate ≧ 90%
Sunrise Subsidiary	1. Reduce the use amount of process chemicals: reduce the use amount of hydrofluoric acid (HF) (reduced by 20~30% compared with the previous year) 2. Wastewater discharge water quality KPI is tightened year by year, and biological treatment efficiency is strengthened: COD <480; SS<320; ammonia nitrogen <75 mg/L; nitrate nitrogen <50mg/L 3. Reduce the amount of wastewater sludge: biological & fluorine-based wastewater are separated, and the biological sludge amount is reduced by 90% compared with the previous year	1. Reduce the use amount of process chemicals: process improvement, nitric acid use amount returns to zero 2. Wastewater discharge water quality KPI is tightened year by year, and biological treatment efficiency is strengthened: COD <200; SS<120; ammonia nitrogen <75 mg/L; nitrate nitrogen <40 mg/L 3. Reduce the amount of wastewater sludge: reduce the use of HF in the process, and calcium fluoride sludge is reduced simultaneously; it is expected that 20% calcium fluoride sludge can be reduced per kilogram of HF use amount	1. Wastewater discharge water quality KPI is tightened year by year, and biological treatment efficiency is strengthened: COD <100; SS<80; ammonia nitrogen <20 mg/L; nitrate nitrogen <20mg/L 2. Increase the water recovery rate: additionally install a cooling tower drainage recovery system, which can increase the water recovery rate by 5~10% (currently approximately 60%)

Water Resource Use and Discharge

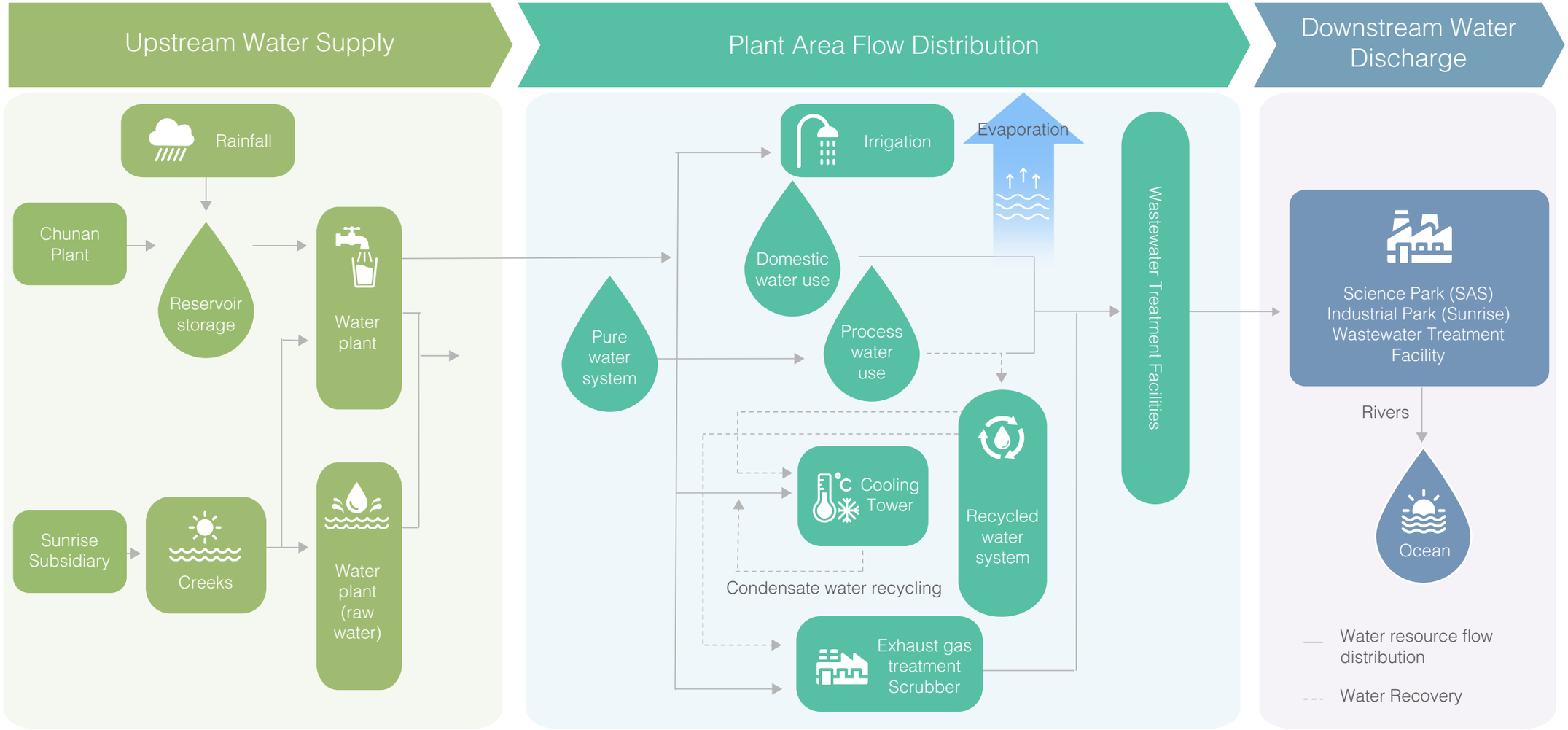
The operational water use of each SAS plant area is applied for from public departments in accordance with law. The water sources are taken from tap water supplied by Taiwan Water Corporation and surface water systems, and groundwater resources are not used; therefore, there is no risk of groundwater over-extraction, land subsidence, or damage to regional hydrology and ecological environment. Through compliant water withdrawal and stable water supply management, the Company ensures the balance between production operation and environmental protection.

The tap water supply source of the Chunan Branch is Dongxing Water Treatment Plant, and its raw water is taken from Yongheshan Reservoir. The above-mentioned raw water sources are not located within the scope of national or international nature reserves, nor do they belong to water bodies with high ecological sensitivity (for example, with special area or functions, rare, threatened, or endangered ecosystems), and they also do not involve waters inhabited by endangered species.

The Company continues to pay attention to the environmental status of water sources and water supply stability. Through water resource risk inventory and compliance management mechanisms, it ensures that water withdrawal behavior complies with relevant laws and regulations, while also being committed to improving water use efficiency and recycling utilization rate, reducing reliance on natural water bodies and environmental impacts, and moving toward the goal of sustainable water resource management.

Referring to the Aqueduct water resource risk assessment tool, Taiwan's overall water resource risk belongs to level 1~2 (low to medium risk), and there are no areas belonging to high water resource stress. Therefore, SAS has no water withdrawal, water discharge, or water consumption from areas with high water resource stress.

Water Use and Discharge Flowchart



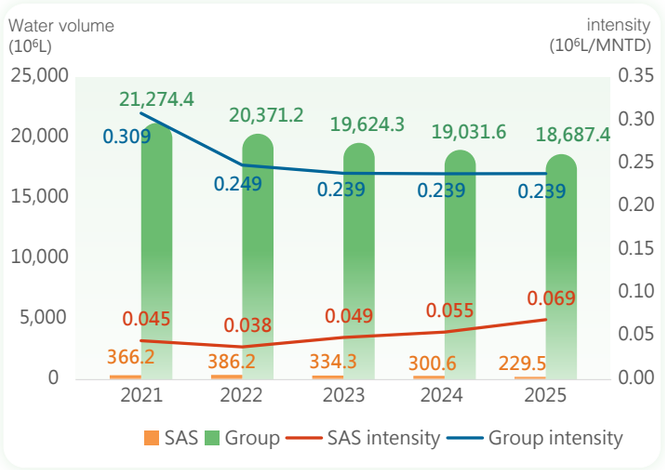
Water withdrawal, Discharge, and Consumption Volume in Recent Years

Unit: Million liters (10^6 L)

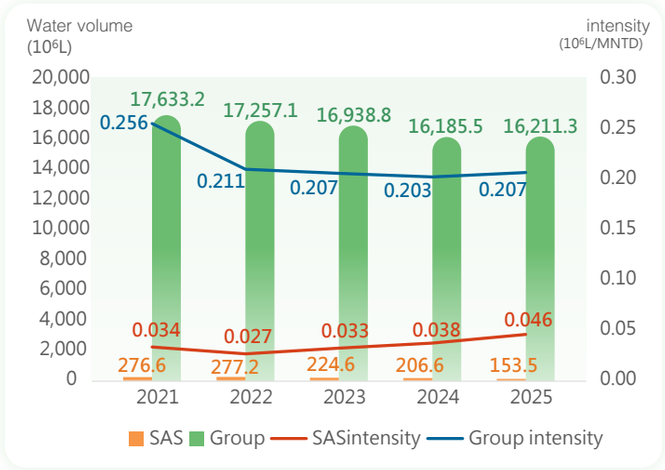
Item		2021				2022					2023				
		SAS	Subsidiary		Group	SAS	Subsidiary			Group	SAS	Subsidiary			Group
			GlobalWafers	TSC			GlobalWafers	TSC	AWSC			GlobalWafers	TSC	AWSC	Actron Technology Corp.	
Water withdrawal quantity	Surface water	0	1,269.413	0	1,269.413	0	1,261.181	0	0	1,261.181	0	1,495.874	0	0	0	1,495.874
	Underground water	0	9,492.499	0	9,492.499	0	8,274.224	0	0	8,274.224	0	7,663.616	0	0	0	7,663.616
	Seawater / produced water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Third-party water–Raw water	224.088	0	0	224.088	235.817	0	0	0	235.817	190.418	0	0	0	0	190.418
	Third-party water–Treated	142.154	10,133.984	12.208	10,288.346	150.346	10,228.225	13.019	208.448	10,600.038	143.849	9,714.552	10.149	164.798	241.092	10,274.440
	Total	366.242	20,895.9	12.208	21,274.35	386.163	19,763.6	13.019	208.448	20,371.23	334.267	18,874	10.149	164.798	241.092	19,624.306
Water discharge	Surface water	0	5,656.671	0	5,656.671	0	4,634.591	0	0	4,634.591	0	3,912.772	0	0	0	3,912.772
	Underground water	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Seawater	0	4,737.976	0	4,737.976	0	4,435.064	0	0	4,435.064	0	3,619.546	0	0	0	3,619.546
	Third-party water	276.634	6,952.960	8.976	7,238.570	277.206	7,755.557	8.971	145.724	8,187.458	224.61	8,858.033	7.235	96.937	219.697	9,406.512
	Total	276.634	17,347.607	8.976	17,633.217	277.206	16,825.212	8.971	145.724	17,257.113	224.61	16,390.351	7.235	96.937	219.697	16,938.830
Water consumption		89.608	3,548.293	3.232	3,641.133	108.957	2,938.388	4.048	62.724	3,114.117	109.657	2,483.649	2.914	67.861	21.395	2,685.476

Item		2024						2025					
		SAS	Subsidiary				Group	SAS	Subsidiary				Group
			GlobalWafers	TSC	AWSC	Actron Technology Corp.			GlobalWafers	TSC	AWSC	Actron Technology Corp.	
Water withdrawal quantity	Surface water	0	1,648.196	0	0	0	1,648.196	0	1,468.2	0	0	0	1,468.2
	Underground water	0	7,116.243	0	0	0	7,116.243	0	7,441.3	0	0	0	7,441.3
	Seawater / produced water	0	0	0	0	0	0	0	0	0	0	0	0
	Third-party water–Raw water	172.444	0	0	0	0	172.444	109.439	0	0	0	0	109.439
	Third-party water–Treated	128.125	9,533.713	10.7	178.205	243.991	10,094.734	120.097	9,098	11.34	186.335	252.705	9,668.477
	Total	300.569	18,298.153	10.7	178.205	243.991	19,031.618	229.536	18,007.5	11.34	186.335	252.705	18,687.416
Water discharge	Surface water	0	3,703.614	0	0	0	3,703.614	0	3,781	0	0	0	3,781
	Underground water	0	0	0	0	0	0	0	0	0	0	0	0
	Seawater	0	4,377.412	0	0	0	4,377.412	0	4,292.6	0	0	0	4,292.6
	Third-party water	206.565	7,562.899	7.408	100.215	227.338	8,104.425	153.487	7,646	7.408	106.148	224.651	8,137.694
	Total	206.565	15,643.924	7.408	100.215	227.338	16,185.450	153.487	15719.6	7.408	106.148	224.651	16,211.294
Water consumption		94.004	2,654.228	3.292	77.99	16.653	2,846.167	76.049	2,287.9	3.932	80.187	28.054	2,476.122

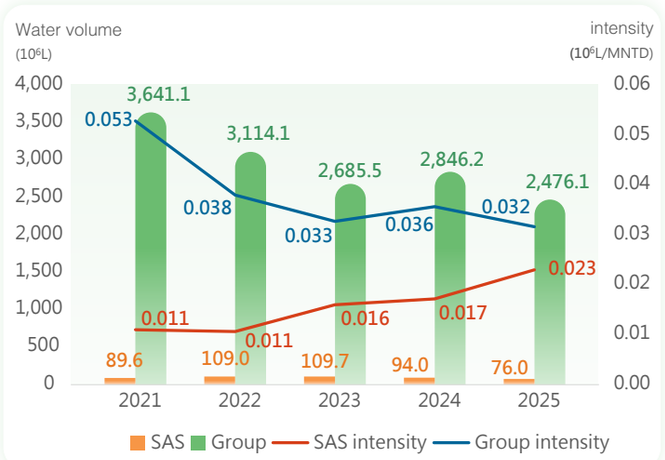
Water Withdrawal



Water Discharge



Water Consumption



Note:

1. Scope of SAS: Chunan Branch (Plant 2) and Sunrise Subsidiary; the headquarters and SGE Hsu-Hsin Branch are located within the buildings of GlobalWafers' Hsinchu Plant and SAS Chunan Branch, respectively, and lease office space without production processes. Since no independent water meters are installed, their water use is not accounted for separately; however, their actual water use is included in the totals for GlobalWafers' Hsinchu Plant and SAS Chunan Branch, respectively.
2. Scope of Group: In addition to the aforementioned SAS scope, the following subsidiaries are also included
   (in accordance with the years included in the consolidated financial statements)
   2021–GlobalWafers and TSC
   2022–GlobalWafers, TSC, and AWSC (newly added subsidiaries in that year)
   2023–GlobalWafers, TSC, AWSC, and Actron (newly added subsidiary in that year)
   2024–GlobalWafers, TSC, AWSC, and Actron
   2025–GlobalWafers, TSC, AWSC, and Actron
3. Intensity: water volume (106 L) divided by revenue (MNTD); "SAS intensity" uses parent company only revenue, while "Group intensity" uses consolidated revenue.

3.2.2 Water Pollution Prevention and Control

In response to the regulations and infrastructure conditions of the locations where each plant is situated, the process wastewater of SAS is respectively discharged into the wastewater treatment plant of the Chunan Park under the Hsinchu Science Park Bureau, Ministry of Science and Technology, and the wastewater treatment plant of the Lize Industrial Park is discharged to the designated wastewater treatment plant for treatment. To maintain the stable and efficient operation of the pollution prevention and control systems, the Company has established a regular equipment maintenance and inspection system, implements preventive maintenance and immediate abnormality handling mechanisms, and assigns dedicated personnel with professional qualifications to conduct operation and management in accordance with standard operating procedures and regulatory requirements, so as to ensure treatment efficiency and discharge quality. In addition, to strengthen real-time monitoring and risk response capabilities, each plant has installed automatic water volume and water quality monitoring facilities before wastewater discharge to continuously monitor key indicators such as pH value and fluoride ion concentration, and conducts regular water quality testing and reporting operations in accordance with regulations. The discharged water quality complies with or is superior to the pipeline discharge standards. Meanwhile, the park management authorities also conduct unscheduled sampling inspections at the discharge outlets, forming a dual supervision mechanism to ensure water quality compliance. In 2025, no major leakage, overflow, or environmental penalty incidents occurred at any plant.

In terms of water pollution prevention and control strategies, the Company upholds the management principles of "source reduction, waste liquid diversion, and classified treatment." Wastewater is diverted and further classified according to the characteristics of different process wastewater, and is treated separately by the in-plant wastewater treatment facilities based on its water quality characteristics. Each plant has established a comprehensive biological treatment system, combining anaerobic treatment with aerobic treatment, to effectively enhance the removal efficiency of organic pollutants and the overall stability of treatment.

According to the analysis results of wastewater discharge water quality in 2025, the effluent quality met or was better than the applicable sewer acceptance standards prescribed by the Science Park Bureau, indicating that the wastewater treatment facilities operated stably and that the management mechanisms were sound. The Company will continue to refine wastewater treatment technologies and management systems to reduce impacts on environmental water bodies and fulfill its responsibility for sustainable water resource management.

3.3 Air Pollution Prevention and Control

3.3.1 Air Pollutant Emissions

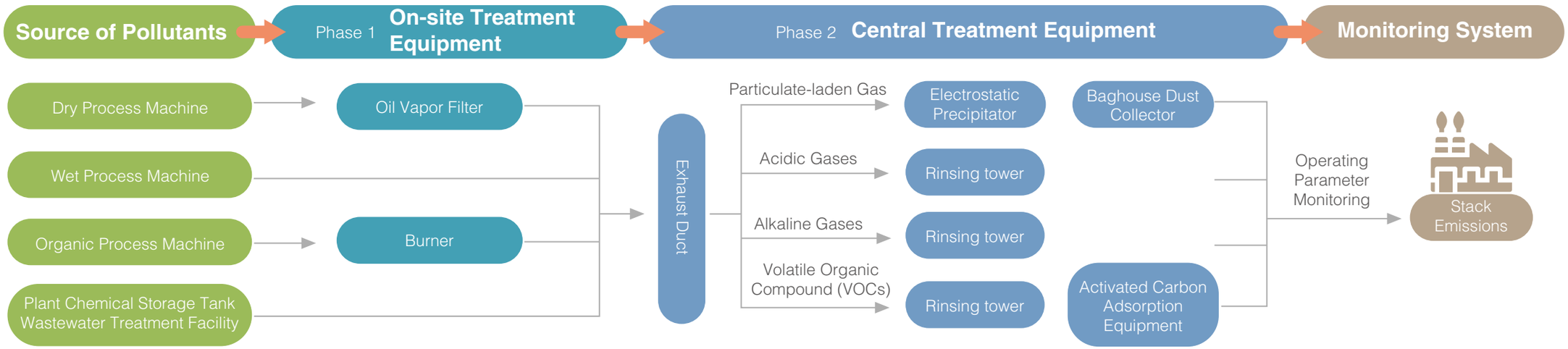
To fulfill environmental protection responsibilities and corporate sustainable development goals, the Company establishes complete pollution prevention and control equipment with sufficient treatment capacity in accordance with relevant environmental protection regulatory requirements. Due to differences in the production processes of each plant, in order to ensure that all pollutants are properly treated before discharge, the process exhaust gases of each plant area are slightly different.

Chunan Branch generates three primary waste gases: acidic gases, volatile organic compounds, and particulate pollutants. Sunrise Subsidiary produces acidic gases, alkaline gases, and volatile organic compounds. According to the characteristics of process exhaust gases, diversion is carried out at the pollutant source. In addition, for gases such as oil gases and combustible gases, high-concentration pollutants are first pre-treated through on-site treatment equipment, and then the gases are sent to central treatment equipment for second-stage end-of-pipe prevention and control equipment treatment, in order to improve air pollution treatment efficiency.

The Company continues to pay attention to the operational stability of air pollution prevention and control equipment. NMHC concentration monitors, continuous automatic monitoring flowmeters, and other monitoring instruments are installed before the emission pipelines, and backup equipment is also provided. If equipment operation failure occurs, the backup equipment can be activated in a timely manner for support, so as to maintain the stable operation of prevention and control equipment and reduce pollution risks to the minimum. In addition, the plant affairs unit conducts daily on-site inspections of the prevention and control equipment system, implements management by walking around, and confirms that the air pollution system operates normally and that all operating parameters are within the control range. No malfunctions or penalties related to air pollution control equipment were reported in 2025.

The VOC emission intensity at SAS has remained between 0.0001 and 0.0002 tons per MNTD over the past three years. In 2023, overall emission intensity increased after Actron Technology was consolidated as a subsidiary and included in reporting. Due to the nature of its industry, VOC emissions from Actron Technology are higher, which affected the Group's aggregated emission data.

Air Pollution Control Process



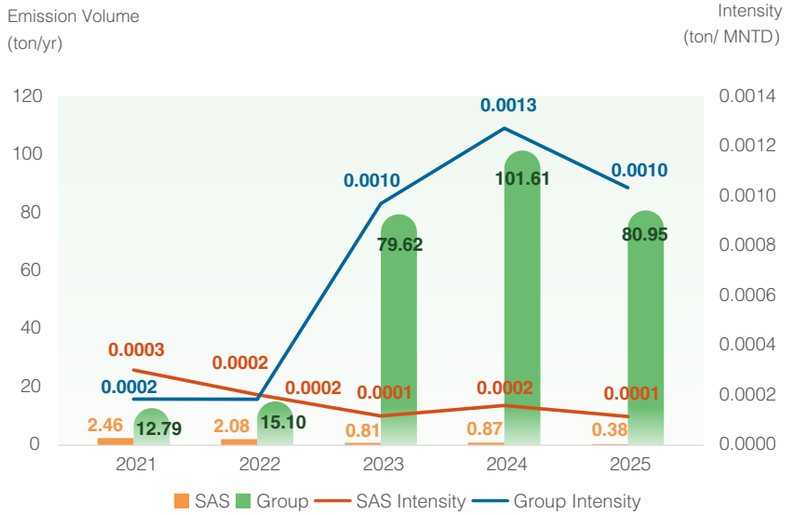
Air Pollutant Emissions in Recent Years

Unit: (ton/yr)

Item	2021			2022				2023				
	SAS	Subsidiary	Group	SAS	Subsidiary		Group	SAS	Subsidiary			Group
		GlobalWafers			GlobalWafers	AWSC			GlobalWafers	AWSC	Actron Technology Corp.	
Particulate Matter Pollutants (Par)	0.398	5.513	5.911	0.823	4.655	-	5.478	0.341	4.566	-	-	4.907
Nitric acid (HNO_3)	0.166	9.254	9.420	0.098	8.190	-	8.288	0.004	5.126	-	-	5.130
Hydrofluoric acid (HF)	0.011	1.471	1.482	0.024	1.639	-	1.663	0.006	1.798	-	-	1.804
Hydrogen Chloride (HCl)	0.004	7.512	7.516	0.008	8.577	-	8.585	-	6.939	-	-	6.939
Volatile Organic Compound (VOC)	2.459	10.334	12.793	2.078	8.993	4.030	15.101	0.805	10.384	1.226	67.200	79.616
Ammonia (NH_3)	0.037	11.847	11.884	<0.001	12.580	-	12.580	-	27.067	-	-	27.067
Phosphoric acid (H_3PO_4)	0.039	0.017	0.056	<0.001	0.007	-	0.007	-	0.007	-	-	0.007
Sulfuric Acid (H_2SO_4)	-	0.099	0.099	<0.001	0.155	-	0.155	-	0.122	-	-	0.122

Item	2024					2025				
	SAS	Subsidiary			Group	SAS	Subsidiary			Group
		GlobalWafers	AWSC	Actron Technology Corp.			GlobalWafers	AWSC	Actron Technology Corp.	
Particulate Matter Pollutants (Par)	0.504	4.842	-	-	5.346	0.466	8.524	-	-	8.991
Nitric acid (HNO_3)	0.020	3.899	-	-	3.919	0.008	5.112	-	-	5.120
Hydrofluoric acid (HF)	0.018	1.267	-	-	1.285	0.011	3.845	-	-	3.856
Hydrogen Chloride (HCl)	0.030	6.608	-	-	6.638	0.017	5.660	-	-	5.677
Volatile Organic Compound (VOC)	0.872	19.613	1.752	79.370	101.607	0.382	23.419	1.226	55.925	80.952
Ammonia (NH_3)	0.229	31.918	-	-	32.146	0.132	35.138	-	-	35.270
Phosphoric acid (H_3PO_4)	<0.001	0.006	-	-	0.007	0.000	0.001	-	-	0.001
Sulfuric Acid (H_2SO_4)	0.003	0.325	-	-	0.328	0.002	0.005	-	-	0.006

VOCs



Note:

1. Scope of SAS: Chunan Branch (Plant 2) and Sunrise Subsidiary; the headquarters and SGE Hsu-Hsin Branch are located within the buildings of GlobalWafers' Hsinchu Plant and SAS Chunan Branch, respectively, and lease office space without production processes.
2. Scope of Group: In addition to the aforementioned SAS scope, the following subsidiaries are also included (in accordance with the years included in the consolidated financial statements; TSC is not classified as a fixed pollution source, therefore no air pollution emission information is available)
   2021–GlobalWafers
   2022–GlobalWafers and AWSC (newly added subsidiaries in that year)
   2023–GlobalWafers AWSC, and Actron (newly added subsidiary in that year)
   2024–GlobalWafers AWSC, and Actron
   2025–GlobalWafers AWSC, and Actron
3. "-" represents no such item or not disclosed
4. Intensity: VOC emissions (ton) divided by revenue (MNTD); "SAS intensity" uses parent company only revenue, while "Group intensity" uses consolidated revenue.

3.3.2 Air Pollution Emergency Response Drill

The process exhaust gases from Chunan Branch and Sunrise Subsidiary contain air pollution emergency-controlled substances such as hydrofluoric acid and hydrochloric acid. Each year, at least one air pollution emergency drill is conducted for units utilizing these controlled substances in the factory, and the drill outcomes are reported to the relevant authority. The regular drills aim to reduce environmental impact, personal injury, and potential loss of equipment and property resulting from accidents, as well as to ensure staff are prepared to implement appropriate contingency measures promptly.

Hydrofluoric Acid Tanker Leak Drill

【Occupational Safety and Health】Emergency Response Team Training (HF)

Exercise Location: Chemical Warehouse Filling Area
Exercise Scenario: HF Leakage

Exercise Highlights

▲ The leak was discovered and reported to the responsible supervisor of the area and the Environmental Protection Bureau.

▲ The emergency response team was assembled, and tasks were assigned to each team.

▲ Evacuation guidance personnel carried out on-site isolation zone control.

▲ The emergency response team donned Level A protective equipment.

▲ The safety protection team donned Level C protective equipment.

▲ The emergency response team entered the leakage site to perform emergency response operations.

▲ The emergency response team conducted HF concentration monitoring.

▲ The safety protection team established a decontamination area.

▲ The emergency response team carried out leak handling operations (1).

▲ The emergency response team carried out leak handling operations (2).

▲ The emergency response team carried out decontamination procedures.

▲ The emergency response team assembled, conducted a headcount, and announced that the emergency situation had been resolved.

National Joint Emergency Response Drill

Exercise Location	In front of the Lize Service Center
Exercise Scenario	HF Tanker Truck Rollover and Leakage
Participating Organizations	SAS, Taiwan Semiconductor Company Limited, Yenyo Technology Co.Ltd., Voyager Photovoltaic Co., Ltd., and Sunlit Fluo& Chemical Co., Ltd.

Exercise Highlights

▲ HF tanker truck rollover and leakage.

▲ Emergency response personnel from all plants were assembled, and tasks were assigned to each team.

▲ The Detection Team donned Level A protective equipment.

▲ The Containment Team and Decontamination Team donned Level C protective equipment.

▲ The Detection Team entered the leakage site to perform emergency response operations (1).

▲ The Detection Team entered the leakage site to perform emergency response operations (2).

▲ The Containment Team carried out drainage channel containment operations.

▲ The Decontamination Team performed decontamination procedures for the Detection Team.

▲ The Tank Transfer Team carried out lifting operations.

▲ The Tank Transfer Team carried out tank transfer operations.

▲ After the tank transfer was completed and the tank was loaded onto the trailer, the emergency situation was declared resolved.

▲ Experts and the emergency response team conducted discussions and shared observations from the exercise.

3.4 Resource Circularity

SAS is committed to implementing a circular economy. Through process optimization and source reduction, the Company reduces waste generation, and deepens resource reuse strategies to reduce environmental burden. We have established an institutionalized management improvement mechanism. While strengthening risk control, we also actively move toward the vision of low-carbon production and sustainable operations.

The primary objective is source reduction through enhanced process design and minimizing raw material consumption, thereby decreasing overall waste generation. The secondary focus is on recycling and reuse within the manufacturing facility, which serves to elevate material recovery rates, minimize waste output, and reduce reliance on raw materials, outsourced semi-finished goods, consumables, and transportation energy. The third priority involves recycling and reusing resources outside of company premises, while the final recourse is commissioning external treatment operations, including incineration, physical and chemical processing, and landfill.

Besides, all pertinent data regarding waste solar panels generated by SAS—including quantities and model numbers—are systematically registered via the Ministry of Environment's "Waste Solar Panel Recycling Service Management Information System." This platform cross-references serial numbers with facility information, following which the Ministry of Environment arranges for authorized agencies to remove and dispose of waste photovoltaic panels. As of this report, all SAS-generated waste solar panels are processed domestically, without any cross-border (international) treatment.

3.4.1 Impacts of Waste and Mitigation Actions

In order to mitigate the impact of waste generated from its own operating activities, SAS adopted the following actions in 2025:

1. Source reduction:

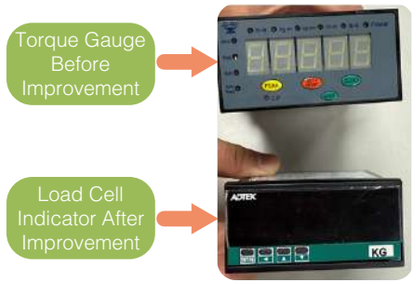
   For parts with a high wear and damage rate, improvements were carried out to extend the service life of process components and reduce the amount directly replaced with new products.

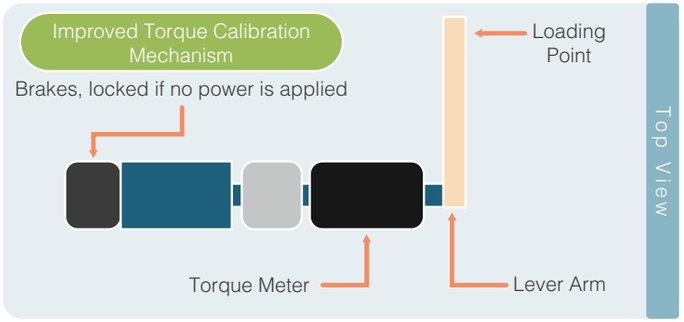
   Improvement Case

   a. Alternative solution for the torque gauge head of the radial drilling machine:

      Before improvement: The original manufacturer's torque gauge head frequently crashed, and the wear and damage rate was high.

      After improvement: The torque gauge head was replaced with a load cell indicator, and the quantity damaged and discarded decreased by 85.7% compared with the previous year.

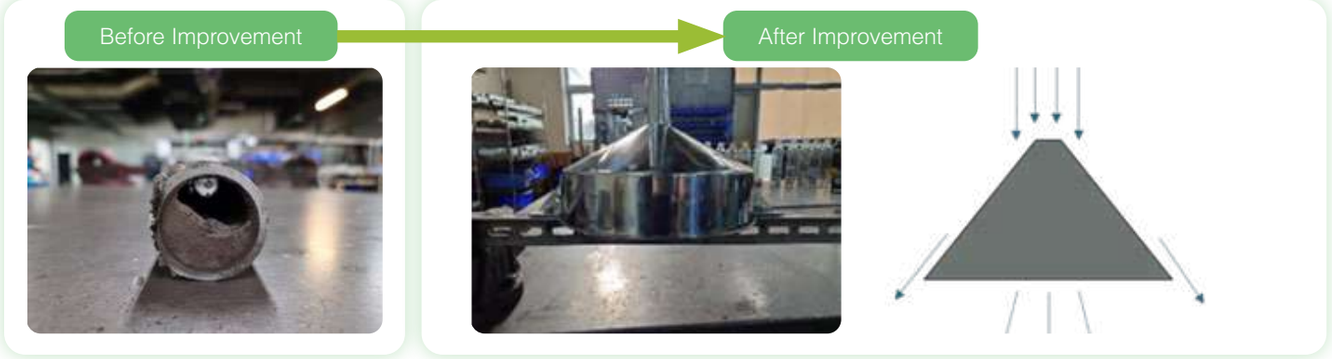




   b. Improvement of the sprinkler system of the squaring machine:

      Before improvement: The sprinkler system was prone to blockage and failure due to silicon sludge, and each squaring machine had to replace the sprinkler system twice per year.

      After improvement: With reference to the operating principle of fire sprinklers, a strong water flow is used to impact a specially made funnel, the piping design is removed, and the problem of pipeline blockage is eliminated. Since its introduction, the system has operated well, with no record of any parts being damaged or replaced.

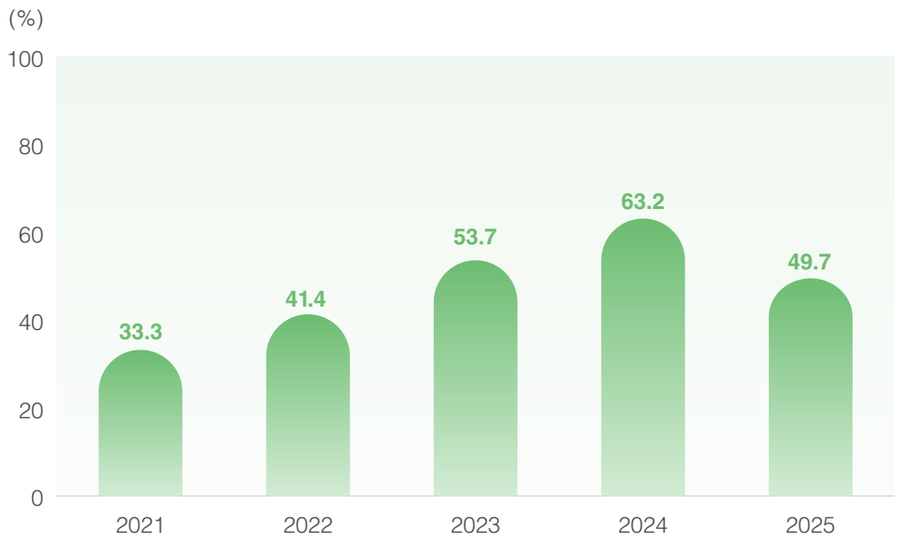


2. Internal recycling and reuse:
   For multicrystalline silicon ingot products, in-plant silicon return materials are used, and since 2022, external silicon recycled materials have also been purchased. Through the use of recycled materials, the use of limited raw materials is reduced. In 2025, the proportion of silicon recycled raw materials decreased, mainly due to the decline in the obtainable volume of externally purchased silicon materials. If the instability of external supply is excluded, the proportion of recycled use of in-plant silicon return materials can still reach 49.7%.
3. External resource recycling and reuse: For part of the generated empty waste acid barrels, empty saw-wire spool, etc., priority is given to the original suppliers for recycling and reuse.

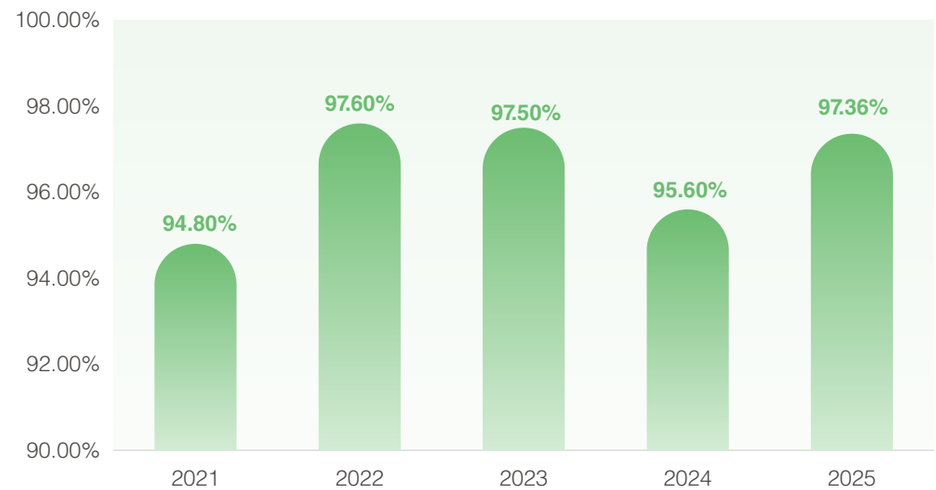
3.4.2 Overview of Waste Generation and Treatment

In 2025, SAS generated a total of 1,768.0 metric tons of waste, including silicon return material and waste collected by suppliers for reuse. Of this amount, general waste represented approximately 99.8% (1,764.0 metric tons), while hazardous waste accounted for around 0.2% (4.0 metric tons). The Company upholds the principle of resource circulation and utilization within its plants, and gives priority to recycling and reuse methods for waste treatment. For the target set in 2025 that the waste resource recovery ratio shall reach more than 90%, the current actual performance has reached 97.36%, steadily ahead of progress; looking toward 2030, SAS will continue to optimize the momentum of waste reduction and strive to achieve the long-term vision of a 95% resource recovery ratio.

Percentage of Recycled Raw Materials Used in Silicon Ingots



Waste Resource Recovery Rate



The increase in the 2024 waste intensity indicator was mainly due to changes in the solar energy market, under which the Company carried out production line adjustments, and non-routine derivative waste was generated during the plant clearance process. In the future, the Company will continue to improve waste management measures, thereby improving performance indicators. The generation and disposal methods of various types of waste in 2025 are summarized as follows.

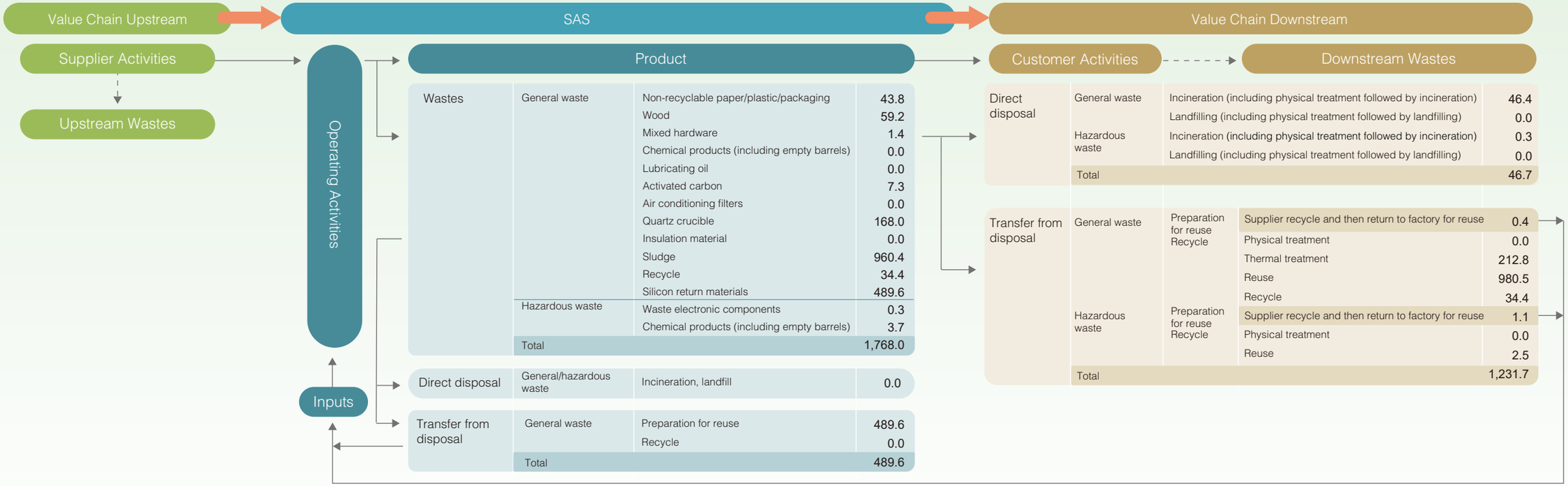
2025 SAS Waste Statistics

Unit: Metric tons

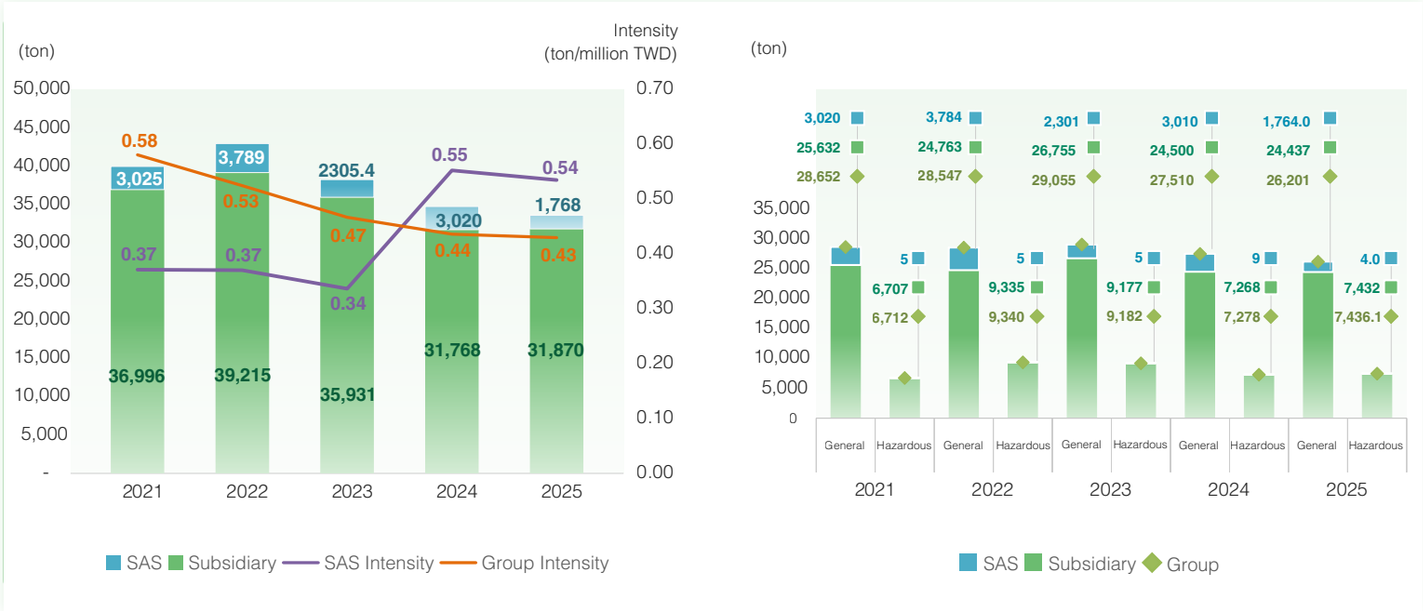
Wastes					
1,768.0	General waste	1,764.0	On-site reuse		
			silicon return materials	489.6	
	Hazardous waste	4.0	Off-site treatment		
			Incineration	0.3	
			Landfill	0.0	
			Reuse (returned to plant after supplier recovery)	1.1	
			Recycling (physical treatment and reuse)	2.5	

Off-site treatment	
Incineration	46.4
Landfill	0.0
Reuse (returned to plant after supplier recovery)	0.4
Recycling (physical/thermal treatment, reuse, resource recovery)	1,227.6

Note:
1. Reuse: Take a product or composition intended for waste and adopt the inspection, cleaning, or repair methods to reuse it for its original purpose.
2. Recycle: Reprocess (chemical, physical, heat treatment, etc.) waste products or components to produce new materials.



Recent Total Waste Generation by SAS and its Subsidiaries



Note:
1. Scope of SAS: Chunan Branch (Plant 2), Sunrise Subsidiary
2. Scope of Group: In addition to the aforementioned SAS scope, the following subsidiaries are also included (in accordance with the years included in the consolidated financial statements)
   2021–GlobalWafers and TSC
   2022–GlobalWafers, TSC, and AWSC (newly added subsidiaries in that year)
   2023–GlobalWafers, TSC, AWSC, and Actron Technology Corp. (newly added subsidiary in that year)
   2024–GlobalWafers, TSC, AWSC, and Actron Technology Corp.
   2025–GlobalWafers, TSC, AWSC, and Actron Technology Corp.
3. Intensity: Waste output quantity (ton) divided by revenue (MNTD); "SAS intensity" uses parent company only revenue, while "Group intensity" uses consolidated revenue.

3.4.3 Management of Outsourced Waste Removal/Disposal

SAS has implemented comprehensive procedures for in-plant waste management and treatment in alignment with the "Regulations Governing Determination of Reasonable Due Care Obligations of Enterprises Commissioning Waste Clearance":

Internal Waste Management

Regular self-inspections are conducted to review waste storage conditions, online declaration records, vendor clearance qualifications, and ensure proper waste disposal is tracked and documented.

Oversight of Waste Management Organizations

- Waste disposal agencies undergo joint inspections by relevant departments—including waste management, EHS, procurement, and legal personnel—to confirm that neither the agencies nor their employees have violated the Waste Disposal Act or incurred related penalties, thereby validating their qualifications. For new waste clearance or disposal contractors, designated factory units conduct on-site assessments to verify the adequacy of treatment/reuse equipment and ensure sufficient capacity for compliant waste processing. The post-treatment sales status of remanufactured products is also reviewed to mitigate risks associated with illegal dumping or improper disposal.
- High-risk waste treatment and reuse agencies are subject to on-site audits at least annually. These reviews encompass an evaluation of operational records, product quality standards, inventory and sales status, environmental protection licenses, and compliance with on-site environmental safety protocols. Inspection outcomes are graded as A, B, or C. Vendors receiving a grade of C (three or more deficiencies) are disqualified from further engagement. In 2025, all inspected vendors achieved an A grade.

3.5 Biodiversity

All plant areas/sites of Sino-American Silicon Products Inc. (Headquarters, Chunan, Sunrise, and SGE Hsu-Hsin) are located within industrial parks, and the impact of operating activities on biodiversity is relatively limited. According to the query results from the WDKBA geographic information system, none of the Company's sites are located in Key Biodiversity Areas (KBA), and the water resource risk assessment results show that the overall water resource risk of each plant area is level 1~2 (low to medium risk), with none located in high water resource stress areas. After assessment, none of the Company's sites are located in ecologically sensitive areas where priority actions are required. However, as global attention to biodiversity issues continues to increase, the Company will continue to pay attention to international trends and regulatory requirements, and assess appropriate environmental management strategies, to ensure that operational development and ecological protection proceed in parallel. SAS has planned that in 2026 it will proceed toward two aspects: "environmentally friendly contract farming" and "native species restoration." Centered on farms, it expects to protect regional species through friendly farming contracts and ensure that habitats do not shrink. In addition, through professional assistance, it plans to plant and restore Taiwan endemic plant species under suitable conditions around the plant areas, with the expectation of maintaining local ecosystems and promoting environmental resilience and diversity.

In addition, the Company regards businesses such as renewable energy and energy storage services as key service pathways for protecting biodiversity. In addition to the Group having announced 2050 RE100 in 2021, it also expects to assist industries in reducing carbon through providing clean energy solutions, and to mitigate from the source the damage caused by climate change to ecosystems. In addition, subsidiary SGE Hsu-Hsin expanded into agrivoltaic and fishery-solar projects in 2025, and obtained the consent of the competent authorities in accordance with regulations. The projects are expected to be completed and begin operations in 2026. To reduce the impact on the environment, mechanical weeding is used instead of chemical weed control during operation and maintenance. In 2025, it also signed the "Self-Regulatory Convention on Solar Photovoltaic Panel Cleaning," committing that solar modules will be cleaned only with clean water throughout the entire process, and that no chemical agents or cleaning detergents will be used or sprayed. It is strictly prohibited to affect surrounding land, water bodies, and ecological environment, thereby effectively achieving the corporate responsibility of being environmentally friendly. In 2025, an on-site inspection was conducted of the floating solar power plants previously installed and constructed by SGE Hsu-Hsin. It was found that the power plants have been constructed for many years, and the degree of impact on the local ecological environment remains low. At the locations of the power plants (Dayuan District and Guanyin District, Taoyuan City), multiple species of wild birds can be seen inhabiting and reproducing at the power plants (see the figure below).

04 Talent Development and Social Inclusion

4.1 Human Resource

4.2 Talent Attraction and Retention

4.3 Talent Cultivation and Development

4.4 Supportive and Caring Workplace

4.5 Empowering Local Communities

4.1 Human Resource

Talent is at the core of sustainable corporate growth. SAS values diversity and inclusion, respects employees' right to choose and work autonomy, and is committed to working together with employees to create achievements. In response to the challenges posed by globalisation, technological progress, organizational change, and demographic trends, SAS has established comprehensive short-, medium-, and long-term human resource management plans. These address key corporate objectives relating to attracting, retaining, developing, and evaluating talent.

In terms of human resources recruitment, SAS attracts knowledge-based talent with professional capabilities and potential through a structured and fair interview process; in talent development, it cultivates versatile talent with cross-disciplinary capabilities through job rotation and diverse learning mechanisms. At the same time, the Company internally encourages teamwork and a project-oriented work model, creating a safe, healthy workplace environment that respects human rights.

SAS has established a performance-linked reward system, supporting employees and supervisors in jointly setting individual goals and promoting the simultaneous growth of organizational and individual value. We continue to refine the quality of human resources services, helping employees realize their potential and create greater overall value.

Adopting a people-oriented philosophy, SAS acknowledges and respects global cultural diversity. Employees are encouraged to stay passionate, demonstrate collaboration and integrity, and adhere to local regulations. At the same time, through continuous innovation and self-improvement, SAS continuously enhances organizational capabilities and pursues outstanding performance.

To deepen consensus on its core values and corporate vision, the Company maintains ongoing dialogue with employees through diverse communication channels, including the internal website, regular meetings, publications, and education and training, strengthening cultural identity and promoting the organization's long-term and steady development.

As of 2025, SAS (headquarters & Chunan, Yilan, SGE-Hsu-Hsin branches) and GlobalWafers employed a total of 7,389 individuals, with SAS alone employing 434 staff members. SAS promotes gender equality; within its workforce, 69.8% are male and 30.2% are female. Age distribution is as follows: 5.5% under 30 years, 80.2% between 30 and 50 years, and 14.3% over 50 years. By location: 8.1% are based in Hsinchu, 35.7% in Chunan, and 56.2% in Yilan. Regarding job type: 49.1% are direct personnel, 50.9% indirect; By employment type, regular employees accounted for 95.2% of the workforce, while non-regular employees accounted for 4.8%; Employment contracts comprise 4.8% fixed-term and 95.2% non-fixed-term arrangements. Employees requiring work visas constitute 0.4%, with those not requiring visas accounting for 0.2%.

During 2023–2024, in response to changes in industry conditions and market demand, the Company adopted flexible human resource management strategies to maintain operational stability. Some employees were transferred internally to other Group sites, while others underwent retraining and job optimization, thereby strengthening the organization's overall competitiveness.

2023 to 2025 Staff Structure Analysis

Workforce structure \ Year		2023		2024		2025	
		SAS	GlobalWafers	SAS	GlobalWafers	SAS	GlobalWafers
By gender	Male	453	5,628	418	5,573	303	5,479
	Female	169	1,677	156	1,625	131	1,582
Regular/ Non-regular	Regular (General Employees)	622	6,765	574	6,828	413	6,589
	Non-regular (Dispatch, part-time)	0	540	0	370	21	472
By employment contract	Indefinite-term	621	6,522	573	6,489	413	6,387
	Fixed Term (Contracted)	1	783	1	709	21	674
By nature of work	Direct	349	4,388	297	4,222	213	4,195
	Indirect	273	2,917	277	2,976	221	2,866
By education level	Doctoral degree	3	76	3	76	0	77
	Master's degree	83	561	83	595	58	610
	Bachelor's degree	387	1,651	365	1,974	265	2,168
	Senior high school and vocational school	129	3,894	106	2,962	99	2,748
	Senior high school and below	20	1,123	17	1,483	12	1,352

Workforce structure \ Year		2023		2024		2025	
		SAS	GlobalWafers	SAS	GlobalWafers	SAS	GlobalWafers
By age	< age 30	31	1,095	22	1,241	24	1,139
	Age 30 to 50	437	3,543	488	3,541	348	3,491
	> age 50	154	2,667	64	2,308	62	2,325
Area	Taiwan	622	1,701	574	1,722	434	1,596
	Offshore	0	5,604	0	5,476	0	5,465
Foreign employees and employees assigned overseas	Work visa not required	0	7	1	15	1	12
	Work visa required	1	222	2	214	2	181
Total		7,927		7,772		7,389	

Note:
1. SAS' non-regular employees in 2025 are dispatched personnel (SAS has no part-time or seasonal employees).
2. In 2025, SAS did not employ any workers without guaranteed working hours.

Hiring People with Disabilities

In accordance with government employment policies for persons with disabilities, SAS hires employees in compliance with relevant laws. The Company implements employment equality and promotes a diverse and inclusive workplace environment. In 2025, SAS employed five persons with disabilities. Two had severe or profound disabilities and were counted as four persons for statutory purposes, bringing the statutory count to seven. The employment ratio accounted for 1.6% of the total workforce, thereby creating an inclusive and diverse working environment.

Statutory employment count of persons with disabilities	7 people
Percentage of employees with physical and mental disabilities	1.6%

Notes: In accordance with the People with Disabilities Rights Protection Act, each employee with a disability of severe or above is counted as two individuals for employment quota purposes.

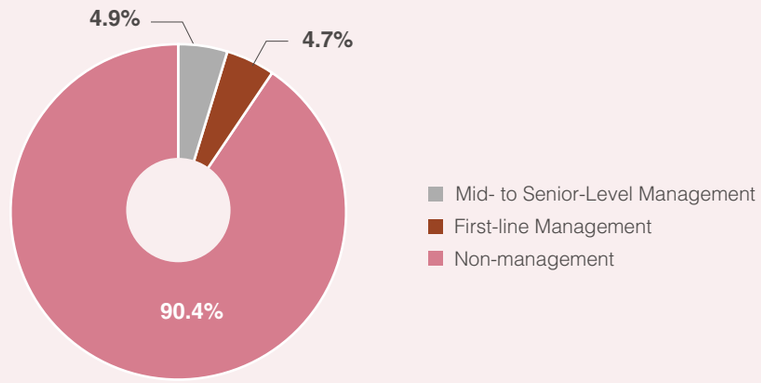
Management

In terms of management, SAS has 66 supervisors, of whom 69.7% are male and 30.3% are female. Among these, 40 individuals hold mid- to senior-level management positions (manager or deputy manager and above), while 26 occupy First-line management roles (section chief level and above but below manager or deputy manager).

All Levels	SAS				GlobalWafers				Total			
	Male	Female	Total	Percentage	Male	Female	Total	Percentage	Male	Female	Total	Percentage
Mid- to Senior-Level Management	30	10	40	9.2%	256	68	324	4.6%	286	78	364	4.9%
First-line Management	16	10	26	6.0%	256	70	326	4.6%	272	80	352	4.7%
Non-management	257	111	368	84.8%	4968	1443	6411	90.8%	5225	1554	6779	90.4%
Total	303	131	434	100.0%	5480	1581	7061	100.0%	5783	1712	7495	100.0%

Note:
1. Mid- to Senior-Level Management: Manager or Deputy Manager Level and Above
2. First-line Management: Section Chief level and above but below Manager or Deputy Manager level
3. Non-management: Including researchers, professionals (engineers, administrators), assistant engineers, technicians, and others.

Management Statistics



New Hires and Employee Turnover Statistics

In 2025, SAS and GlobalWafers hired 689 staff members. By the end of the year, new male employees comprised 6.5% of the total workforce, while female new hires accounted for 2.8%. With respect to age, recruits those aged 30 to 50 represented 4.3%, and under 30 years old made up 4.0%.

In 2025, 1,185 employees left the Company, and the voluntary turnover was 19.8%. Male employees who left the Company constituted 11.1% of the total, while female employees made up 4.9%. Regarding age, 9.8% of departing employees were between 30 and 50 years old, and 3.0% were under 30.

When an employee submits a resignation notice, the HR Department conducts an exit interview to understand the reasons for departure. Based on the employee's job duties, personal attributes, and concerns raised, HR proactively provides explanations and necessary assistance and assesses feasible job adjustments with the aim of retaining talent.

In addition, when vacancies arise within the Group, internal recruitment opportunities are announced to support both organizational development and employees' career planning, promote internal talent mobility, and reduce overall turnover.

2023 to 2025 Statistical Analysis for New Employees

Year		2023												2024												2025											
Area		Yilan		Chunan		Hsinchu		GlobalWafers-Taiwan		GlobalWafers-overseas		Total		Yilan		Chunan		Hsinchu		GlobalWafers-Taiwan		GlobalWafers-overseas		Total		Yilan		Chunan		Hsinchu		GlobalWafers-Taiwan		GlobalWafers-overseas		Total	
Age		No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%
Male	< age 30	0	<0.1%	1	<0.1%	0	<0.1%	51	0.6%	222	2.8%	274	3.5%	0	<0.1%	1	<0.1%	1	<0.1%	88	1.1%	199	2.6%	289	3.8%	16	0.2%	1	<0.1%	1	<0.1%	36	0.5%	155	2.0%	209	2.7%
	Age 30 to 50	0	<0.1%	3	<0.1%	1	<0.1%	35	0.4%	121	1.5%	160	2.0%	0	<0.1%	5	<0.1%	1	<0.1%	78	1.0%	148	1.9%	232	3.0%	45	0.6%	1	<0.1%	2	<0.1%	51	0.7%	121	1.6%	220	2.8%
	≧ age 50	4	<0.1%	0	<0.1%	1	<0.1%	3	<0.1%	48	0.6%	53	0.7%	1	<0.1%	0	<0.1%	0	<0.1%	4	0.1%	63	0.8%	68	0.9%	3	<0.1%	1	<0.1%	0	<0.1%	10	0.1%	36	0.5%	50	0.6%
Female	< age 30	0	<0.1%	0	<0.1%	1	<0.1%	18	0.2%	52	0.7%	71	0.9%	0	<0.1%	0	<0.1%	3	<0.1%	24	0.3%	56	0.7%	83	1.1%	21	0.3%	0	<0.1%	2	<0.1%	20	0.3%	44	0.6%	87	1.1%
	Age 30 to 50	0	<0.1%	0	<0.1%	5	0.1%	25	0.3%	39	0.5%	69	0.9%	0	<0.1%	1	<0.1%	5	0.1%	35	0.5%	43	0.6%	84	1.1%	40	0.5%	2	<0.1%	5	0.1%	29	0.4%	25	0.3%	101	1.3%
	≧ age 50	0	<0.1%	0	<0.1%	0	<0.1%	3	<0.1%	19	0.2%	22	0.3%	0	<0.1%	0	<0.1%	0	<0.1%	1	0.0%	35	0.5%	36	0.5%	3	0.0%	1	<0.1%	0	<0.1%	2	<0.1%	16	0.2%	22	0.3%
Total		1	<0.1%	4	<0.1%	8	0.1%	135	1.7%	501	6.3%	649	8.2%	1	<0.1%	7	0.1%	10	0.1%	230	3.0%	544	7.1%	792	10.3%	128	1.6%	6	0.1%	10	0.1%	148	1.9%	397	5.1%	689	8.9%

2023 to 2025 Statistical Analysis for Employees Who Left the Company

Year		2023												2024												2025											
Area		Yilan		Chunan		Hsinchu		GlobalWafers-Taiwan		GlobalWafers-overseas		Total		Yilan		Chunan		Hsinchu		GlobalWafers-Taiwan		GlobalWafers-overseas		Total		Yilan		Chunan		Hsinchu		GlobalWafers-Taiwan		GlobalWafers-overseas		Total	
Age		No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%	No. of People	%
Male	< age 30	27	0.3%	8	0.1%	0	0.0%	46	0.6%	150	1.9%	231	2.9%	2	<0.1%	1	<0.1%	0	<0.1%	50	0.7%	131	1.7%	184	2.4%	15	0.2%	0	<0.1%	0	<0.1%	35	0.5%	79	1.0%	129	1.7%
	Age 30 to 50	48	0.6%	22	0.3%	0	0.0%	65	0.8%	129	1.6%	264	3.3%	29	0.4%	10	0.1%	2	<0.1%	73	1.0%	126	1.6%	240	3.1%	263	3.4%	8	0.1%	5	0.1%	104	1.3%	123	1.6%	503	6.5%
	≧ age 50	0	0.0%	3	<0.1%	0	0.0%	23	0.3%	55	0.7%	81	1.0%	2	<0.1%	0	<0.1%	0	<0.1%	26	0.3%	119	1.6%	147	1.9%	27	0.3%	1	<0.1%	3	<0.1%	37	0.5%	123	1.6%	191	2.5%
Female	< age 30	1	<0.1%	0	<0.1%	3	0.0%	24	0.3%	35	0.4%	63	0.8%	2	<0.1%	0	<0.1%	3	<0.1%	18	0.2%	52	0.7%	75	1.0%	20	0.3%	0	<0.1%	2	<0.1%	21	0.3%	47	0.6%	90	1.2%
	Age 30 to 50	1	<0.1%	4	0.1%	1	<0.1%	58	0.7%	46	0.6%	110	1.4%	12	0.2%	2	0.2%	1	<0.1%	32	0.4%	29	0.4%	75	1.0%	116	1.5%	2	<0.1%	12	0.2%	56	0.7%	35	0.5%	221	2.8%
	≧ age 50	0	<0.1%	0	<0.1%	1	<0.1%	14	0.2%	21	0.3%	36	0.5%	2	<0.1%	0	<0.1%	1	<0.1%	10	0.1%	35	0.5%	48	0.6%	9	0.1%	0	<0.1%	0	<0.1%	13	0.2%	29	0.4%	51	0.7%
Total		77	1.0%	37	0.5%	5	0.1%	230	2.9%	436	5.5%	785	9.9%	49	0.6%	13	0.2%	7	0.1%	209	2.7%	492	6.4%	769	10.0%	450	5.8%	11	0.1%	22	0.3%	266	3.4%	436	5.6%	1185	15.2%

Note:

1. The percentage of new and resigned employees is based on the ratio of the total number of employees at the end of the previous year.
2. The statistics are divided by region and age. "Chunan" covers: SAS Chunan Branch and SGE Hsu-Hsin Branch. (The operating locations of Chunan and SGE Hsu-Hsin branches are both located in Chunan)
3. "GlobalWafers-Taiwan": covers GlobalWafers headquarters, Chunan Plant, and Taisil Branch.
4. In response to global energy transition trends and the rapidly growing demand for green energy, SAS actively undertook organizational transformation initiatives in 2025. In support of the Company's operational strategy, many employees were reassigned to subsidiaries and newly established affiliates. The organizational restructuring process also influenced the retention intentions of certain employees, leading to workforce attrition.

4.2 Talent Attraction and Retention

Employees constitute a core driving force in the Company's sustained growth and success. SAS offers a competitive remuneration and benefits package, with annual salary reviews conducted in alignment with the Company's operational performance, prevailing industry trends, inflationary factors, and individual employee achievements. Based on these factors, the Company establishes annual salary adjustment standards to ensure the fairness and reasonableness of compensation levels.

To attract and retain high-calibre professionals, the Company has implemented a dual-track remuneration framework for both management and specialist roles, enabling employees to realise their full potential and leverage their unique strengths. Salary levels are established based on job-related criteria—including position, seniority, capability, and job performance—to ensure fair compensation practices and prevent any form of discrimination or inequity related to gender, age, or other personal characteristics.

Furthermore, compensation is directly linked to the Company's profitability, fostering greater employee cohesion, incentivising exceptional performance, and enabling the collective sharing of business success. Promotion recommendations are made annually, grounded in comprehensive evaluations of work performance and individual contributions. SAS is committed to fostering an environment where employees recognize the Company's dedication to sharing its operational achievements, promoting teamwork, enhancing unity and belonging, cultivating a proactive growth culture, and establishing itself as an employer of choice within the industry.

Item		SAS (Headquarters and Chunan, Yilan, and SGE Hsu-Hsin branches)			GlobalWafers (GlobalWafers Headquarters, Chunan Plant, and Taisil Plant)		
		2024	2025	Difference Compared to the Previous Year	2024	2025	Difference Compared to the Previous Year
Non-supervisory positions	Number of non-Managerial Employees (persons)	573	321	-43.98%	1,638	1,552	-5.25%
	Average salary (NTD thousand)	1,080	1,320	22.22%	1,205	1,216	0.91%
	Median salary (NTD thousand)	996	1,022	2.61%	1,101	1,145	3.99%

Note:

1. "Full-time employees" refer to those whose working hours have reached the normal working hours or statutory working hours stipulated by the Company; or, where normal working hours are not specified, whose average weekly working hours exceed 35 hours.
2. "Full-time non-supervisory employees" refers to the number of full-time employees after subtracting the supervisor positions, part-time positions, and those eligible for exemption from statistics from all employees. Employees in supervisory positions refer to Company managers or "managers" within the scope as defined by the regulations of the competent authority: President and equivalent; Vice President and equivalent; Assistant Vice President and equivalent; head of the financial department; head of the accounting department; and other persons who have the authority to manage the Company's affairs, other persons authorized to manage the Company's affairs and sign on its behalf, and consistent within the scope of insiders (managers) and (managers) declared by the annual shareholders meeting report.
3. "Salary" refers to the employee's salary attributable to the current year according to the accrual basis based on the occurrence of powers and responsibilities. It shall include recurring salary (monthly basic salary, fixed allowance, and bonus), overtime pay (regardless of taxable or tax-free), and non-recurring salary (non-monthly allowances, bonuses, employee compensation, etc.).
4. The number of employees listed above is based on the weighted average statistical concept (the average number of employees for each month), and only covers GlobalWafers and the Taisil Branch.

Connection between Appraisal and Remuneration

Annual performance evaluations are conducted for all employees, focusing on their commitment, sense of duty, responsibility, and overall contribution. Salary adjustments are determined with consideration to potential for future development and prevailing market salary benchmarks. Additionally, employees may receive profit-sharing bonuses based on performance outcomes. This approach ensures that employee remuneration and career development are aligned with both the company's financial health and organizational performance, while motivating employees to achieve breakthroughs and enhance their personal value within SAS.

Type	Parties	Frequency	Execution Method
Annual evaluation	All employees	Annually	Supervisors conduct annual performance evaluations based on the achievement of yearly goals to assess employees' job performance
Multi-dimensional evaluation	Supervisors	Annually	Employees undergoing evaluation receive multi-dimensional feedback from cross-departmental supervisors or colleagues with collaborative work experience, serving as a reference for future development
Regular communication and feedback	All employees	Real-time	Employees may proactively initiate discussions on work progress, or supervisors may conduct timely one-on-one meetings to provide immediate feedback or offer necessary support regarding work goals.

Senior Management Team Performance and Remuneration

The remuneration framework for senior management is meticulously designed to align with the Company's overall performance. Annually, management remuneration proposals are structured based on the Company's performance indicators and are subjected to thorough review by the Remuneration Committee prior to submission to the Board of Directors for approval. The long-term incentive program for executives is concurrently structured to reflect both long-term corporate performance and shareholder interests.

To reinforce the Company's commitment to sustainable development, ESG (Environmental, Social, and Governance) criteria have been integrated into the performance assessments of senior executives, including the President, Vice President, and Plant Managers. ESG performance indicators—tailored in weighting and relevance to each executive's responsibilities—cover areas such as domestic and international ESG ratings, climate change mitigation and adaptation (including GHG emissions reduction and progress towards energy/carbon-saving targets), and promotion of occupational safety and health. Achievement against these ESG criteria is incorporated into holistic performance evaluations and subsequently informs remuneration decisions.

Key Talent Long-term Retention Program

For critical positions and core talent, retention strategies tailored to local market conditions are consistently applied. Specialised retention programs are implemented on an ongoing basis to promote long-term employee engagement and sustained contributions.

Comprehensive Employee Benefits System

SAS is dedicated to fostering employee stability and well-being. Across all operational sites, full-time employees are provided with six essential protections: life insurance, medical insurance, disability insurance, parental leave, retirement plans, and participation in an employee stock ownership trust. These benefits enable employees to pursue their roles passionately while supporting mutual growth alongside the Company.

Additionally, sites in Taiwan offer further benefits, including labor and health insurance, group insurance, retirement contributions, meal subsidies, annual travel grants, regular health screenings, festive and milestone gifts, wedding and bereavement allowances, childbirth and hospitalisation subsidies, funding for club activities and continuing education, on-site medical practitioners, cancer support payments, the Employee Assistance program (EAP), and more. These provisions are aimed at ensuring employees achieve a healthy work-life balance.

Ongoing learning forms the foundation of SAS's talent development strategy. Employees are encouraged to participate in a range of internal training sessions and supported through subsidies for external professional development opportunities, guided by the "Employee On-the-Job Education Guidelines." Complementary measures, such as tuition subsidies and flexible working arrangements, are also offered to harmonise company objectives with individual advancement.

Recognition and Rewards for Outstanding Employees

The Company has established comprehensive recognition mechanisms to reward initiative and excellence, including awards for notable achievements, project innovation, and patent submissions.

In Taiwan, the annual Model Employee Selection program identifies and honours exemplary employees through public commendation. These initiatives aim to cultivate a dynamic and positive corporate culture, consistent with the Company's commitment to continuous improvement.

Employee Stock Ownership Trust

In Taiwan, the Company has implemented an Employee Stock Ownership Trust (ESOT) Program, encouraging employees to invest in Company shares through regular monthly fixed-amount contributions. Based on each employee's monthly contribution amount, the Company provides a 100% matching incentive contribution to be invested in the trust, helping employees share in the Company's long-term business achievements and shareholder value.

While respecting employees' autonomy and rights regarding investment decisions, the Program enhances overall employee welfare through a prudent and systematic accumulation mechanism. It also supports employees in planning for retirement and post-employment financial needs, fostering long-term growth and shared success between employees and the Company.

Insurance and Pension System

In addition to enrolling employees in Labor Insurance and National Health Insurance as required by law, SAS provides group insurance coverage exceeding statutory requirements, encompassing term life, accident, aviation, major burn, injury medical, hospitalisation, cancer, and epidemic prevention insurance. Epidemic coverage includes diagnosis benefits and hospitalisation protection, thereby safeguarding employee health and safety.

Under the Labor Standards Act, old pension scheme participants receive monthly retirement reserves equal to 2% of salary, deposited into a designated retirement account at the Bank of Taiwan, with annual allocations fully compliant with legal requirements. The Supervisory Committee of Business Entities' Labor Pension Reserve meets regularly as required by law to oversee pension matters, complemented by an annual actuarial evaluation to ensure sufficiency.

For those eligible under the new pension scheme, 6% of monthly salary is contributed to individual accounts managed by the Bureau of Labor Insurance, to support employees in building a secure and sustainable retirement foundation.

Comprehensive Childbirth and Parenting Support: Prenatal Examination Leave, Prenatal Examination Accompaniment and Paternity Leave, Pregnancy Bed-Rest Leave, Maternity Leave, and Parental Leave

SAS promotes active involvement of all employees in parenting, providing comprehensive maternity and parental leave policies at all locations to help staff balance professional and family commitments. All operating sites provide comprehensive maternity and parental leave arrangements in accordance with applicable laws and the Company's policies.

Prior to childbirth, employees are entitled to prenatal examination leave, prenatal examination accompaniment and paternity leave, pregnancy bed-rest leave, and flexible working hours, enabling effective management of work and family needs. After childbirth, male and female employees with at least six months of service may apply for unpaid parental leave up until their child turns three.

Beyond leave entitlements, SAS ensures female employees' health during each stage of childbirth by offering access to Health Center maternal protection programs and risk assessments. Additional provisions include reserved parking for pregnant employees, "Mom-to-be Good Pregnancy Packs," breastfeeding rooms, and dedicated break times for expressing milk and childcare needs. Risk assessments, physician consultations, and care services are available for pregnant and postnatal employees. Through agreements with childcare providers, SAS offers exclusive discounts to employees. Collectively, these measures underscore the Company's commitment to creating a family-friendly workplace that supports both employee well-being and organizational success.

Execution Results of Unpaid Parental Leave Application

Item	Gender	SAS			GlobalWafers–Taiwan		
		2023	2024	2025	2023	2024	2025
Total employee staff number eligible for unpaid parental leave	Male	34	24	9	46	45	28
	Female	16	3	4	22	21	18
Total number of employees who actually took unpaid parental leave	Male	5	10	11	2	8	9
	Female	7	2	8	9	11	8
Total number of reinstated employees upon the expiration of their child care leaves	Male	3	6	7	4	6	12
	Female	6	4	8	12	8	10
Total number of employees who actually resumed their duties upon the expiration of their child care leaves	Male	2	5	7	3	6	10
	Female	5	2	6	6	5	9
Ratio of employees who resumed their duties upon the expiration of their child care leaves (reinstatement rate)	Male	66.7%	83.33%	100.0%	75.0%	100%	83%
	Female	83.3%	50%	75.0%	50.0%	62.5%	90%
Total number of employees still in service 12 months after expiration of their unpaid child care leaves	Male	2	2	1	1	3	5
	Female	3	4	0	4	6	3
The ratio of employees still in service 12 months after expiration of their parental leaves (retention rate)	Male	66.7%	100%	20.0%	50.0%	100%	100%
	Female	42.9%	80%	0.0%	66.7%	100%	60%

Employee Meals

SAS offers complimentary meals to employees during working hours in staff restaurants. The objective is to provide a suitable dining environment and a variety of meal options to accommodate different dietary requirements. A restaurant monitoring task force oversees meal quality, nutritional standards, and health and catering controls.

Welfare Committee System

Established in 1988, the SAS Employee Welfare Committee implements employee benefits such as emergency relief and first-time cancer support. Cash compensation is provided for marriage, childbirth, and funerals. Employees receive festival and birthday cash gifts, education scholarships, illness and hospitalization subsidies, discounts at designated shops, regular outings, year-end parties, and sponsorships for social welfare organizations. The Committee also holds family days and plant tours on an ad hoc basis, inviting employees and their families to learn more about the Company's operations and strengthen organizational cohesion.

Employee associations promote physical and mental health, entertainment, teamwork, mutual assistance, and communication among staff. Occasional beach cleaning activities are organized to support environmental efforts. Audio-visual facilities have been added to enhance the dining environment.

In 2025, total subsidy expenditures reached NT$4.22 million, averaging NT$10,000 per employee. The employee travel program offers a wide variety of enriching itineraries for employees to choose from, and family members are also welcome to participate.

4.3 Talent Cultivation and Development

Comprehensive Learning Environment and Career Development

To strengthen human capital and advance the Company's growth objectives, we cultivate a learning-focused organizational culture by providing diverse resources and training channels. We actively reinforce on-the-job training and remain committed to supporting the comprehensive career development of every employee. Annual training plans are developed each year in alignment with corporate strategies and policies, tailored to the specific competencies and requirements of each position. Professional capabilities and job competencies are enhanced through both internal and on-the-job training (OJT), and employees are encouraged to participate in programs offered by external professional training institutions.

By leveraging various training methods, the Company ensures multiple learning opportunities that facilitate individual and organizational development. At the end of each quarter, we review and evaluate the training initiatives to ensure their effectiveness in skill enhancement. This systematic approach is designed to increase work efficiency and competitiveness, thereby aligning personal advancement with the Company's sustainability goals.

SAS Provides an all-around, Diversified Learning Environment

SAS has created an E-Library Academy for employees to read and review training materials at any time. The Academy provides resources for multiple professional fields, enabling employees to undertake self-study across disciplines, thereby enhancing their professional capabilities and accelerating their growth. The flexible learning arrangement helps cultivate a culture of reading within the organization, while continuous learning further strengthens overall operating performance.

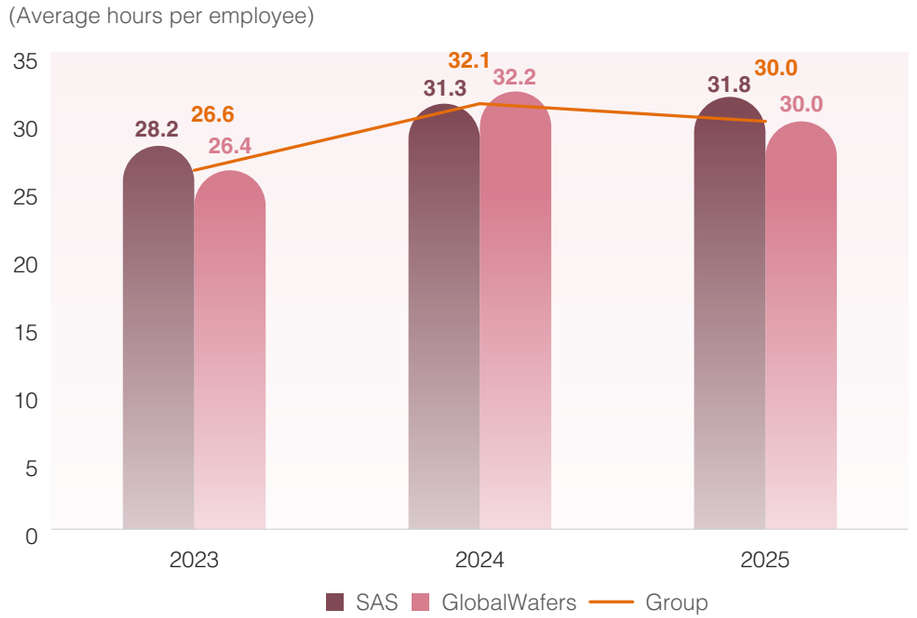
In 2025, the combined training development hours for SAS and GlobalWafers reached 225,956 hours.

For SAS, the average education and training hours by gender are 33.5 hours for men and 27.9 hours for women. By employee classification, direct personnel received an average of 28.2 hours, while indirect personnel averaged 35.3 hours of training.

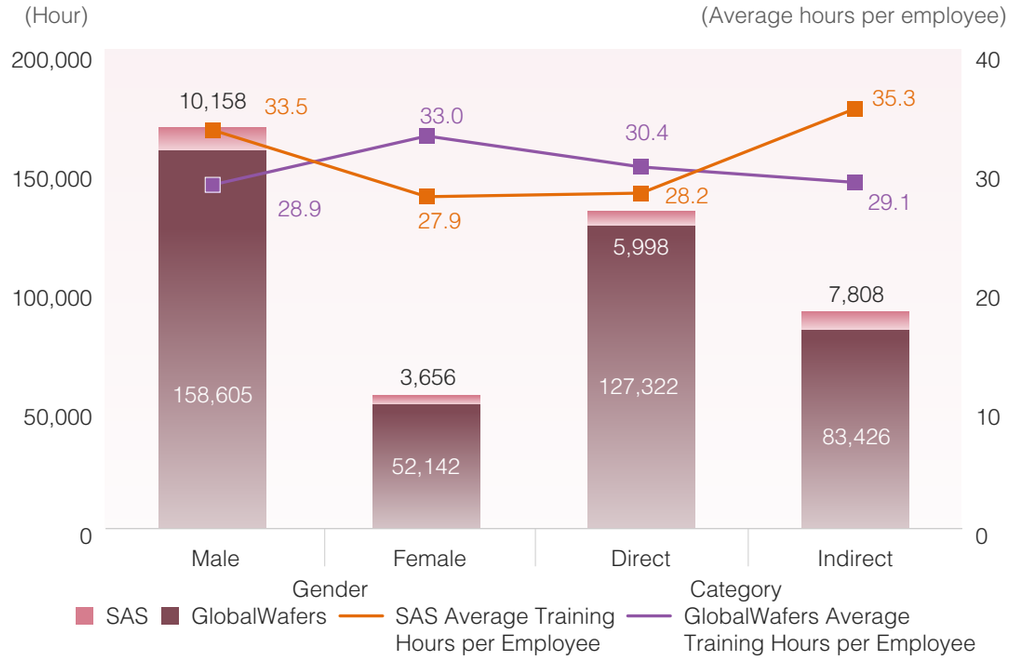
Number of People and Hours for Education and Training from 2023 to 2025

Training Type		2023				2024				2025			
		Number of Sessions	Participant Attendances	Total Class Opening Hours	Total Class Hours	Number of Sessions	Participant Attendances	Total Class Opening Hours	Total Class Hours	Number of Sessions	Participant Attendances	Total Class Opening Hours	Total Class Hours
SAS	Competency training for new recruits	11	11	135.0	135.0	38	43	215.5	231.5	62	66	666.0	674
	Professional competency training	704	12,440	1,939.5	12,882.5	784	10,887	2,002.5	12,593.0	582	5,180	1,705.0	8,401
	General competency training	252	2,493	420.0	4,514.0	305	3,277	481.5	5,167.0	316	3,087	582.0	4,730.5
	Total	967	14,944	2,494.5	17,531.5	1,127	14,207	2,699.5	17,991.5	960	8,333	2953.0	13,805.5
GlobalWafers	Competency training for new recruits	316	1,282	1,586.0	9,553.0	422	1252	23226.0	30027.0	290	927	28,597.5	33,201.5
	Professional competency training	1,951	13,757	25,282.0	79,075.0	1,691	18,633	47,336.0	77,336.0	1,179	15,220	39,026.7	66,402.2
	General competency training	1,263	47,246	3163.0	102,606.0	1,742	41,007	73,831.0	124,449.0	3,198	45,898	57,878.5	112,547.1
	Total	3,530	62,285	30,032.0	191,233.0	3,855	60,892	144,393.0	231,812.0	4,667	62,045	125,502.7	212,150.8
Total		4,497	77,229	32,526.1	208,764.7	4,982	75,099	147,092.5	249,803.5	5,627	70,378	128,455.7	225,956.3

Average Employee Education and Training Hours from 2023 to 2025



Average Hours of Education and Training of Employees According to Their Gender and Category in 2025

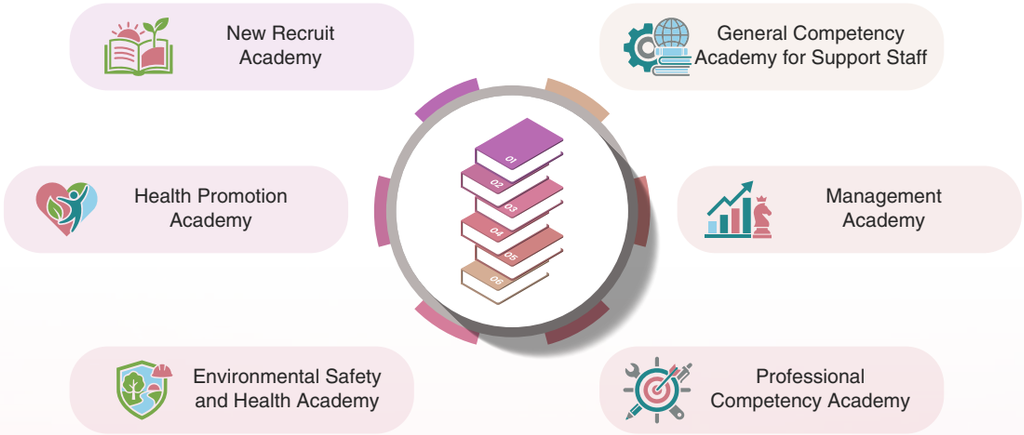


Note:
1. Direct Personnel: Operation personnel directly engaged in production related operations, including those engaged in technological tasks and team leaders in production sites.
2. Indirect Personnel: Personnel not directly engaged in production related tasks, including management, product design staff, accounting staff, procurement staff, engineers, etc.

Diverse Talent Cultivation Channels

SAS places great importance on knowledge transfer and talent development, developing its annual education and training plan based on operational strategies and short-, mid-, and long-term objectives. The company provides various training courses, industry-academia collaborations, research projects, temporary acting assignments, job rotation, and on-the-job training (OJT) programs, intended to keep employees informed about current global market trends and technology advancements.

The Company provides a comprehensive training framework, including:



Through training programs tailored to different career stages and professional disciplines, this system supplies targeted training for employees at different career stages, enhancing employees' knowledge, skills, and competencies, enabling both the company and its workforce to adapt to changing requirements and maintain relevant knowledge and skills.

To encourage utilization of training resources and foster knowledge sharing, SAS has implemented regulations for internal lecturer management, supporting knowledge transfer and strengthening the Company's core competitiveness.

Supervisor Training Program

SAS has established a program to develop management skills among supervisors. The program addresses management challenges, strengthens leadership and decision-making abilities, and aims to help supervisors effectively guide their teams toward company objectives. Internal training programs are supplemented with external partnerships, such as with the Chinese Professional Management Association, to offer systematic development opportunities for prospective senior managers and promote the sharing of management experience through exchanges with industry leaders, jointly driving industry development. In 2025, two managers participated in external senior manager training.

ESG Education and Training

As a leading provider of green energy solutions, SAS is committed to environmental protection, the promotion of social responsibility, and sound corporate governance. SAS organized two ESG training sessions in 2025. These sessions were designed to improve employees' understanding of ESG and sustainability objectives. A total of 75 employees attended, accumulating 221 training hours, thereby continuously promoting sustainable development goals.

4.4 Supportive and Caring Workplace

Human Rights Policy

SAS follows a policy of respect for employees and adheres to legal standards in all jurisdictions where it operates. The company safeguards the rights of full-time, contract, temporary personnel, interns, and job applicants, and encourages partners and suppliers to adopt similar practices throughout their operations.

We acknowledge and uphold the core principles of human rights protection as outlined in key international conventions and standards, including the Universal Declaration of Human Rights, the United Nations Global Compact, the International Labour Conventions, the United Nations Guiding Principles on Business and Human Rights, and the Responsible Business Alliance Code of Conduct. We comply with relevant labor laws and have established a Human Rights Policy, committing to the creation of a fair, safe, and dignified working environment.

Policy Guidelines

1. Promote diversity, inclusion, and equal opportunities while prohibiting all discrimination, including on the basis of gender, sexual orientation, race, nationality, social class, age, marital status, language, ideology, religion, political affiliation, origin, appearance, or disabilities.
2. Ban human trafficking, forced labor, and child labor.
3. Ensure a safe, healthy, and harassment-free workplace.
4. Offer fair pay and working conditions.
5. Support free expression, respect for association rights, and accessible communication channels.

Diversity, Equity, and Inclusion (DEI) Workplace Statement

SAS Group operates facilities across Europe, America, and Asia, embracing a global perspective and supporting the values of Diversity, Equity, and Inclusion (DEI). We are committed to fostering a workplace that respects differences, promotes equity, and inspires innovation. We value the unique backgrounds, experiences, and perspectives of every employee and regard them as an important resource for the growth of our global business. We strictly comply with local laws and regulations in every country in which we operate. Regardless of gender, race, nationality, age, marital status, language, ideology, religion, culture, political affiliation, sexual orientation, social status, or physical and mental abilities, everyone can feel respected and included here. We believe that by embracing diverse talents and perspectives from around the world, we can continue to strengthen our competitiveness and better serve and contribute to our customers and society. PEOPLE is one of SAS's core values. Through the continuous refinement of our policies and practices, we ensure that all employees have equal opportunities to participate in company affairs and pursue their career development. Guided by a people-centered approach and acting with goodwill, we actively promote the well-being of employees, customers, shareholders, communities, and other stakeholders. We are committed to making diversity, equity, and inclusion a long-term objective of our sustainable business operations and to laying a solid foundation for every step of our future development.

For more details, see the SAS Company website.

Harassment-Free Workplace

To prevent employees from being subjected to any form of physical or psychological unlawful infringement (including sexual harassment) while performing their duties, the Company has established the Regulations for the Prevention of Workplace Violence and Protection Management and provides relevant training programs. Necessary safety and protective measures are implemented to safeguard employees' occupational safety and physical and mental well-being. In addition, a Statement on the Prevention of Workplace Violence is posted on workplace bulletin boards, and multiple accessible grievance channels are provided to employees. The Company also conducts regular workplace violence risk assessments. Based on the results of assessments and investigations, the Company continuously reviews and implements appropriate corrective actions and safety measures, striving to create an equal, safe, respectful, and friendly working environment.

Eliminating Unlawful Discrimination and Ensuring Equal Employment Opportunities

The Company upholds the principles of diversity, inclusion, and equality through the implementation of its Human Rights Policy and Diversity, Equity, and Inclusion (DEI) Workplace Statement. Discrimination based on race, social class, age, marital status, language, ideology, religion, political affiliation, place of origin, birthplace, appearance, facial features, physical or mental disabilities, or any other status is strictly prohibited. The Company is committed to providing a safe and friendly working environment for all employees.

SAS Chunan Branch, together with GlobalWafers, was honored with the Excellence Award in the 2025 Hsinchu Science Park Workplace Gender Equality Promotion Unit Selection, recognizing its commitment and achievements in promoting workplace equality.

Prohibition of Child Labor and Forced Labor

During the recruitment process, the Company rigorously verifies identity documents to ensure that child labor is not employed in any manufacturing operations. Exceptions apply only to legally compliant workplace learning, internship, or cooperative education programs.

Upon establishing an employment relationship, the Company and each employee voluntarily enter into a written employment contract, ensuring that employment terms are transparent and clear. All forms of forced, coerced, or involuntary labor are strictly prohibited.

Management of Working Hours

Employee working hours are managed in strict accordance with local labor laws and RBA working hour standards. Staff members are entitled to two days of rest within every seven-day period, comprising one rest day and one regular day off. Total daily working hours shall not exceed twelve hours, and a minimum thirty-minute break is provided for every four consecutive hours of work. Overtime work is limited to forty-six hours per month.

A comprehensive attendance system has been implemented to automatically notify employees of any violations or irregularities, making it easy for them to review their attendance records. The system also provides employees with access to real-time inquiries of their personal attendance records, enhancing transparency in working-hour management.

When overtime is required, prior consent must be obtained from employees, and overtime compensation or compensatory leave will be granted in accordance with statutory requirements. For indirect employees, the Company offers a 30-minute flexible schedule option to support a better work-life balance.

Protection of Personal Data

The Company is committed to safeguarding the personal data of employees, customers, and partners, as well as protecting corporate interests. In compliance with the Personal Data Protection Act and its Enforcement Rules, the collection, processing, and usage of personal data is conducted lawfully, in good faith, and with due regard for individual rights. Processing is confined to legitimate business purposes and does not exceed the scope necessary to achieve those objectives.

Individuals are informed in advance of the purpose, scope, and methods of use of the data collected, and prior written consent is obtained in accordance with law.

Employee Communication Channels

SAS prioritises employee feedback and upholds their rights by providing diverse communication channels, including an employee suggestion and grievance mailbox and the organization of labor-management meetings, to facilitate open dialogue. Employees may submit their opinions through any established channel.

In accordance with applicable laws, SAS convenes regular labor-management meetings and Employee Welfare Committee sessions, with committee representatives selected proportionally by each unit. Labor representatives engage with management during quarterly meetings to advocate for employee interests with 100% employee coverage.

Item	Number of Meetings in 2025	Description
Labor-Management Meetings	23	Each quarter, one meeting is held respectively at SAS headquarters, Chunan Branch, Hsu-Hsin Branch, and Yilan Branch.
Employee Welfare Committee Meetings	4	Each quarter, SAS headquarters and its branches jointly hold one meeting.

In addition to establishing a Human Rights Policy, the Company has published a Diversity, Equity, and Inclusion (DEI) Workplace Statement. Both are endorsed by senior management and disclosed on the Company's official website. The Company conducts human rights due diligence on a regular basis, using human-rights assessment tools to identify and evaluate risks and to formulate mitigation and remediation measures for each risk issue. Employees and other reporters may raise concerns, either anonymously or under their own names, through email, dedicated hotlines, physical suggestion boxes, or other channels. Relevant committees handle cases in strict confidence, follow up on and monitor the outcomes, and provide necessary support to the parties involved to protect human rights and prevent recurrence.

Reporting of Illegal, Unethical, or Dishonest Conduct	886-3-577-2255#2370 whistleblower@saswafer.com
Employee Grievance Mailbox	886-3-577-2255#2398 happywork@saswafer.com

Employee Satisfaction Survey

SAS administers an annual Employee Satisfaction Survey through the Human Resources Department, systematically evaluating employees' workplace experiences and gathering suggestions. The survey encompasses six primary dimensions: engagement, leadership and communication, rewards and recognition, career development, work environment, and work-life balance. This approach facilitates a comprehensive analysis of the Company's strengths and areas for improvement. Actionable plans are subsequently developed, informed by survey findings, to advance the quality of the workplace, elevate employee satisfaction, and reinforce organizational competitiveness.

In 2025, the overall employee satisfaction score stood at 3.82 out of 5, with a coverage rate of 62.35%, remaining unchanged compared with the previous year.

To improve employee satisfaction, the Company strengthens transparency and communication. In addition to labor-management meetings, departmental meetings are held from time to time to enhance communication between supervisors and employees. The Company also reinforces policy explanations to prevent misunderstandings. Furthermore, information on bulletin boards is enhanced to ensure that compensation and benefits policies are clearly communicated and transparent.

The Company optimizes its compensation and benefits programs. Through data analysis, it monitors employee satisfaction and turnover rates to ensure that improvement measures align with the needs of talent attraction, development, and retention, thereby enhancing employees' sense of identification with the Company.

In addition, based on the results of the 2025 employee satisfaction survey, the Company has introduced a flexible work schedule allowing employees to start work between 07:30 and 08:30, with the end of the workday determined by completion of eight actual working hours on that day. This measure aims to enhance employee autonomy, promote work-life balance, and strengthen overall employee well-being.

Investigation scope	2024		2025	
All SAS	Satisfaction score	coverage rate	Satisfaction score	coverage rate
	3.89/5	63.45%	3.82/5	62.35%

Human Rights Due Diligence

In accordance with the United Nations Guiding Principles on Business and Human Rights (UNGPs), all organizations bear the responsibility to uphold human rights. Human rights due diligence constitutes a fundamental aspect of SAS's operational policies and procedures. We undertake due diligence activities guided by the following framework, ensuring consistency with the key elements advocated by leading international human rights bodies:

Identification and Assessment

Parties	Risk Issues	Content Description	Common Evaluation Factors	Individual Evaluation Factors	Evaluation Tools
SAS Group and suppliers	Labor Laws and Regulations	Adherence to labor-related laws applies to all phases of employment, including recruitment, interviews, contract signing, employment, working hours, overtime, leave, salary, insurance, pensions, workplace safety, gender equality, job transfers, disciplinary actions, as well as employee resignation, retirement, and termination.	1. Number of participants and training hours for employee human rights education and training 2. Whether suppliers have signed the supplier code of conduct	Number of cases penalized by competent authorities for violations of labor laws	1. Labor law compliance 2. Employee health examination 3. Employee grievance mechanism 4. Labor-Management Meetings 5. EAP 6. Internal control system 7. Maternal protection risk evaluation 8. Supplier risk evaluation and on-site audits 9. Supplier Code of Conduct and Supplier Commitment
	Child labor	Child labor is not permitted in business operations. The term "child labor" applies to individuals older than fifteen but younger than sixteen who are employed to perform work.		Whether identity verification is conducted during the recruitment process	
	Forced labor	The provision of work or services without an individual's free and informed consent is strictly prohibited. Prohibited practices include, but are not limited to: exploiting vulnerability, deception, restriction of movement, isolation, physical or sexual violence, intimidation or threats, retention of identity documents, withholding of wages, debt bondage, abusive working or living conditions, and imposition of excessive overtime.		Number of human rights–related grievance cases deemed valid	
	Working conditions	Employees are required to work in conditions that comply with occupational safety and health regulations. This includes setting a maximum of 60 working hours per week, adhering to wage laws, prohibiting severe or inappropriate treatment, and ensuring safety systems are operating effectively, thereby reducing occupational injury and illness risks and safeguarding employees' physical and mental well-being.		1. Number of employees working more than 12 hours in a single day or working more than 6 consecutive days. 2. Number of cases penalized for violations of regulations on working hours, wages, occupational safety, and related laws. 3. Number of occupational accident cases 4. Identification and risk evaluation of excessive workload	
	Discrimination and Harassment	Discrimination or harassment of employees on the basis of race, colour, age, gender, sexual orientation, gender identity or expression, ethnicity or national origin, disability, pregnancy, religion, political affiliation, group background, veteran status, protected genetic information, or marital status is not permitted in recruitment, hiring, employment, or workplace practices within the workplace. These factors are not to be considered in decisions regarding wages, promotions, rewards, or access to training opportunities.		Number of human rights–related grievance cases deemed valid	
	Human Trafficking	No person shall exploit another individual's incapacity, ignorance, or inability to seek assistance, nor employ any means against that individual's will, for the purpose of recruiting, buying or selling, pledging, transporting, delivering, receiving, concealing, hiding, brokering, or harboring either domestic or foreign persons.			
	Freedom of Association	Workers and their representatives shall have the right to communicate openly with management regarding working conditions and management practices, and to express ideas and concerns without fear of discrimination, retaliation, threats, or harassment.		Number of labor-management meetings held and number of employees participating in associations	
	Equality and equal pay for equal work	For the same position and under the same working conditions, all workers—regardless of gender, identity, household registration, or form of employment—shall receive equal pay for equal work, provided that the quantity and quality of the labor performed are equivalent.			
	Maternity care	Measures for female workers engaged in work that may pose risks to maternal health shall include hazard assessment and control, medical consultation and guidance, risk classification management, suitable job placement, and other related safeguards.		Number of parties protected	

Actions and Effectiveness

Parties	Risk Issues	Mitigation Measures	Remedial Measures	Implementation Results
SAS Group and suppliers	Labor Laws and Regulations	1. Establish work rules and post them in a prominent and easily accessible location. During new employee training, provide instruction on work rules and regulations in the employee's native language to ensure a full understanding of labor rights. 2. Through the internal control system and internal audits, regularly review and update all rules and regulations to ensure that operations remain in full compliance with labor laws and regulations. 3. Establish diverse communication channels. Communication and grievance mechanisms shall be available at both Taiwan and overseas sites, including labor-management meetings, dedicated email accounts, hotlines, physical suggestion boxes, and whistleblower systems, to promptly identify and resolve workplace issues. 4. In the event of changes to labor conditions, the Company shall consult its internal legal department to ensure the protection of employee rights.	1. The Human Resources Department and Compliance Unit shall conduct an investigation, ensuring full consideration of the employee's personal interests and strict confidentiality throughout the process. They shall communicate with the department head and the concerned individual, and upon completion, report the case to the highest-level supervisor. Appropriate compensation and corrective actions shall then be implemented. 2. If any non-compliant procedures or operations with labor regulations are identified through audit activities, the root cause shall be promptly investigated, and corrective actions shall be implemented within a specified timeframe. 3. Employee grievances shall be managed by the Human Resources Department. When necessary, a committee shall be convened to ensure fair and impartial decision-making.	No unlawful incidents have occurred at any site
	Child labor	1. The Company rigorously verifies candidates' identity documents during recruitment and ensures, through interviews and observations, that no child labor under the age of sixteen is employed. 2. Employees under the age of eighteen shall not engage in work that may endanger their health or safety, nor shall they be assigned to night shifts.	1. The remediation plan shall remain in effect for six months or until the child laborer reaches the age of sixteen, whichever is longer. If child labor is identified, the child shall be immediately removed from the workplace, returned to their place of residence, parents, or guardian, and provided compensation for educational expenses. 2. A medical examination shall be arranged for the child laborer to verify that their health has not been adversely affected during employment. If any health issues are identified, the Company shall assume full responsibility for all related medical and living expenses.	No illegal employment of child labor has occurred at any site
	Forced labor	1. The "Personnel Employment Rule" explicitly stipulates the prohibition of employing forced, threatened, or involuntary labor. 2. Employee attendance is compiled and analyzed on a monthly basis to support supervisors in managing working hours. To safeguard employees' physical and mental well-being, the system issues daily real-time alerts on working hours. The Human Resources Department, together with department supervisors, develops countermeasures to ensure the effective implementation of preventive and remedial measures. 3. In line with the RBA framework, a Supplier Code of Conduct has been established, and all suppliers are required to commit to full compliance.	1. Implement multi-skilled worker training to enhance workforce flexibility and reduce excessive reliance on a single employee, thereby preventing overwork. 2. Adopt a rotating rest system to safeguard employees' family life as well as their physical and mental well-being. 3. If any non-compliance is identified in a supplier, immediate corrective action shall be required, and the continuation of the partnership shall be subject to evaluation.	No site has been investigated by the competent authority due to complaints related to forced labor

Parties	Risk Issues	Mitigation Measures	Remedial Measures	Implementation Results
SAS Group and suppliers	Working conditions	1. An annual salary survey is conducted to assess market salary levels and overall economic indicators, supporting appropriate salary adjustments and ensuring competitive starting pay. 2. Employee Assistance Programs (EAPs) provide employees with free, professional, and strictly confidential consultation services in five areas: psychological, managerial, legal, health, and financial. 3. Regular health examinations are provided for all active employees. 4. ISO 45001 certification[Note] for the Occupational Health and Safety system is continuously maintained to ensure effective operation. This includes establishing hazard assessment and risk classification mechanisms, forming emergency response teams at each site, and providing comprehensive occupational health and safety training. 5. The highest-level supervisor at each site shall establish an EHS organization and an Occupational Health and Safety Committee. 6. Procedures for the Prevention and Protection against Unlawful Infringement in the Workplace are established to regularly assess risks of workplace misconduct and to conduct related education and training. Note: ISO 45001 certification period: March 12, 2025–March 11, 2028.	1. Ergonomic hazards: Conduct departmental risk assessments and implement engineering or operational improvements progressively each year. 2. Abnormal workload: Ensure working hours comply with regulations. Based on health checkup reports, overwork assessments, and risk analyses, arrange health education consultations and coordinate necessary work adjustments with supervisors and employees. 3. Through professional employee assistance organizations, provide support to help employees address issues related to personal life and psychological well-being. 4. Offer health checkups exceeding legal requirements to identify high-risk groups, ensure ongoing monitoring and management, and arrange on-site services by professional occupational health physicians. 5. In the event of an occupational injury, immediately initiate a formal investigation and support process. Relevant units shall provide comprehensive assistance, including insurance claims, emergency aid, work-hour adjustments, and psychological counseling. 6. Provide a flexible working hours system, allowing employees to select start and end times based on personal needs to maintain balance with family life. 7. Upon receiving a complaint or report of unlawful infringement in the workplace, conduct an investigation and response in accordance with incident handling procedures, ensuring the victim receives immediate, ongoing, and supportive protection, placement, and assistance.	1. In 2025, a total of 1,190 participants attended human rights–related education and training sessions, accumulating 1,052 training hours. 2. In 2025, 75 individuals received EAP consultations, including participants from the subsidiary GlobalWafers. To protect users' privacy, the EAP provider does not disclose disaggregated statistics. 3. Received the Excellence Award in the 2025 Hsinchu Science Park Workplace Gender Equality Promotion Unit Selection for three consecutive years, 2023 to 2025. 4. In 2025, 55 employees were placed under abnormal workload tracking and management, representing approximately 13% of the total workforce. 5. In 2025, occupational health and safety–related education and training sessions recorded 2,135 participants, totaling 1,075.5 training hours.
	Discrimination and Harassment	1. The Personnel Employment Rule explicitly stipulates the strict prohibition of any unlawful discrimination during recruitment and in the course of employment. 2. Annual training on the prevention of discrimination and harassment is conducted for all employees, with mandatory participation required for supervisors to prevent coercion, oppression, and workplace violence stemming from power imbalances. 3. Ensure equal employment opportunities for persons with disabilities. 4. Establish the Guidelines for the Prevention of Sexual Harassment in the Workplace and post the workplace violence prevention statement in a prominent location to demonstrate SAS's firm commitment to eliminating such incidents. 5. In response to global population aging, conduct hazard identification and risk assessments, implement preventive and improvement measures, and follow up on implementation effectiveness to ensure that work requirements remain suitable for middle-aged and senior employees while protecting their health.	Upon receipt of a complaint, the Human Resources Department initiates the case-handling process and establishes a dedicated committee responsible for the following matters: 1. Protecting the rights and interests of the parties involved and ensuring their safety and privacy throughout the investigation process. 2. Assessing and adjusting the working conditions of affected employees to minimize adverse impacts. 3. Convening committee meetings to conduct investigations and render decisions regarding the case. 4. Providing re-education and behavioral correction measures for individuals involved in the incident. 5. The Company also provides the necessary resources and support to facilitate the proper handling of cases and implements preventive measures to avoid the recurrence of similar incidents.	1. In 2025, a total of 5 persons with disabilities were employed, including 2 individuals with severe or profound disabilities, representing 1.6% of the total workforce. 2. No incidents of discrimination or harassment were reported at any site.
	Human Trafficking	Ensure that all labor is sourced through direct employment or authorized human resources dispatch services and staffing agencies. Under no circumstances shall unlawful methods be employed to coerce individuals into work that contravenes laws or regulations, or to provide compensation that is inequitable in relation to their performance.	Upon receipt of a human trafficking case, prompt provision of appropriate protection, placement, and support to the victim is required. All production processes must be thoroughly monitored to ensure they remain free from any involvement in human trafficking.	No sites have reported human trafficking.

Parties	Risk Issues	Mitigation Measures	Remedial Measures	Implementation Results
SAS Group and suppliers	Freedom of Association	Enhance labor-management communication and establish effective dialogue mechanisms, while promoting employee association formation and participation in company-sponsored group activities.	1. Establish rules and regulations to ensure the legitimacy of association activities and provide operational subsidies to support their functioning. 2. Labor and management representatives are re-elected every four years, and labor-management meetings are convened quarterly, enabling employees to communicate with the Company on an equal footing regarding working conditions, benefits, and other related matters.	Quarterly labor-management meetings are held at every site.
	Equality and equal pay for equal work	1. Establish the Regulations for Salary, Allowances, and Bonuses and prepare job descriptions to ensure that salaries are determined based on objective criteria (such as job responsibilities, scope of duties, and performance outcomes) rather than subjective judgment. 2. The EAP is available to employees for consultation on work-related stress, workplace difficulties, or personal concerns, helping them maintain a healthy work-life balance and ensuring that supervisors treat all employees fairly and equitably.	1. Salary ranges are defined based on the nature of each position to ensure equal pay for equal work. 2. Annual performance evaluations are conducted, and compensation adjustments are made for high-performing employees to ensure a strong linkage between pay and performance. Compensation decisions are based on objective criteria to prevent differential treatment arising from personal identity or other non-objective factors.	SAS conducts annual salary adjustments in accordance with market benchmarks and individual performance evaluations.
	Maternity care	1. The "Maternal Health Protection Procedures" are implemented to identify and monitor the working conditions of breastfeeding employees, ensuring that female employees can work with peace of mind during the nursing period. 2. Breastfeeding rooms are established at each site to provide convenient access for employees in need.	In accordance with the regulations of the competent authority, eligible employees shall have their work schedules, locations, and duties adjusted without contravening their will. For risks not identified in time, hazard assessments and follow-up actions shall be carried out to ensure that their health is not compromised.	In 2025, a total of five individuals were identified, classified, and provided with maternal protection measures.

Stakeholder Communication

SAS communicates with its stakeholders—including employees, suppliers, customers, communities, and investors—using various channels. The company discloses information related to human rights due diligence on its official website, media, sustainability reports, and annual general shareholders' meeting reports in both Chinese and English, making it accessible globally. Disclosed information includes the company's commitments, due diligence processes, policies, actions, and details on identification and assessment. SAS states that it provides truthful information. Most operational sites offer human rights education and training for new employees; in 2025, 1,190 participants completed a total of 1,052 training hours. Annual courses addressing workplace violence prevention and sexual harassment prevention are available to existing staff. Human rights information relevant to business partners, such as suppliers, is published on the official website, and the Supplier Code of Conduct serves as an implementation standard.

4.5 Empowering Local Communities

SAS Group follows the principle of "Caring for Society and Sustainable Development" to meet its corporate social responsibility obligations. The company has focused on initiatives such as "giving back to communities" and "supporting disadvantaged groups," with the aim of contributing to Taiwan through various activities and safeguards Taiwan with love and responsibility. The Company's public welfare activities primarily focus on communities surrounding its operating sites. Beneficiaries include charitable organizations and social welfare institutions. Through charitable donations and community participation, the Company continues to give back to local communities and promote sustainable community development.

Charity and Public Welfare

Genesis Social Welfare Foundation, Miaoli Branch: Supporting the Ceiling-Mounted Patient Transfer System Project

SAS and the GlobalWafers Group have long been committed to ESG sustainability initiatives and have supported the Genesis Social Welfare Foundation, Miaoli Branch for the fourth consecutive year. This year, the Group joined hands with employees to participate in this charitable cause. On November 26, company supervisors led employees in personally visiting the branch and donating NT$300,000, designated specifically for the purchase of a ceiling-mounted patient transfer system.

Through the implementation of this system, caregivers can perform lifting and transfer operations with simple remote-control functions, significantly reducing physical workload. This allows what was once a demanding caregiving process to become safer, more efficient, and more stable, while also ensuring that residents no longer experience fear during transfers. This donation represents not only an upgrade of equipment but also a commitment to respecting and protecting human dignity.

By introducing the ceiling-mounted transfer system, SAS and GlobalWafers hope to provide residents in a persistent vegetative state at the Miaoli Branch with a more dignified caregiving experience, while reducing the physical strain and occupational risks faced by frontline caregivers.

SAS and GlobalWafers firmly believe that when businesses come together with goodwill, that goodwill can be transformed into meaningful support and companionship. Through these efforts, the Company seeks to share the burden borne by families and caregivers, allowing warmth, compassion, and care to continue growing and flourishing within local communities.

Catholic Foundation of Our Lady of China: Rebuilding Homes After Typhoon Danas, Restoring Hope One Brick at a Time

In response to the impact of Typhoon Danas on vulnerable families living in the coastal and mountainous areas of Chiayi, employees of SAS and the GlobalWafers Group joined hands with the Catholic Foundation of Our Lady of China to support post-disaster housing repairs and livelihood recovery through charitable donations. Leveraging the Foundation's deep-rooted local service network, these efforts helped repair damaged homes for elderly individuals with disabilities living alone, restore basic residential safety, and provide affected families with essential housing repair and living assistance. The initiative aimed to alleviate the long-term pressures resulting from the disaster and ensure that the journey toward recovery would not be faced alone.

Following the devastating typhoon along the coastal region, damaged homes were once again able to provide shelter from wind and rain. In a small corrugated-metal house located in a remote mountainous area, the four young children of a young mother were provided with safer cribs and essential childcare supplies. These meaningful improvements were made possible through the support entrusted by donors, enabling elderly individuals with disabilities living alone to no longer face damaged homes and difficult circumstances by themselves. Likewise, young families struggling through hardship were able to regain hope and the strength to move forward.

The Kid's Bookhouse: Helping Children Build a Boat for Their Dreams

Through charitable donations, SAS and the GlobalWafers Group support The Kid's Bookhouse and its marine education program in Taitung, encouraging children to explore and connect with the ocean while gradually learning to engage with the wider world. For many children, the ocean is both vast and unfamiliar, and can even evoke feelings of uncertainty or fear. However, under the patient and caring guidance of teachers and coaches, they progress from simply observing the sea from the shore to actively participating in the boat-building process. They learn to paddle canoes, raise the sails of sailboats, and use their own hands and efforts to form a meaningful connection with the ocean.

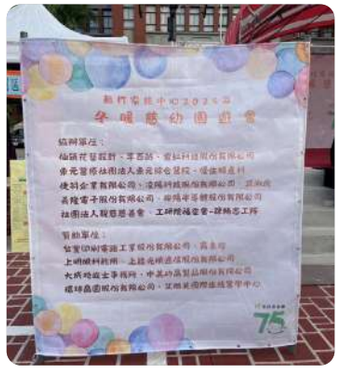
Throughout every stage of boat construction and practical learning activities, children develop teamwork, mutual support, and cooperation. They also gradually overcome their fears, cultivate patience, and build the courage to face the unknown. The ocean becomes more than a distant landscape; it transforms into an open classroom where children gain confidence, strengthen their sense of identity, and experience the satisfaction that comes from achieving their goals through dedication and perseverance.

SAS and the GlobalWafers Group hope to serve as a stable and long-term source of support throughout the children's growth journey, helping them discover their potential and recognize their own value through exploration and learning. Completing a boat with their own hands symbolizes their readiness to navigate toward a broader future, opening the door to new opportunities and endless possibilities in life.

TFCF Hsinchu Center: Sponsoring the Winter Charity Carnival for Children and Families

TFCF Hsinchu Center organizes its annual Winter Charity Carnival to provide beneficiary families with opportunities to participate in parent-child activities, strengthening family relationships. The event also recognizes dedicated sponsors and outstanding volunteers, while expressing appreciation to corporate partners for their long-term support of disadvantaged children and families. Through collaborative efforts, the program helps vulnerable families overcome challenges and create positive changes in their lives.

SAS and the GlobalWafers Group have participated in and sponsored the TFCF Hsinchu Center's Winter Charity Carnival for 16 consecutive years. This long-standing commitment reflects the Company's dedication to caring for vulnerable communities and supporting disadvantaged families. By working together with community partners, SAS continues to contribute to building a brighter and more hopeful future for families in need while fulfilling its corporate social responsibility commitments.



Mid-Autumn Festival Mooncake Donation Charity Campaign

Prior to the Mid-Autumn Festival each year, SAS presents every employee with a mooncake gift box to celebrate the holiday together. At the same time, the Company organizes an internal charitable fundraising campaign. Employees who wish to donate the value of their mooncake gift boxes to support disadvantaged groups may voluntarily participate. The Company then consolidates all donated amounts and provides a matching contribution, doubling the total donation. Through this initiative, SAS extends care and support to vulnerable communities while fulfilling its corporate social responsibility commitments.

Children and Youth Education

SAS and GlobalWafers once again partnered with IC Broadcasting, the iShare Association, and Hsuan Chuang University to jointly organize the "Pioneer Seedling Program 2025 Public Science Camp" for the second consecutive year. Through the integration of technology and humanities, the program aims to support the learning and development of children in rural and underserved communities. We believe that every child is like a young seedling that, when provided with sufficient sunlight and nourishment, can grow into a pioneer explorer with the courage to discover the world.

The camp was held from June 26 to June 27, 2025, bringing together nearly 60 students and teachers from Taoshan Elementary School in Wufeng Township and Xinguang Elementary School in Jianshi Township, Hsinchu County. A series of engaging and inspiring learning activities was carefully designed, including creating personalized comic characters using AI image-generation tools, drone challenge missions, and immersive AR interactive experiences. These activities encouraged children to learn science and innovation through hands-on exploration, fostering their curiosity, creativity, and enthusiasm for science and technology.

More than just a science camp, this program represented a meaningful journey of accompanying children as they explore the world around them. SAS and GlobalWafers Chairperson Doris Hsu remarked: "We believe that every spark of curiosity can become the starting point for shaping the future. Through science education camps and energy education programs, we hope to help children discover a broader world while cultivating seeds of hope for a sustainable society." By transforming corporate resources into meaningful actions, SAS and GlobalWafers are committed to advancing diverse public welfare initiatives. Through these ongoing efforts, the Company hopes to provide more children with opportunities to learn about renewable energy and environmental protection, while working together with partners across society to nurture the next generation of innovators who dare to dream, explore, and pursue a brighter future.

05 Workplace Health and Safety

5.1 Safe Workplace

5.2 Health Promotion and Care

Occupational Health and Safety	2025 Performance	2026 Targets	2030 Targets
	• Occupational injuries | FR 3.31 (representing an approximately 57% decrease from 2024) • Risk identification and improvement | 1,823 risk assessments conducted ／ 3 unacceptable risks identified, with a 100% corrective action completion rate • Safety and health training | 1,805 person-times / 3,635 training hours	• Occupational injuries | FSI (Frequency-Severity Indicator) ≦ FSI Level in 2025 • Emergency response capabilities | Achieve a 100% assessment completion rate for emergency response team members	• Occupational injuries | FSI ≦ industry average for electronic component manufacturing • Supplier participation | Conduct emergency response drill observations and environmental protection, safety, and health training, reaching at least 10 cumulative sessions

Management Area	Systems and Management Measures	Key Achievements in 2025
Risk Identification and Assessment	• Established a hazard identification and risk classification management mechanism. Improvements are tracked based on assessment results to ensure closed-loop management.	• Completed 1,823 risk identification and assessment cases. All 3 unacceptable risks (0.16%) were corrected.
Chemical Management	• Established chemical safety and health review and change management procedures. Exposure assessments and control measures are implemented according to chemical characteristics and regulatory requirements.	• For chemicals requiring workplace environmental monitoring, all measurement results were classified as Level 1 (X95 < 0.5 PEL).
Incident Investigation	• Established incident reporting and investigation procedures. Corrective and preventive measures are implemented based on root-cause analyses, with improvement progress continuously tracked.	• A total of 6 incidents/accidents occurred during the year, with a 100% corrective action completion rate.
Emergency Response	• Established standardized emergency scenarios and response procedures, including response classification based on the scale of an incident. Regular drills and competency assessments are conducted to ensure effective implementation.	• Emergency scenarios and response procedures were standardized and incorporated into routine management. The assessment completion rate for emergency response team members reached 100%.
Contractor Management	• Established a digital contractor management process covering applications, hazard communication, and quality assessments. Site-entry training and qualification requirements are also incorporated into the control process.	• Contractors must complete six hours of safety and health training and provide proof of insurance before commencing work on-site.
Safety and Health Training	• Established an annual safety and health training plan. Courses are arranged according to participant groups and risk levels to strengthen regulatory awareness, operational safety, and emergency response and first-aid capabilities.	• Completed 1,805 person-times and 3,635 training hours, covering employees, supervisors, and contractors.
Occupational Injury and Incident Statistics	• Established mechanisms for compiling occupational accident indicators and monitoring trends. Management practices are regularly reviewed and continuously improved based on incident investigation findings.	• Employee occupational injuries: 6; near-miss incidents: 0; FR: 3.31; SR: 41. No injuries involving non-employee workers were recorded.

Promoting a Safety Culture | Key Achievements in 2025	Health Promotion Management | Key Achievements in 2025
• Safety Month in September: A company-wide online occupational safety and health challenge quiz and the "Spot the Hazard Champion—Workplace Safety Challenge" were held.	• Annual health examinations were completed by 372 employees. The completion rate among employees subject to statutory examinations reached 100%, with a satisfaction rate of 96%.
• External seminar: Crisis Management and Emergency Response Strategies.	• Conducted 59 health seminars, with 972 person-times of participation, and provided cancer screenings to 875 person-times.
• Emergency response drill and observation: Suppliers were invited to participate.	• The Chunan Plant and Sunrise Subsidiary obtained AED Safe Place Certification, with more than 70% of employees completing CPR and AED training.
• "Little Safety Officer 2.0": Internal inspections identified 50 issues, with a 98% corrective action completion rate. Follow-up improvements remain ongoing.	• The Employee Assistance Program (EAP) provided consultation services to 75 person-times.

5.1 Safe Workplace

SAS acknowledges that maintaining a safe and healthy working environment is essential for both employee wellbeing and the Company's long-term sustainability. Accordingly, the Company has implemented an occupational health and safety management system aligned with the ISO 45001 standard, fully integrating health and safety considerations into daily business operations. SAS recognizes that workplace safety cannot be ensured by systems or regulations alone; it requires ongoing collaboration between employees and management.

The occupational health and safety management system applies to all primary operational sites [Note], extending its scope from in-plant personnel to contractors. The Company is committed to providing a healthy and secure work environment for all individuals. To support the effective functioning of this system, SAS places emphasis on the following key areas:

▲ Occupational Health and Safety Policy

1. **Total Participation in Safety Management**
   Safety is regarded as a shared responsibility among management, employees, and partners. Regular meetings, feedback platforms, and direct involvement are used to facilitate observations about the work environment and provide suggestions for improvement. Open communication and the exchange of ideas are considered essential for integrating safety and health into workplace culture.
2. **Systematic Execution and Support**
   An internal team is assigned to implement and monitor safety management measures, with senior management conducting regular reviews and offering support. The aim is to ensure each task complies with regulations and addresses potential risks through preventive actions.
3. **Transparent and Open Communication**
   The occupational safety and health policy is communicated to all employees via various channels, including the internal information portal and scheduled meetings. The main aspects of the policy are also available on the company's official website and in relevant external documents, allowing stakeholders to access information regarding these safety commitments.

Efforts continue to reinforce health and safety concepts within the workplace, with the objective to minimize accidents and risks, and promote engagement so that workplace safety and health become collective achievements.

Note:

1. The occupational safety and health management system of SAS covers the Headquarters, Chunan Branch, Yilan Branch, Sunrise Subsidiary, SGE subsidiary and its Hsu-Hsin Branch, encompassing 100% of employees (434 individuals) and 32.6% of non-employees (92 individuals).
2. The Chunan Branch and Sunrise Subsidiary have been certified by a third-party and conduct regular internal audits. These branches cover 79.0% of the total employees (343 individuals), with the same coverage rate of 32.6% for non-employees(92 individuals).
3. The Headquarters is located within the GlobalWafers facility, and the Hsu-Hsin Branch is positioned within the Chunan Branch. While these locations have not been certified under the management system, employees at both sites remain subject to oversight and governance within the system framework. Non-employees of the Hsu-Hsin Branch generally work outside the plant premises and are therefore excluded from the scope of the management system (e.g., off-site construction contractors). Nonetheless, the Company manages these contractors in accordance with occupational safety and health system requirements and applicable regulations to uphold operational safety standards.

Occupational Health and Safety Organizations

Senior Management

Role Definition: Responsible for approving the occupational safety and health policy, allocating resources, and overseeing the overall operation of the management system.

Main Duties:
- Regularly review the implementation progress of the occupational safety and health management system, make decisions on major health and safety issues, and provide strategic guidance.
- Allocate sufficient resources to support on-site safety improvement actions and ensure effective implementation of the occupational safety and health policy.
- Review and evaluate the achievement of occupational safety and health objectives at each site to ensure continuous improvement.

Communication Mechanism: Through the Safety Committee, Management Review Committee, or other occasional meetings, receive progress reports on occupational safety and health management and make resource allocations or decisions regarding improvement initiatives.

Occupational Safety and Health Committee

Role Definition: Serving as the coordination and communication hub for policy implementation, this group is responsible for tracking execution effectiveness and proposing improvement plans. Members include labor representatives, supervisors at all levels, and occupational safety and health personnel, ensuring that diverse perspectives are incorporated into decision-making.

Main Duties:
- Quarterly meetings are held to review the effectiveness of occupational safety and health policy implementation and to propose concrete improvement suggestions based on on-site inspections and frontline employee feedback.
- An annual occupational safety and health plan is formulated to ensure that all improvement actions are effectively tracked and gradually implemented.
- Review safety and health inspection findings at each site and assess the effectiveness of corresponding corrective actions, proposing revisions when necessary.
- Regularly report implementation results to senior management and submit subsequent management plans and recommendations.

Communication Mechanism: Communicate safety management progress with each department through quarterly meetings, collecting feedback from frontline personnel to ensure that on-site needs are promptly reflected in decision-making.

Occupational Safety and Health Management Personnel and On-site Support

Role Definition: Responsible for on-site safety inspections and prompt issue reporting, forming a multi-level support system together with on-site personnel and Little Safety Officer coordinators to jointly safeguard health and safety in the workplace.

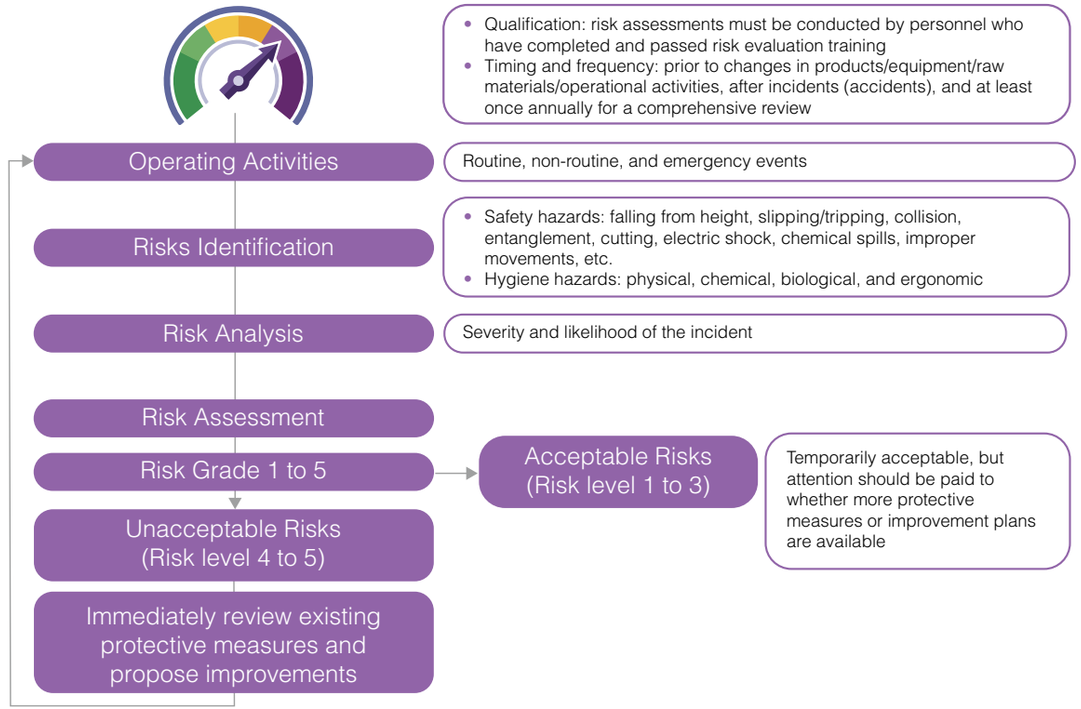
Main Duties:
- Follow safety operating procedures, implement on-site safety measures, and immediately report and assist in on-site improvements when any abnormal conditions are identified.
- Conduct routine inspections to check equipment operational safety and compliance with procedures, ensuring that the working environment meets established standards.
- Act as frontline executors of occupational health and safety tasks, assisting in identifying potential risks within the plant and taking appropriate measures to eliminate or mitigate them.

Communication Mechanism: Through quarterly Occupational Safety and Health Committee meetings and monthly Little Safety Officer meetings, key directions of safety and health management are communicated, and recommendations for addressing on-site risks are proposed to ensure effective responses to issues encountered during implementation.

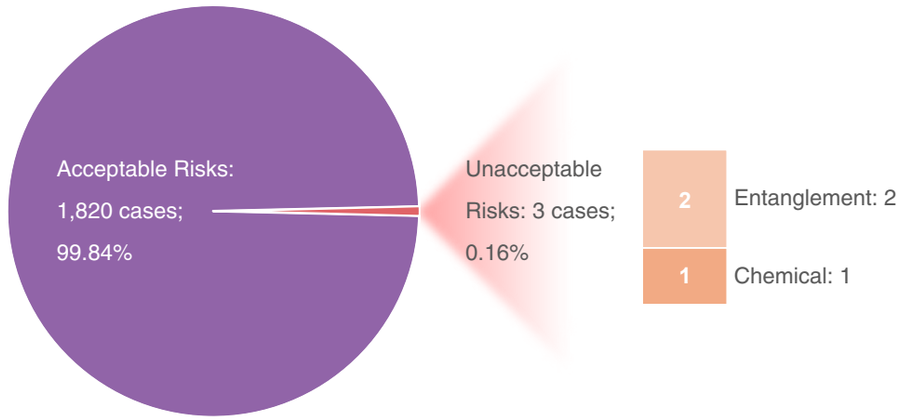
5.1.1 Occupational Safety Management

Risk Identification and Assessment

- Workplace hazards for employees and contractors are systematically identified and assessed, followed by the implementation of a tiered management mechanism based on the risk assessment outcomes. In the current year, 1,823 risk identifications and assessments were successfully completed, with 3 cases (0.16%) classified as unacceptable risks; all identified issues were resolved within the same year.
- In accordance with the Ministry of Labor's Technical Guidelines for Risk Assessment, hazard identification and risk assessment activities encompass both routine and non-routine operations. Employees are actively encouraged to report occupational hazards or potential risks present in the workplace environment. The Company facilitates prompt communication of safety concerns through various channels, including supervisor meetings, internal reporting mechanisms, and safety meetings. All reported cases are reviewed and addressed by relevant departments, and employees are assured that no punitive action will result from raising occupational safety-related matters. This approach fosters transparent communication and encourages active employee participation in safety management.
- Beyond risk identification and management initiatives, the Company conducts regular monitoring of workplace environmental conditions related to chemical and physical hazards. For chemical agents with potential health risks (e.g., hydrofluoric acid, sulfuric acid, dust) and physical factors (e.g., noise), measurements are performed every six months in compliance with regulatory standards. In addition, employees undergo targeted health examinations according to their job characteristics. Inspection results inform the health classification management system and underpin the provision of tailored health guidance and education, thereby reinforcing the Company's health risk management strategy.



Risk Identification Statistics



Chemical Management

- All newly introduced chemicals within the facility are subject to occupational safety and health review, as well as change management procedures, to ensure that potential hazards are thoroughly identified and managed within acceptable limits prior to official implementation.
- In compliance with current regulations, certain chemicals are governed by permissible exposure limit (PEL) standards, with a subset requiring routine occupational environment monitoring. The Company conducts systematic environmental monitoring and exposure assessments based on chemical properties and relevant regulations to evaluate worker exposure risks and implement suitable management controls.
  - ○ Chemicals with established PELs:
    - (1) For substances requiring workplace environment monitoring, all measured results are classified as Level 1 (X95 < 0.5 PEL).
    - (2) For those not subject to workplace environment monitoring, quantitative methods (such as no-ventilation estimation models or saturated vapour pressure models) or semi-quantitative assessments are utilised according to specific chemical characteristics. Quantitative assessment results remain within Level 1; semi-quantitative assessment outcomes are categorised as Risk Level 3 (hazard communication regarding these chemicals is performed accordingly).
  - ○ Chemicals without PELs are evaluated using semi-quantitative tools, such as the Occupational Safety and Health Administration's CCB online tool and control banding techniques. Management measures are implemented in alignment with the risk levels identified through these assessments.

Management of First-Time Use of Chemicals

Chemical Application and Data Collection	• The applying department shall provide basic information on the chemical • Collect hazard information and relevant regulatory requirements for the chemical
Preliminary Screening and Regulatory Compliance Check	Verify applicable regulatory requirements
Occupational Health and Safety Review and Hazard Identification	• Implement change management • Identify risks that may affect personnel, equipment, and the environment, and conduct hazard analysis and risk classification.
Risk Control and Preventive Measures	• Establish and implement necessary risk control measures • If the risk level is classified as unacceptable, conduct a substitute material assessment or redesign the process.
Change Management and Approval Completed	
Approved Chemical Substances	
Included In Plant-Wide Chemical Inventory, With Ongoing Monitoring and Periodic Evaluation	

Plant-Wide Chemical Management

Chemical Inventory and Survey	Conduct a comprehensive survey of chemical use and operations within the plant at least once every 2 years
Risk Assessment for Similar Exposure Groups	• Quantitative assessment methods: workplace environmental monitoring, no-ventilation estimation model for the workplace, saturated vapor pressure model • Semi-quantitative assessment methods: occupational safety and health administration's ccb online tool, control banding method.
Risk Assessment and Tiered Management	• Quantitative method - graded management Level 1 (x95 < 0.5 pel): maintain current control measures and continue monitoring Level 2 (0.5 pel ≦ x95 < pel): review process equipment, operating procedures, or methods, and implement necessary improvements Level 3 (x95 ≧ pel): immediately implement effective control measures and reassess after improvements are completed • Semi-quantitative method - graded management Adopt corresponding management measures based on the risk level
Implementation and Improvement of Control Measures	Adopt corresponding control measures based on different levels
Monitoring and Continuous Improvement	Review investigation results to determine whether control measures need to be updated or management plans adjusted

Incident Investigation

- In order to safeguard worker safety and prevent the recurrence of similar incidents, the Company has implemented a comprehensive incident investigation process. Throughout the year, 6 incidents were recorded, and all corrective actions have been completed in full.

Incident Investigation Process

Incident Reporting and Emergency Response

- In the event of an incident, on-site personnel shall immediately notify their unit supervisor and, depending on the situation, take emergency measures such as evacuating personnel and isolating hazardous areas.
- If a worker is in an environment with imminent danger, they have the right to immediately suspend operations and leave the site without being subject to any disciplinary action or unfair treatment by the company.

Establish an Incident Investigation Team and Collect Relevant Data

- The investigation team consists of occupational safety and health personnel, on-site supervisors, relevant technical staff, and worker representatives.

Accident Cause Analysis

- Conduct a comprehensive investigation covering direct, indirect, and root causes.

Formulate Recurrence Prevention Measures and Conduct Renewed Hazard Identification and Risk Assessment

- Take corrective measures based on the results of the root cause analysis
- Update the hazards or potential risks and corrective measures of the incident in the risk identification list, and confirm that the risk level after improvement has been reduced to an acceptable range.

Improvement Tracking and System Optimization

- Incorporate the corrective measures into the occupational safety and health management system, and track the implementation progress and effectiveness.
- Incorporate the findings and lessons learned from the incident investigation into internal training materials or safety meetings, using past incidents as a reference to prevent similar accidents from recurring.

Emergency & Contingency

- Based on the results of risk assessments and hazard identification, the Company plans and conducts emergency response drills for different types of hazards and scenarios to enhance the facility's capability to respond to unexpected incidents. Emergency response drills are conducted regularly each year, and realistic simulations, including unannounced drills and site-wide evacuation exercises, are used to evaluate the effectiveness of response procedures and team coordination, thereby continuously strengthening emergency response mechanisms and on-site incident management capabilities.
- Starting in 2025, the Company adopted "Rapid Identification and Immediate Response" as its core principle and further reviewed potential emergency scenarios that may occur across its facilities. Standardized emergency scenario documentation and corresponding response procedures were established to help employees quickly identify key response actions under different situations. In addition, emergency response drills and competency verification have been incorporated into routine management practices. Through regular drills and scenario-based assessments, the Company continuously evaluates the suitability and completeness of its response procedures and verifies that all emergency response team members are capable of performing their assigned duties in accordance with established requirements. Personnel who do not meet the required standards must complete retraining and pass a follow-up assessment. All emergency response team members are required to undergo at least one emergency response competency assessment annually to maintain the team's response readiness and capabilities.
- In 2025, the completion rate of annual competency assessments for emergency response team members reached 100%.

Emergency Response Management Process: Standardization of Emergency Scenarios and Response Procedures x Scale Classification x Competency Verification

Standardization of Emergency Scenarios and Response Procedures | Developed Based on Risk Identification

- Identify potential emergency scenarios within the facility. Assess each scenario by: location/ type of disaster/ hazard factors/ scale/ timing—daytime, nighttime, or holidays
- Establish an emergency scenario inventory and the corresponding response procedures.
- Incorporate the inventory and procedures into the facility's iso document control and issuance system.

Incident Scale Assessment and Response Classification | Define the Scope of Impact

Small-Scale Incident Scenario | Implement Basic

Follow the basic response checklist and carry out the initial on-site response.

Large-Scale Incident Scenario | Activate

Follow the response-process swimlane diagram and initiate the designated command structure, division of responsibilities, and emergency response actions.

Feedback from drills and competency verification Process revisions and continuous improvement

Regular Review and Updates | Emergency Response Procedures

Emergency scenario inventory and response-process swimlane diagrams.

Drills and Competency Verification | Emergency Response Team

- Conduct quarterly on-site drills, including unannounced drills and evacuation exercises.
- Review the reasonableness and completeness of the procedures and assess personnel according to the established response procedures.
- For units without scheduled on-site drills, conduct scenario-based spot checks through tabletop exercises.

At Least One Competency Assessment per Year | Emergency Response Team Members

- Personnel who fail to meet the required standards must undergo retraining and reassessment.
- Maintain the capability to "rapidly identify incidents and respond immediately."

HF Leak Response Drill

1. Personnel discover a leak in the acid discharge line of the pickling machine and report it to the on-site supervisor.

2. After notifying the department supervisor, the on-site supervisor assigns duties to the emergency response team members. The department supervisor informs the relevant departments, and the responsible departments issue plant-wide announcements and external notifications.

3. Personnel assist the Emergency Rescue Team in putting on self-contained breathing apparatuses (SCBA) and Level B Personal Protective Equipment.

4. The Emergency Rescue Team enters the hot zone: (1) Operate the equipment to stop the acid discharge and contain the leak (2) Place absorbent pads and booms around the leak.(3) Once no residual liquid remains at the leakage site, place the used absorbent pads and booms into hazardous waste disposal bags.

5. The Safety Support Team assists the Emergency Rescue Team with decontamination and the removal of emergency response equipment. Contaminated items are then placed in hazardous waste disposal bags.

6. Conduct an on-site post-drill review meeting.

Contractor Management

- The Company has implemented a digital contractor operation process management system that includes construction applications, hazard notifications, and construction quality evaluations for safety and quality management purposes during construction.

Contractor Management

Before Entering the Plant: Hazard Notification and Coordination of Organizations

- Before entering the plant, contractors must receive in-plant hazard notifications to understand the potential risks and safety requirements of the work environment.
- Occupational safety and health personnel shall convene the coordination meeting to establish the safety measures to be followed during the work.

After Entering the Plant: Pre-Task Hazard Notification and Toolbox Meeting

- Before daily operations, in-plant supervisors provide hazard notifications and require on-site personnel to complete a electronic signature for confirmation.
- Contractors and in-plant supervisors hold a toolbox meeting to coordinate the day's work content and safety precautions.

During and After Operations: Construction Safety Inspections and Patrols

- During and after operations, in-plant supervisors conduct on-site safety inspections to ensure that the work complies with regulations.
- Occupational safety and health personnel conduct unscheduled on-site patrols and require immediate corrective actions when violations are identified.

After Completion: Construction Quality and Safety Evaluation

- After the construction is completed, the applying unit, along with the occupational safety and health and procurement departments, conducts a contractor quality evaluation covering construction quality, safety management, and level of cooperation.
- The evaluation results will serve as criteria for future collaboration, and those who fail to meet the standards will not be selected.

Procurement Management

- The Company includes occupational safety and health requirements within its procurement management procedures for projects, chemicals, equipment, and personal protective equipment. Occupational safety and health personnel co-sign during the requisition process to verify that procurement items meet regulatory standards and to evaluate whether change management is necessary to address potential safety and health risks.
- Suppliers and Contractors Management
  - Raw material suppliers: Supplier evaluation practices are described in Section 2.5.1 Supplier Selection and Evaluation. Only approved suppliers are qualified.
  - Contractor entry management: All contractors are required to sign the SAS Supplier Code of Conduct and Supplier's Declaration. Before commencing work on-site, contractor personnel must complete 6 hours of occupational safety and health training and provide proof of insurance coverage. For non-construction contractors, signing the Site Hazard Notification Form is sufficient to obtain a visitor pass for site access.
- The Company seeks to leverage its organizational influence and business relationships to encourage suppliers and contractors to strengthen their occupational safety and health management practices and risk awareness. In addition, appropriate protection and support mechanisms are established to safeguard workers in the event of unexpected incidents. Through these efforts, the Company aims to reduce occupational health and safety risks and potential impacts, extend safety management practices throughout the supply chain and partner network, and further minimize occupational health and safety risks arising from operational activities.

Workers' Consultation and Communication

- The Company facilitates worker participation in occupational safety and health management through multiple communication channels, ensuring that feedback is addressed and incorporated as needed. Regular labor-management meetings (with labor representatives), Occupational Safety and Health Committee meetings (including worker representatives), and "Little Safety Officer" meetings (with safety representatives from each department) are held to provide forums for workers to raise occupational safety and health concerns and discuss possible improvements.
- Employees may submit suggestions or complaints regarding occupational safety and health via the proposal improvement system and the EHS platform on the internal information service site, ensuring that identified needs are considered and workplace conditions reviewed. A dedicated email address on the Company's official website allows external stakeholders to submit feedback. No workplace safety or health disputes were reported during the year.

Safety and Health Education and Training

- To enhance workers' occupational safety and health awareness and emergency response capabilities, the Company systematically develops annual training plans based on operational requirements, regulatory obligations, management priorities, and employee feedback. These plans are consolidated by the responsible training units and implemented according to the annual training schedule. Training participants include new hires, existing employees, supervisors at all levels, and contractors. Course content focuses on regulatory compliance awareness, competency development, operational safety management, emergency response, and first-aid preparedness. Training programs are categorized into routine training and specialized training courses, with instruction delivered by internal or external professionals possessing relevant expertise and practical experience. For courses related to professional qualifications, emergency response, first aid, and on-the-job training, the Company has established post-training assessment mechanisms to verify learning outcomes. Participants who fail to meet the required standards must complete additional training. For other specialized courses, interactive discussions and practical exercises are incorporated to strengthen learning retention and application, thereby continuously enhancing the overall effectiveness of occupational safety and health training programs.

On-the-job Training

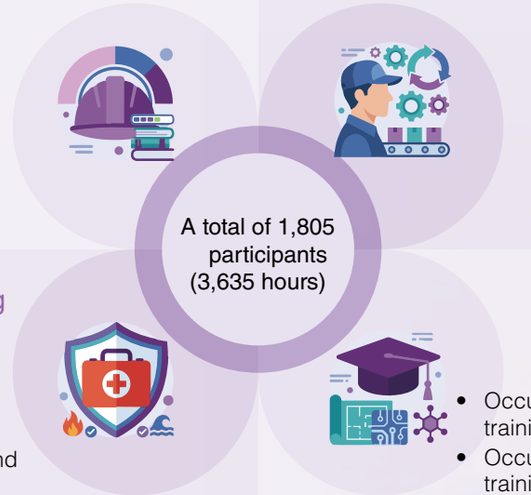
A total of 739 participants
(1,518 hours)

- New recruit training
- Hazard awareness training
- Occupational Safety and Health Committee training
- Respiratory and hearing protection training

Contractor-related Training

A total of 19 participants
(32 hours)

- Education and training for contractor on-site supervisory personnel



A total of 1,805 participants
(3,635 hours)

Disaster Prevention / First Aid Training

A total of 899 participants
(1,219 hours)

- CPR+AED Practices
- First aid personnel training
- In-plant emergency response measures and chemical splash exposure training
- Emergency response team member training
- Response personnel training for toxic and concerning chemical substances
- Firefighting training

Professional Training

A total of 148 participants
(866 hours)

- Occupational safety and health education and training for supervisors of hazardous operations
- Occupational safety and health education and training for special operations
- Occupational safety and health training for hazardous machinery and equipment
- Crisis management and strategic planning seminar
- Operational safety at solar power plants

Regulatory Identification

- The Company employs a cloud-based regulatory identification platform that delivers automatic updates on legal provisions and compliance functions. This assists accountable departments in remaining abreast of the latest regulatory changes and determining both applicability and compliance status. Regulatory developments related to business operations are reviewed on a monthly basis, with a comprehensive evaluation of all applicable regulations across production sites conducted every six months to ensure management practices align with current standards.
- Outcomes of regulatory identification are presented or discussed in occupational safety and health committee meetings, management review sessions, and Little Safety Officer gatherings. This process enables the Company to continuously track the implications of regulatory changes on operations and make timely adjustments to relevant procedures.

Internal & External Audit

- The Company conducts internal audits every six months to assess adherence to occupational safety and health principles and standards, implementing corrective actions and improvements based on audit findings to drive ongoing enhancement of the management system.
- An independent external verification body is engaged annually to audit the management system and evaluate its sustained effectiveness. Operational strategies are adapted as necessary in response to audit results, and management practices are strengthened to further improve occupational safety and health performance.

5.1.2 Safety Culture

Establish a Safety Culture by Starting with Everyday Practices

At SAS, safety is not merely a directive but a deeply ingrained culture shared by all employees. We promote an environment where each individual takes responsibility for their own safety as well as that of their colleagues, ensuring safety principles are seamlessly integrated into daily operations.

September: Occupational Safety Month—Promoting Workplace Safety

Since 2022, the Group has designated September as Occupational Safety Month each year, using a variety of activities to deepen employees' awareness of occupational safety and health, strengthen a culture of accountability, and enhance crisis awareness and emergency response capabilities when facing unexpected situations. The 2025 Occupational Safety Month program included the following activities:

- Occupational Safety Competition: Centered on the principle of occupational safety and health accountability for all employees, the Company organized online quizzes and interactive activities such as the "Hazard Spotting Challenge" to enhance employees' understanding and implementation of safety requirements and workplace risk management through scenario-based identification and engaging competitions.
- Thematic Seminars: External experts were invited to deliver seminars focusing on crisis management and emergency response strategies. These sessions helped employees develop sound risk awareness and response mindsets while strengthening managers' decision-making and communication capabilities during crisis situations.
- Fire Equipment Experience, Emergency Response Drills and Observation Activities: To improve employees' familiarity with firefighting equipment operations and enhance teamwork during emergency situations through hands-on training and emergency response exercises. Suppliers were also invited to participate in the drills to strengthen coordinated emergency response capabilities between the Company and its external partners.

"Little Safety Officer 2.0": Cultivating Comprehensive Engagement for a Safer Workplace

Since 2024, the Company enhanced the "Little Safety Officer" initiative by broadening participation to include all plant personnel, thus reinforcing a pervasive safety culture:

- Quarterly Safety Competition: Each quarter, themed safety competitions are organized (such as simulated high-risk scenarios and photo-based violation identification) to deepen employees' risk recognition and emergency preparedness through experiential and observational learning.
- Monthly Meeting Sharing: Safety representatives regularly present workplace safety cases, discuss remediation strategies, and motivate employees to engage proactively in operational safety and environmental self-inspections. In 2025, a total of 50 self-inspection items were reported, with a corrective action completion rate of 98%.

Occupational Safety Seminar: Crisis Management and Emergency Response Strategies

Participation: 25 participants

- Mandatory for managers at the section level and above.
- Case studies were used to explain crisis management concepts, followed by group tabletop exercises.

Spot the Hazard Champion: Workplace Safety Challenge

Participation: 15 teams (58 participants)

- Participants identified unsafe behaviors, actions, or potential hazards in images.
- Prizes were awarded to the top 10 teams based on their scores.

Emergency Response Equipment Experience and Drill Observation

Participation: 40 participants

- Station 1: Wearing personal protective equipment (Level C Personal Protective Equipment).
- Station 2: Operating fire extinguishers and setting up fire hoses for water discharge.
- Participation prize: NT$100.

Company-Wide Online Occupational Safety and Health Challenge Quiz

Participation: 81 participants (19 scored above 90)

- The online quiz enhanced employees' occupational safety and health knowledge.
- Rewards were granted based on the number of correct answers.
- Scores above 90: NT$400; participation prize: NT$100.

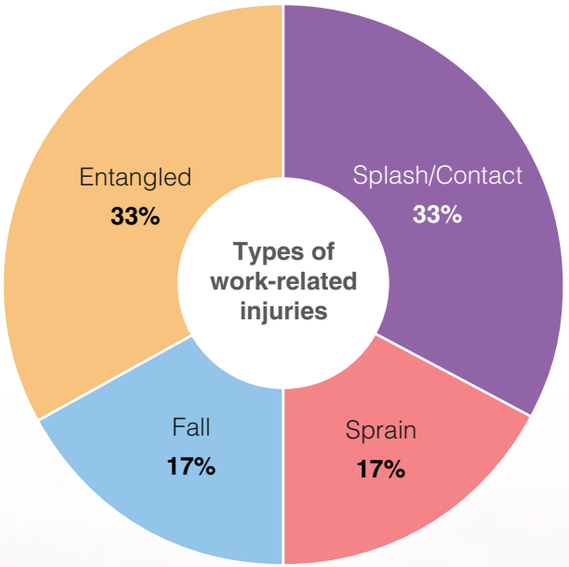
▲ Highlights of Occupational Safety Month at the Chunan Plant

5.1.3 Occupational Injuries and Incident Statistics

In 2025, a total of six occupational injuries, excluding commuting accidents, and zero near-miss incidents were recorded among employees. According to the disabling injury indicators defined by the Ministry of Labor, the disabling injury frequency rate (FR) was 3.31 and the disabling injury severity rate (SR) was 41.

In 2024, a total of ten employee occupational injuries were recorded, with an FR of 7.66. In response, the Company established an improvement target of reducing the FR by 20% to below 6.12. To achieve this target, the Company continued to advance measures related to hazard identification and risk control in routine operations, incident investigation and corrective and preventive actions, education, training and awareness promotion, and enhanced participation by on-site managers. In 2025, the FR decreased to 3.31, achieving the original 20% reduction target. Going forward, the Company will continue to optimize its management practices based on incident investigation findings and the effectiveness of improvement measures, while strengthening on-site implementation to steadily enhance safety management performance.

For non-employee workers, there were no reported work-related injury incidents within the Company's plant areas in 2025.



Improvement of Entanglement Injuries

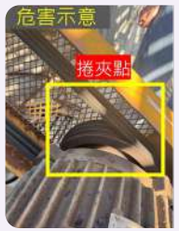
Incident Description

While replacing a blower belt, an employee accidentally placed their right hand into the equipment's pinch-point area, resulting in an injury in which the little fingernail was lifted from the nail bed.

Improvement Measures

① Strengthened Operational Controls: An installation and removal tool must be used when replacing blower belts. This prevents workers' hands from directly contacting or entering equipment pinch points, thereby reducing the risk of entanglement injuries.

② Standardized Procedures and Training: The above requirements have been incorporated into the relevant standard operating procedures. Regular training and operational competency assessments are conducted to ensure that all personnel perform the work in accordance with established requirements.



Improvement of Chemical Exposure Incident

Incident Description

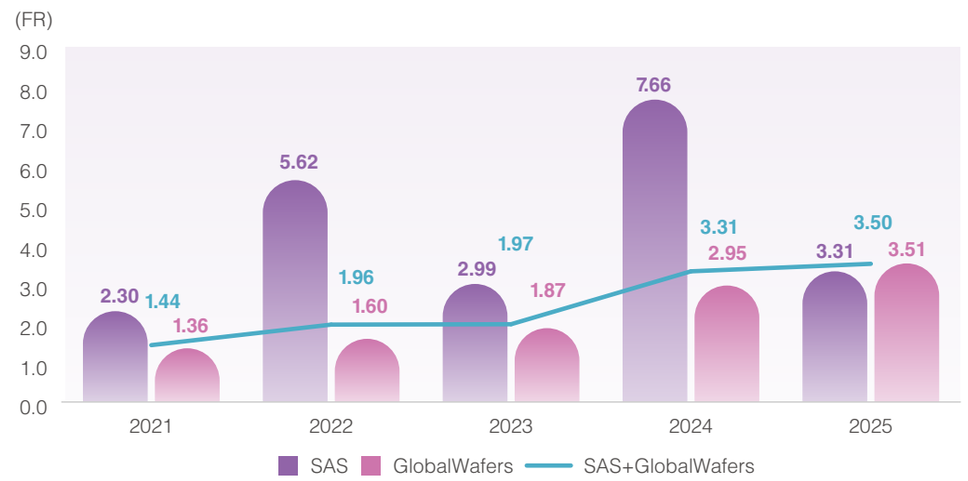
The piping connected to a liquid caustic soda storage tank was damaged by a typhoon. During the repair work, a sharp burr on a nut tore the worker's protective glove, causing the worker's hand to come into contact with the caustic solution and resulting in an injury.

Improvement Measures

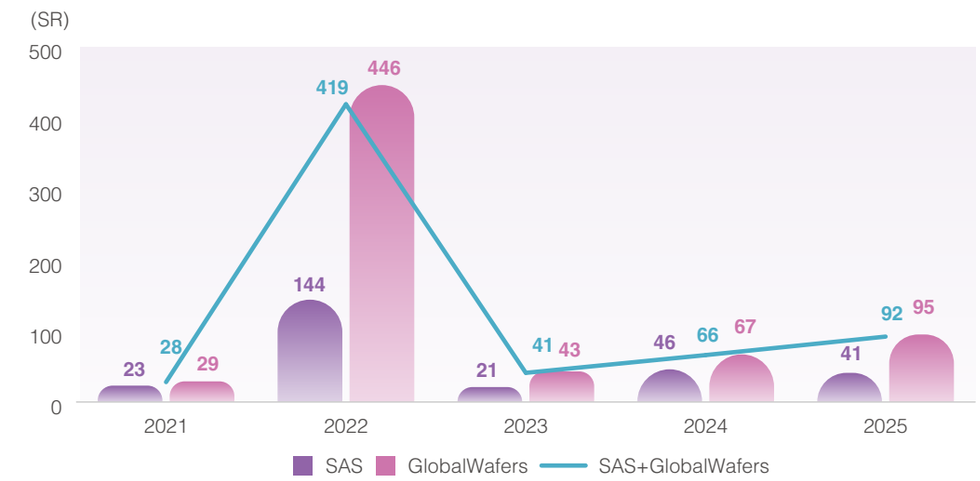
① Enhanced Personal Protective Equipment: For this type of work, the original protective gloves were replaced with chemical-resistant gloves featuring reinforced fingertips. This provides greater protection against sharp edges and exposure to hazardous chemical liquids during operations.

② Incorporation into Operating Procedures: The relevant protective requirements were incorporated into the operating procedures as the safety requirements for similar work in the future. This helps ensure consistent work practices and effective on-site implementation.

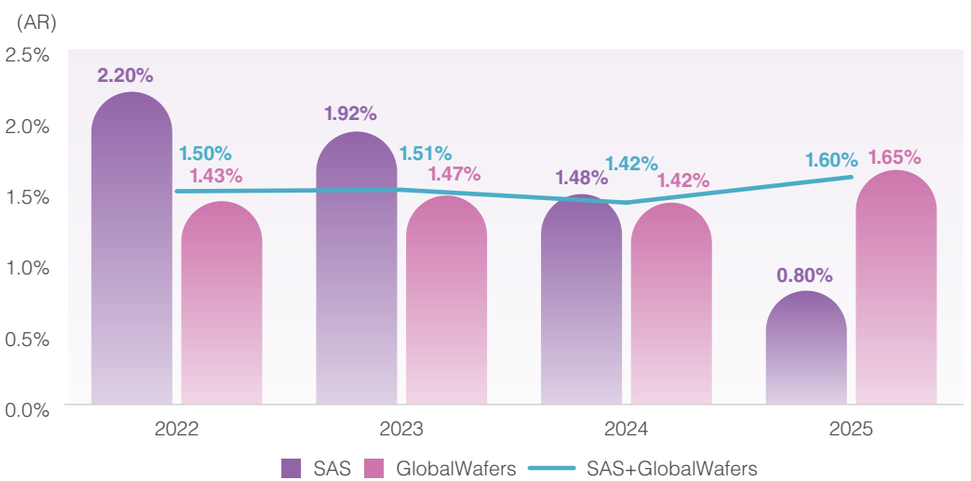
Disabling Frequency Rate (FR)



Disabling Severity Rate (SR)



Absence Rate (AR)



Note:

1. Disabling Injury Frequency Rate (FR): The number of disabling injuries per one million work hours. FR = (Number of disabling injuries × 1,000,000) ÷ Total hours worked
2. Disabling Injury Severity Rate (SR): The number of workdays lost due to disabling injuries per one million work hours. SR = (Workdays lost due to disabling injuries × 1,000,000) ÷ Total hours worked.
3. Absence rate (AR): Total number of absent days ÷ Total number of working person-days × 100%

Occupational Accident Statistics in Recent Years

Item	2021				2022				2023				2024				2025			
	SAS		GlobalWafers (Taiwan)		SAS		GlobalWafers (Taiwan)		SAS		GlobalWafers		SAS		GlobalWafers		SAS		GlobalWafers (Taiwan)	
	Employees	Non-employees	Employees	Non-employees	Employees	Non-employees	Employees	Non-employees	Employees	Non-employees	Employees	Non-employees	Employees	Non-employees	Employees	Non-employees	Employees	Non-employees	Employees	Non-employees
No. of people	657	195	1,674	88	729	294	1,711	110	622	274	7,305	847	574	396	7,198	481	434	282	7,061	541
Working hours	1,303,846	573,932	3,321,216	265,810	1,422,974	867,088	3,408,312	320,011	1,339,600	794,511.5	14,417,284	1,793,612	1,174,847	1,155,688	14,228,678	1,043,699	907,132	824,240	13,942,940	1,158,555
No. of disability injuries	3	0	3	0	8	0	7	0	4	0	27	0	9	0	42	0	3	0	49	0
Days of disabling injuries	30	0	14	0	205	0	6,218	0	28	0	613	0	54	0	959	0	37	0	1,330	0
Death toll due to work	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
No. of severe occupational accidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No. of recordable occupational injuries	5	0	10	0	10	0	34	0	6	0	55	0	10	0	60	0	6	0	60	0
Recordable occupational injury rate (IR)	3.835	0	3.010	0	7.030	0	9.975	0	4.480	0	3.815	0	8.512	0	4.217	0	6.614	0	10.207	0
Occupational disease rate (ODR)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note:
1. Non-employees: Refer to workers who are not employees but whose work and/or workplace are controlled by the organization, including security personnel, housekeeping staff, catering service providers, and construction contractors. Divide the total number of workers for the year by 365 to calculate the average number of people entering the plants every day.
2. Work hours: Employees–calculated based on the actual work hours of the year. Other non-employee workers–calculated based on the total number of workers for the whole year, followed by 8 hours per day.
3. Severe occupational disasters: Injuries in which workers are unable or cannot recover to their pre-injury health status within 6 months after the occupational injuries.
4. Recordable occupational injuries: Refer to occupational injuries that caused death, loss of work, restricted work, or work transfer; emergency care or higher level medical treatment; loss of consciousness; and serious injury or illness diagnosed by a doctor.
5. Recordable occupational injury rate (IR): (recordable occupational injury number / total working hours) * 1,000,000
6. Occupational disease rate (ODR): (total number of occupational diseases / total working hours) * 1,000,000
7. SAS headquarters is located within the scope of the occupational safety and health management system of GlobalWafers headquarters. The relevant information of other workers who are not employees is included in GlobalWafers headquarters' statistics.

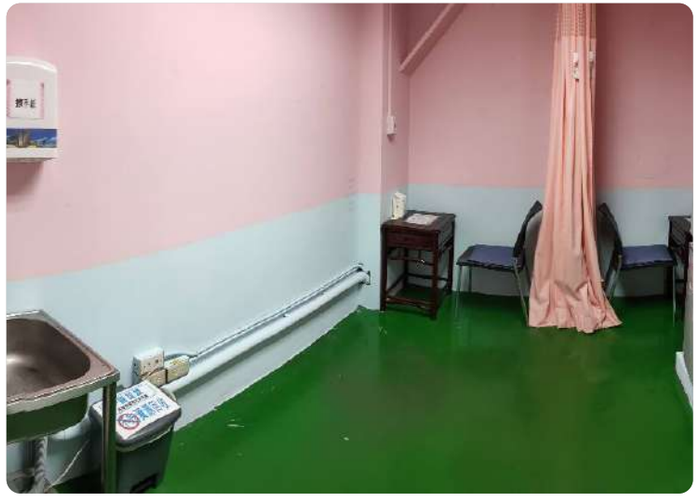
5.2 Health Promotion and Care

At SAS, employees are regarded as the organization's most valuable asset. The Company is dedicated to fostering a safe, comfortable work environment and views employee health as essential to achieving corporate success and sustainable development. Each plant is equipped with a health center staffed by full-time nurses and regularly visited by occupational medicine specialists.

5.2.1 The Five Pillars of Health Protection

Based on its Occupational Safety and Health Management System, the Company implements health protection and prevention programs focusing on five key areas: maternal health protection, prevention of abnormal workload-related illnesses, health protection for middle-aged and older employees, prevention of workplace violence and harassment, and ergonomic hazard prevention.

Health Protection Programs	Program Description	2025 Performance Results
Maternity Health Protection	Maternity health protection program	1. A total of 18 female employees of childbearing age, pregnant employees, and employees within one year postpartum received workplace hazard identification and hazard communication services. 2. Following comprehensive evaluations conducted by occupational medicine physicians, work suitability assessments and arrangements were implemented. A total of 18 employees were classified under Level 1 health management, while no employees were classified under Level 2 or above. All 18 employees were deemed fit to continue their current work assignments, and no job modifications were required. 3. Three lactation rooms were provided across the Company's facilities. 4. Each pregnant employee received a "Good Pregnancy Pack," including a maternity and nursing pillow (moon-shaped pillow) or a maternity support belt. A total of one care package was distributed in 2025.
Prevention of Diseases Caused by Abnormal Workload	Abnormal Workload-Induced Disease Prevention Program	1. A total of 436 employees underwent abnormal workload risk screening in 2025. Among them, 4 employees were identified as having significant health risks and completed occupational physician consultations, health guidance, and preventive interventions. No employees were recommended to adjust or shorten their working hours, and no job reassignments were required.
Health Protection for Middle-Aged and Senior Employees	Health Protection Program for Middle-Aged and Older Employees	1. Assessments are conducted once every two years. In 2025, a total of 72 employees were included in the follow-up management program and provided with health education and promotion information.
Prevention of Unlawful Infringement in the Workplace	Regulations for the Prevention of Workplace Violence and Protection Management / Workplace Sexual Harassment Prevention Measures	1. A total of 36 workplace violence prevention awareness training sessions were conducted, with 833 participant attendances. The training completion rate reached 100% for all new employees and supervisors (deputy section manager level and above). 2. Nine discussion-based workshops were organized for supervisors, with 61 managers participating. Through facilitated activities led by licensed counseling psychologists, supervisors were encouraged to develop empathy, strengthen perspective-taking skills, and enhance their response and communication capabilities in workplace situations. The participation rate among supervisors reached 82%.
Prevention of Ergonomic Hazards	Ergonomic Hazard Prevention Program	1. Two employees were identified as having suspected work-related musculoskeletal discomfort and completed on-site ergonomic assessments, as well as consultations and guidance provided by occupational medicine specialists. 2. For identified improvement needs, engineering controls and work process modifications have been completed, including the use of material handling equipment to reduce manual handling workloads. These measures have been incorporated into operational controls, education, and awareness programs as part of routine management practices.



▲ Breastfeeding Room

▲ Good Pregnancy Pack

5.2.2 Health Promotion

Item	Description	2025 Performance Results
Annual Health Examinations Beyond Regulatory Requirements	1. Annual health examinations are provided beyond statutory requirements. 2. The Company partners with the Linkou Chang Gung Memorial Hospital mobile health examination team, providing professional medical services and high-quality laboratory testing standards. 3. The collection, processing, and use of personal data are conducted in accordance with applicable personal data protection regulations to ensure that individual health examination results do not result in any favorable or unfavorable treatment of workers.	1. A total of 372 employees completed annual health examinations, achieving a 100% completion rate among legally required participants. 2. Following the annual health examinations, 17 employees were identified and notified for urgent follow-up examinations. 3. To control occupational disease risks, specialized examinations were arranged for employees engaged in specific operations, including noise exposure and dust-related work. 4. Employee satisfaction with the Group's health examination program reached 96%. Total health examination expenditures amounted to NT$1,059,319, and zero occupational disease-related fatalities were reported. In addition, ERT (Emergency Response Team) members received supplementary cardiopulmonary fitness assessments, including exercise electrocardiogram (ECG) testing and pulmonary function testing.
Cancer Screening and Disease Prevention	In conjunction with the annual health examination program and partnerships with mobile healthcare providers, the Company offers free cancer screening services to employees, including colorectal cancer screening, oral cancer screening, and cancer biomarker blood tests (carcinoembryonic antigen [CEA] and alpha-fetoprotein [AFP]).	1. A total of 875 cancer screening participations were recorded, including colorectal cancer screening, oral cancer screening, low-dose computed tomography (LDCT) lung cancer screening, and cancer biomarker blood tests (CEA and AFP). Employees participated in different screening programs based on their individual health conditions, and not every participant completed all screening items. 2. A total of 11 employees underwent coronary artery calcium (CAC) scoring for cardiovascular disease screening, and 7 employees received bone mineral density (BMD) X-ray examinations. The follow-up consultation rate for employees with abnormal results was 100%.
Health Promotion Activities	Daily 7,000-Step Health Promotion Challenge.	1. A total of 50 employees successfully completed the challenge. Through a gamified design, participants earned stars by achieving their daily step goals, completing the "Loyal Companion" task, and responding to interactive questionnaires. The stars were used to enter a prize drawing, with 3,994 stars accumulated in total. 2. A total of 59 health promotion and wellness seminars were held, with 972 participants.
Government-Funded On-Site Influen	Free influenza vaccination services are provided on-site to enhance employees' immunity and reduce the risk of workplace infectious disease outbreaks. Discounted influenza vaccination programs are also made available to employees' family members through contracted healthcare providers.	1. A total of 209 employees received influenza vaccinations through the on-site vaccination program.
Occupational Physician	Occupational medicine specialists provided on-site consultation services.	1. A total of 15 on-site service sessions were conducted, serving 64 employees, with total expenditures of NT$120,000.
Follow-up of Occupational and General Injuries and Illnesses	Follow-up support is provided to employees who have experienced occupational injuries or traffic accidents, taken extended sick leave, or undergone major surgery.	1. A total of 18 return-to-work and job accommodation assessments were conducted. Occupational medicine specialists recommended work adjustments or other measures in 4 cases. The Company also maintained communication with the employees' supervisors to monitor their conditions after returning to work.
Employee Assistance Program (EAP)	The program provides counseling services covering emotional management, interpersonal relationships, legal matters, career development, family and parenting issues, financial concerns, and other areas. Each employee is entitled to two Stage 2 counseling sessions per year.	1. The Group's real-time counseling hotline provided services to 60 person-times. 2. One-on-one consultations with professional advisors were provided to 15 person-times. 3. A total of 75 person-times received counseling services.
First-Aid Skills Training	The Company regularly provides the "In-Plant Emergency Medical Response Measures and Chemical Splash Response Course" to help maintain a safe workplace.	1. In-plant first-aid training was provided to 395 employees. 2. A total of 18 CPR and AED training sessions were conducted, with 226 participants. 3. SAS's Chunan Plant and Sunrise Subsidiary obtained the Ministry of Health and Welfare's AED Safe Place Certification, with more than 70% of employees having completed CPR and AED training.
Follow-up and Health Support for Special Employee Groups	Note※	1. A total of 338 employees received follow-up support under the special employee group health management program.

Note:
※ Definition of Special Employee Groups:
(1) Prevention of abnormal workload (follow-up for Level B2 and above in the current year)
(2) Maternity (current-year case tracking; job assessment and hazard notification for women of childbearing age); (3) Disability (current-year follow-up, once every two years); (4) New hires (GWC: those issued guidance sheets due to abnormal medical examination findings); (5) Special operations health examinations (Level 2 and above); (6) Annual health examinations (Level 4 and above); (7) Occupational injuries (tracked by date of occurrence); (8) Psychological (mental health scale score of 19 or above; suicidal intent); (9) Middle-aged and senior care group (middle-aged workers / senior protection subjects, once every two years); (10) Ergonomic care group (score of 3 or above)

New Recruits

- General physical examination
- Completed in designated hospitals before arriving for work
- Assessment record archive for work selection operation

Existing Employees

- General health check-up
- Implemented in line with regulations regarding labor health protection
- Assessment record archive for work distribution operation

High-ranking Executives

- Exquisite health examinations
- Implementation exceeding standards as required by regulations regarding labor health protection
- Assessment record archive for health risk

Catering Personnel

- Health examination for Security, Cleaning, and Catering Personnel
- In line with Clause 322 in the occupational safety and hygiene facilities regulations
- Catering contractors conduct self-assessment and submit the record/report to the company.

▲ Daily 7,000-Step Challenge, Workplace Well-being Seminar Series, Health and Wellness Seminars, and other activities

▲ CPR and AED Training, Annual Employee Health Examinations, Influenza Vaccination Campaigns, and Charitable Blood Donation Drives

Follow-up and Health Support for Special Employee Groups

Number of service sessions		2023	2024	2025
SAS	Yilan Branch Note2	508	523	168
	Chunan Branch	393	189	132
	Hsu-Hsin Branch	26	5	11
	Hsinchu Headquarters	30	49	25
	Total	957	766	336
GlobalWafers–Taiwan		1,193	1,528	2477
Total		2,150	2,294	2813
No. of people under follow-up Note 1		**2023**	**2024**	**2025**
SAS	Yilan Branch Note2	159	259	157
	Chunan Branch	124	103	127
	Hsu-Hsin Branch	13	10	14
	Hsinchu Headquarters	33	42	40
	Total	329	414	338
GlobalWafers–Taiwan		1,565	1,218	1,737
Total		1,894	1,632	2,075

Note1:

※ Definition of Special Employee Groups:

(1) Prevention of abnormal workload (follow-up for Level B2 and above in the current year)

(2) Maternity (current-year case tracking; job assessment and hazard notification for women of childbearing age); (3) Disability (current-year follow-up, once every two years); (4) New hires (GWC: those issued guidance sheets due to abnormal medical examination findings); (5) Special operations health examinations (Level 2 and above); (6) Annual health examinations (Level 4 and above); (7) Occupational injuries (tracked by date of occurrence); (8) Psychological (mental health scale score of 19 or above; suicidal intent); (9) Middle-aged and senior care group (middle-aged workers / senior protection subjects, once every two years); (10) Ergonomic care group (score of 3 or above)

Note 2: In July 2025, the operations of the Yilan Branch were spun off into Sustainable Sunrise Co., Ltd., Susen Green Energy Co., Ltd., and Sustainable Energy Solution Co., Ltd. (SES). For consistency, the relevant statistics for these entities are collectively presented under the Yilan Branch.

Employee Assistance Program (EAP) Utilization Statistics

Employee Assistance Program (EAP)		2023	2024	2025
Live chat E-mail consultation service	All regions*	69 people	47 people	60 people
One-on-one expert advisor consultation	SAS GlobalWafers–Taiwan	10 people	15 people	15 people
Total number of consultation		79 people	62 people	75 people
Professional consultants for colleagues Overall satisfaction with on-site psychological counseling		96.7%	97.8%	96.3%

*The program also covers the subsidiary, GlobalWafers Co., Ltd. To protect user privacy, EAPC does not provide differentiated statistics.

06 Appendix

GRI Guideline Index

SASB Standards Index

Climate-Related Information of TWSE/TPEx Listed Companies

Disclosure of Sustainability Indicators as Required by TPEx

External Assurance Statement

GRI Guideline Index

Statement of Use	Sino-American Silicon Products Inc. has prepared this report in accordance with the GRI Standards. The reporting period covered in this report is 2025 (from January 1 to December 31, 2025).
GRI 1 Used	GRI 1: Foundation 2021
Applicable GRI Standards	NA

GRI 2: General Disclosures 2021

GRI Standards	Disclosure Items	Corresponding Chapters	Page No.	Omitted/Notes
2-1	Organizational details	SAS–Company Overview	12	
2-2	Entities included in the organization's sustainability reporting	SAS–Company Overview	12	
2-3	Reporting period, frequency and contact point	About This Report	3	
2-4	Restatements of information	-	-	The greenhouse gas emissions data disclosed in prior periods were not restated in the current year; in addition, to enhance the consistency of year-on-year comparisons, the Company used the 2024 electricity emission factor as a consistent basis and additionally disclosed a comparative scenario for Scope 2 emissions. For relevant explanations, please refer to the "Climate Strategy and Actions" section.
2-5	External assurance	About This Report Appendix 5 External Assurance Statement	4 151	
2-6	Activities, value chain and other business relationships	SAS–Company Overview 2.2 Customers and Product Servicess 2.5 Supply Chain Management	12 70 73	
2-7	Employees	4.1 Human Resource	98	

GRI Standards	Disclosure Items	Corresponding Chapters	Page No.	Omitted/Notes
2-8	Workers who are not employees	5.1 Safe Workplace	133	
2-9	Governance structure and composition	Sustainable Management	18	
2-10	Nominating and selecting the highest governance body	1.1 Corporate Governance	50	
2-11	Chairperson of the highest governance body	Sustainability Organization 1.1 Corporate Governance	18 49	
2-12	Role of the highest governance body in overseeing the management of impacts	4.1 Human Resources	18	
2-13	Delegation of responsibility for managing impacts	5.1 Safe Workplace	18	
2-14	Role of the highest governance body in sustainability reporting	Sustainable Management	18	
2-15	Conflicts of interest	1.1 Corporate Governance	50	
2-16	Communication of critical concerns	Sustainable Management 1.1 Corporate Governance	49 58	
2-17	Collective knowledge of highest governance body	1.1 Corporate Governance	50	
2-18	Evaluating the highest governance body's performance	1.1 Corporate Governance	53	
2-19	Remuneration policies	1.1 Corporate Governance	52	
2-20	Process to determine remuneration	1.1 Corporate Governance	52	
2-21	Annual total compensation ratio	-	-	Due to confidentiality constraints, the highest employee remuneration is not disclosed

GRI Standards	Disclosure Items	Corresponding Chapters	Page No.	Omitted/Notes
2-22	Statement on sustainable development strategy	Message from the Chairperson	5	
2-23	Policy commitments	Climate Change Risks and Actions – Performance and Targetss 1.1 Corporate Governance 4.4 Supportive and Caring Workplace	43 49 110	
2-24	Embedding policy commitments	Climate Change Risks and Actions – Performance and Targetss 1.1 Corporate Governance 4.4 Supportive and Caring Workplace	43 49 110	
2-25	Processes to remediate negative impacts	1.1.2 integrity & Ethics	55	
2-26	Mechanisms for seeking advice and raising concerns	1.1 Corporate Governance	49	
2-27	Compliance with laws and regulations	1.1 Corporate Governance	49	
2-28	Membership of associations	SAS–Participation in External Associations	16	
2-29	Approach to stakeholder engagement	Sustainable Management–Determination of material topics	19	
2-30	Collective bargaining agreements	-	-	Not applicable, no union organization

GRI 3: Material Topics 2021

GRI Standards	Disclosure Items	Corresponding Chapters	Page No.	Omitted/Notes
3-1	Process to determine material topics	Sustainable Management–Determination of material topics	19	
3-2	List of material topics	Sustainable Management–Determination of material topics	25	

List of Material Topics		Corresponding Chapters	Page No.	Omitted/Notes
3-3	Management of material topics	1.2 Operational Performance	61	
201-1	Direct economic value generated and distributed	1.2 Operational Performance	61	
201-2	Financial implications and other risks and opportunities due to climate change	Climate Strategy and Actions	36	
201-3	Defined benefit plan obligations and other retirement plans	1.2 Operational Performance	61	
3-3	Management of material topics	1.1.2 integrity & Ethics	55	
205-1	Operations assessed for risks related to corruption	1.1.2 integrity & Ethics	55	
205-2	Communication and Training About Anti-corruption Policies and Procedures.	1.1.2 integrity & Ethics	55	
205-3	Confirmed incidents of corruption and actions taken	1.1.2 integrity & Ethics	55	
3-3	Management of material topics	1.3 Risk Management	63	
201-2	Financial implications and other risks and opportunities due to climate change	Climate Strategy and Actions	36	
3-3	Management of material topics	2.5 Supply Chain Management	73	

List of Material Topics		Corresponding Chapters	Page No.	Omitted/Notes
204-1	Proportion of spending on local suppliers	2.5.2 Local Procurement in the Supply Chain	76	
308-1	New suppliers that were screened using environmental criteria	2.5.1 Supplier Selection and Evaluation	73	
308-2	Negative environmental impacts in the supply chain and actions taken	2.5.1 Supplier Selection and Evaluation	73	
414-1	New suppliers that were screened using social criteria	2.5.1 Supplier Selection and Evaluation	73	
414-2	Negative social impacts in the supply chain and actions taken	2.5.1 Supplier Selection and Evaluation	73	
3-3	Management of material topics	3.1 Energy Management and Development	79	
302-1	Energy consumption within the organization	3.1 Energy Management and Development	79	
302-3	Energy intensity	3.1 Energy Management and Development	79	
302-4	Reduce Energy Consumption	3.1 Energy Management and Development	79	
3-3	Management of material topics	Climate Strategy and Actions	37	
305-1	Direct (scope 1) GHG emissions	Climate Strategy and Actions – Carbon Emissions Management	44	
305-2	Energy indirect (Scope 2) GHG emissions	Climate Strategy and Actions – Carbon Emissions Management	44	
305-3	Other indirect (Scope 3) GHG emissions	Climate Strategy and Actions – Carbon Emissions Management	44	
305-4	GHG emission intensity	Climate Strategy and Actions – Carbon Emissions Management	46	
305-5	Reduction of GHG emissions	Climate Change Risks Management – Performance and Targetss	43	

List of Material Topics		Corresponding Chapters	Page No.	Omitted/Notes
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	3.3.1 Air Pollutant Emissions	89	
3-3	Management of material topics	4.2 Talent Attraction and Retention	102	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	4.2 Talent Attraction and Retention	102	
401-3	Parental leave	4.2 Talent Attraction and Retention	102	
3-3	Management of material topics	5.1 Safe Workplace	122	
403-1	Occupational health and safety management system	5.1 Safe Workplace	122	
403-2	Hazard Identification, Risk Assessment, and Accident Investigation	5.1.1 Occupational Safety Management 5.1.3 Occupational Injuries and Incident Statistics	123 131	
403-3	Occupational health services	5.2 Health Promotion and Care	134	
403-4	Worker participation, consultation, and communication on occupational health and safety	5.1.1 Occupational Safety Management	123	
403-5	Worker training on occupational health and safety	5.1.1 Occupational Safety Management	123	
403-6	Promotion of worker health	5.2.2 Health Promotion	136	
403-7	Prevent and mitigate occupational safety and health impacts directly related to business relationships	5.1.1 Occupational Safety Management	123	
403-8	Workers covered by an occupational health and safety management system	5.1 Safe Workplace	122	
403-9	Work-related injuries	5.1.3 Occupational Injuries and Incident Statistics	131	
403-10	Work-related ill health	5.1.3 Occupational Injuries and Incident Statistics	131	

SASB Standards Index

Topic	Code	Metric	Category	Corresponding Chapters/Description	Page No.	External Verification
Greenhouse Gas Emissions	TC-SC-110a.1	(1) Gross global Scope 1 emissions and (2) amount of total emissions from perfluorinated compounds	Quantitative	Climate Strategy and Actions – Carbon Emissions Management	44	◎
	TC-SC-110a.2	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Qualitative	Climate Strategy and Actions – Performance and Targetss	43	◎
Energy Management in Manufacturing	TC-SC-130a.1	(1) Total energy consumed, (2) percentage grid electricity and (3) percentage renewable	Quantitative	3.1 Energy Management and Development	79	◎
Water Management	TC-SC-140a.1	(1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	3.2.1 Water Resource Management	84	◎
Waste Management	TC-SC-150a.1	Amount of hazardous waste from manufacturing and percentage recycled	Quantitative	3.4.2 Overview of Waste Generation and Treatment	93	◎
Workforce Health & Safety	TC-SC-320a.1	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	Qualitative	5.1 Safe Workplace	122	◎
	TC-SC-320a.2	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	Quantitative	NT$0; no monetary losses resulting from violations of employee health and safety regulations.	-	◎

Topic	Code	Metric	Category	Corresponding Chapters/Description	Page No.	External Verification
Recruiting & Managing a Global & Skilled Workforce	TC-SC-330a.1	Percentage of employees that require a work visa	Quantitative	4.1 Human Resource	98	◎
Product Lifecycle Management	TC-SC-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	Quantitative	Stakeholders primarily focus on the Company's products' compliance with the RoHS Directive, and product testing results meet the relevant standards.	-	◎
	TC-SC-410a.2	Processor energy efficiency at a system level for: (1) servers, (2) desktops and (3) laptops	Quantitative	Not terminal product manufacturer, no corresponding content	-	◎
Materials Sourcing	TC-SC-440a.1	Description of the management of risks associated with the use of critical materials	Qualitative	2.5 Supply Chain Management	73	◎
Intellectual Property Protection & Competitive Behaviour	TC-SC-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behaviour regulations	Quantitative	1.1.2 integrity & Ethics	55	◎
Activity Metrics	TC-SC-000.A	Total production	Quantitative	1.2 Operational Performance	61	◎
Activity Metrics	TC-SC-000.B	Percentage of production from owned facilities	Quantitative	1.2 Operational Performance	61	◎

Climate-Related Information of TWSE / TPEx Listed Companies

Item	Implementation
1. Describe the board of directors' and management's oversight and governance of climate-related risks and opportunities.	Please refer to "Climate Strategy and Actions"
2. Describe how the identified climate-related risks and opportunities impact the Company's business, strategy, and financial planning (short-, mid-, and long-term).	Please refer to "Climate Strategy and Actions"
3. Describe the financial impact of extreme climate events and transition actions.	Please refer to "Climate Strategy and Actions"
4. Describe how the processes for identifying, assessing, and managing climate risks are integrated into the overall risk management system.	Please refer to "Climate Strategy and Actions"
5. If scenario analysis is used to assess resilience to climate change risks, describe the scenarios, parameters, assumptions, analytical factors, and the major financial impacts considered.	Please refer to "Climate Strategy and Actions"
6. If a transition plan has been developed to manage climate-related risks, describe the contents of the plan, as well as the metrics and targets used to identify and manage physical and transition risks.	Please refer to "Climate Strategy and Actions"
7. If internal carbon pricing is used as a planning tool, the basis for determining the pricing should be explained.	The Company has adopted an internal carbon pricing mechanism by referencing the Carbon Border Adjustment Mechanism (CBAM) price, which is provisionally set at EUR 90 in 2024. This price is used to incorporate carbon emissions from operational activities into financial cost estimations. (The calculation method is as follows) Calculation: Verified carbon emissions (Scope 1 + Scope 2) * EUR 90 *10%
8. If climate-related targets have been established, the covered activities, GHG emission scopes, implementation timeline, and annual progress should be disclosed. If carbon offsets or Renewable Energy Certificates (RECs) are used to achieve these targets, the sources and amounts of the offsets or the quantity of RECs should be specified.	Please refer to "Climate Strategy and Actions"
9. GHG inventory and assurance status, along with reduction targets, strategies, and specific action plans.	Please refer to the table below

Year	Scope	Total Emissions (tons CO_2e)	Intensity (metric tons of CO_2e/NT$ millions)	Assurance Institution	Description of Assurance Status
2022	Scope 1	2,428.2	4.98	DNV	Reasonable Assurance Level
	Scope 2	48,465.1			
2023	Scope 1	551	4.21	DNV	Reasonable Assurance Level
	Scope 2	28,268.7			
2024	Scope 1	561.3	4.85	DNV	Reasonable Assurance Level
	Scope 2	25,920.6			
2025	Scope 1	384.4	7.70	DNV	Reasonable Assurance Level
	Scope 2	20,671.9			

The above data covers the following entities: Headquarters, Chunan Branch (Chunan Plant and Plant 2), Yilan Branch (Plant 1 and Plant 3), and Hsu-Hsin Branch.

Disclosure of Sustainability Indicators as Required by TPEx

In accordance with the "Taipei Exchange Rules Governing the Preparation and Filing of Sustainability Reports by TPEx Listed Companies," the relevant appendices are disclosed

Table 1-8: Sustainability Disclosure Indicators – Semiconductor Industry

No.	Indicators	Types of Indicators	Disclosure Status	Unit	Notes
I	Total Energy Consumption	Quantitative	164,687.842	Gigajoules (GJ)	
	Percentage of Purchased Electricity		97.56	Percentage (%)	
	Renewable Energy Usage Rate		2.8	Percentage (%)	
II	Total Water Withdrawal Quantity	Quantitative	18,687,416.19	Thousand cubic meters (1,000 m^3)	
	Total Water Consumption Quantity		2,476,121.712	Thousand cubic meters (1,000 m^3)	
III	Weight of Hazardous Waste	Quantitative	3.97	Metric tons (t)	
	Hazardous Waste Recycling Rate		93.2	Percentage (%)	(1.1+2.5) / 3.97*100%
IV	Types of Occupational Disasters	Quantitative	A total of 6 incidents of minor or greater severity occurred this year, including 2 chemical splash/contact incidents, 1 fall, 1 sprain, and 2 entanglement injuries.	Quantity	
	No. of disability injuries		3	No. of people	
	Disabling Frequency Rate		0.69	Rate (%)	Disabling Frequency Rate = Number of Occupational Injury ÷ Total Number of Employees
V	Weight Including Scrapped Products and Electronic Waste	Quantitative	0.3	Metric tons (t)	
	Recycling Percentage		100%	Percentage (%)	
VI	Description of Risk Management Related to the Use of Critical Materials	Qualitative description	Please refer to 2.5 Supply Chain Management	N/A.	
VII	Total Monetary Losses Resulting from Legal Proceedings Related to Anti-Competitive Con-ducts	Quantitative	NT$0	Reporting Currency	No violations of anti-competition regulations
VIII	Production Volume of Major Products by Product Category	Quantitative	Please refer to 1.2 Operational Performance	Varies by Product Category	

External Assurance Statement

Independent Assurance Statement

To the Management and Stakeholders of Sino-American Silicon Products Inc.

DQS has been engaged by **Sino-American Silicon Products Inc.** (**"SAS"**) to provide independent assurance over the Sustainability Report 2024. The engagement took place in Mar.2026.

The objective of this assurance engagement was to independently express conclusions on underlying reporting processes and validate qualitative and quantitative claims, so as to limit misinterpretation by stakeholders and increase the overall credibility of the reported information and data.

Scope of assurance and standards

The assurance encompassed the entire sustainability report and focused on all figures, statements and claims related to sustainability during the reporting period January 2025 to December 2025.

The assurance engagement was performed with reference to the AA1000 Assurance Standard (AA1000AS v3) and GRI Standards 2021 of Global sustainability standard board (GSSB), which consists of:

- Evaluating the company's sustainability framework and processes using the inclusivity, materiality, responsiveness and impact criteria of the AA1000 AccountAbility Principles (AA1000AP 2018), and
- Evaluating the quality of the reported sustainability performance information – Economy, Environment and People (including Human Rights), the period from 1 January 2025 to 31 December 2025.
- The scope of assurance is consistent with the scope of disclosure in SAS reference to the requirements of GRI Standards 2021;
  - Economic Performance: The scope of coverage is the same as the scope of the 2025 consolidated financial report of SAS.
  - Environmental Performance: SAS, its subsidiaries (Actron, TSC, AWSC, GlobalWafers) and other subsidiaries (SES disclosed carbon emissions only).
  - People (including human rights) Performance: SAS and GlobalWafers.
- SAS is responsible for the issuance, response, performance data, case studies and the information related to management sustainability related data and information systems;
- The scope of assurance is consistent with the scope of disclosure in SAS 2024 Sustainability Report with reference to the GRI General Standards 2021 version, SASB Sustainability Accounting Standards for the Semiconductor Industry, Taiwan Stock Exchange Semiconductor Industry Sustainability Disclosure Index, and TCFD Climate Change-Related Financial Disclosure Standards.

DQS Taiwan Inc.
8F, 23, Yuan Huan West Road,
Feng Yuan Dist., Taichung City,
Taiwan 420014

document no.: TF-0065
www.dqsglobal.com

Level of assurance

A Type 2 Moderate Level of assurance under AA1000AS v3 was provided for this engagement. Information and performance data subject to assurance is limited to the scope described above.

Limitations

The assurance did not cover financial data, GHG emission data, technical descriptions of buildings, equipment and production processes or other information not related to sustainability.

The assurance engagement is not a compliance audit and does not assess or evaluate compliance with applicable laws and regulations.

Independence and Competences of the Assurance Provider

The DQS Group is an independent professional services firm that provides assurance on sustainability disclosures under the Global Reporting Initiative (GRI), CDP and other specialized management and reporting mechanisms. Independent verifiers have not been involved in the development of the report or have they been associated with SAS sustainability program, data collection or strategic processes.

DQS Group ensures that the assurance team possesses the required competencies, maintained neutrality and performed ethically throughout the engagement. Further information, including a statement of impartiality, can be found at: www.dqsglobal.com .

The management of SAS was responsible for the preparation of the sustainability data.

Assurance Methodology

The assurance procedures and principles used for this engagement were drawn from the International Standard AA1000AS and methodology developed by DQS, which consists of the following steps:

1. Identifying statements and data sets, which are classified according to the relevant data owners and the type of evidence required for the verification process.
2. Reviewing the Sustainability Report to determine whether the material topics identified during our procedures have been adequately disclosed.
3. Carrying out interviews with key functional managers and data owners at SAS office at No. 6, KeJung Rd., Hsinchu Science Park, Chu-Nan, Miao-Li County, Taiwan, R.O.C.
4. Assessing the collected information and provide recommendations for immediate correction where required or for future improvement of the report content.

Evaluation of the adherence to AA1000 AccountAbility Principles

Inclusivity – *People should have a say in the decisions that impact them*

SAS identifies and communicates with the stakeholders based on their activities and business

DQS Taiwan Inc.
8F, 23, Yuan Huan West Road,
Feng Yuan Dist., Taichung City,
Taiwan 420014

document no.: TF-0065
www.dqsglobal.com

Sino-American Silicon Products Inc.