Sino-American Silicon Products Inc.

2020

Corporate Social Responsibility Report

Contents

About This Report

★ Report Axis

The main business items of Sino-American Silicon Products Inc. (hereafter"SAS") and its subsidiaries include R&D, design, manufacturing, and sales of semiconductor silicon materials and components, photovoltaic and communication wafer materials, as well as technical services for photovoltaic power generation system integration and installation. Since 2017, SAS has taken the initiative to compile a Corporate Social Responsibility (CSR) report. Based on its long-term in-depth interactions with the local communities and engagement with stakeholders, SAS has disclosed the relevant information on material issues regarding the four aspects of corporate governance, economy, environment, society, as well as execution and improvement results in the report in addition to presenting the future vision and goals in terms of sustainable development.

★ Report Editing and Final Draft

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

• CSR Task Force

The main members include the President's Office and the Environment, Health & Safety Department. The task force is in charge of promoting energy environment-related matters, overall planning, information compilation & organization, communication & integration and editing & revisions.

• Editing Procedures, Review and Final Draft

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 (Sustainable Development Committee Chairperson) for publication finalization after review.

★ Reporting Basis

The contents and structure of this report are based on the core indicators in the Sustainability Reporting Guidelines released by the Global Reporting Initiative (GRI). This report also conforms to the Rules Governing the Preparation and Filing of Corporate Social Responsibility Reports by TWSE Listed Companies. Key issues of concern to stakeholders are disclosed and responded to in relevant chapters based on materiality analysis results.

★ Report Boundaries and Reporting Period

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

Publication time: June 2021
Coverage time: January 1, 2020 to December 31, 2020
Scope of coverage:
The scope of this report includes the performance data, financial status, and sales performance of SAS Headquarters, Zhunan Branch, Yilan Branch, FZtech Branch (formerly FZtech Inc., which was merged by SAS on December 12, 2019 and renamed to SAS FZtech Branch on January 3, 2020), and semiconductor business group GlobalWafers Co., Ltd. (hereafter "GlobalWafers"); which are consistent with the consolidated financial scope of the Company's annual report. Other subsidiaries are also included in addition to the companies listed above. The entities included in this report account for over 80% of the consolidated revenue. Financial data is verified by KPMG in accordance with International Financial Reporting Standards (IFRS), and the calculation unit is New Taiwan Dollar (NTD).

The environmental performance disclosed primarily involves the Zhunan Branch, Yilan Branch, and GlobalWafers (which have the largest number of plants and the most significant impact on environment compared to other subsidiaries). The contents also disclose FZtech Branch's solar power generation system performance. The social performance topic includes the Headquarters, Zhunan Branch, Yilan Branch, FZtech Branch, and GlobalWafers.

In addition, GlobalWafers has compiled a separate CSR report; therefore the relevant contents mainly cover the Headquarters, Zhunan Branch, Yilan Branch, and FZtech Branch; and include the performance statistics of GlobalWafers. The relevant performance data is provided by the internal units, compiled, and presented in an internationally accepted indicator calculation method.

Note: The GlobalWafers Co., Ltd. referred to in this report covers GlobalWafers Headquarters, GlobalWafers Zhunan Plant, GlobalWafers Taisil Branch, GlobalWafers Japan Co., Ltd., MEMC Japan Ltd., MEMC Korea Kunshan Sino Silicon Technology Co., Ltd., MEMC Electronic Materials Sdn. Bhd., GlobiTech Incorporated., MEMC LLC, MEMC Electronic Materials S.p.A, Topsil GlobalWafers A/S, GlobalWafers Singapore Pte. Ltd.

In the future, SAS will release CSR reports on an annual basis and provide electronic files of the report in the Corporate Responsibility section of the corporate website for viewing and download.

Previous publication time: December 2020 (added the revised version of GWC information)

★ Report Assurance

The Enterprise Sustainability Committee of SAS has been verified by a third-party independent verification agency in order to strengthen the GRI Standards compliance for this report while enhancing the transparency and credibility of the sustainable management information. This report has been verified by DNV to comply with the GRI Standards' core compliance options as well as the DNV VeriSustain medium assurance level verification standard requirements. The verification statement is detailed in the appendix. The financial performance data is publicly released information after CPA certification and is consistent with the data presented in the Company's annual report, and the greenhouse gas data is based on the self-inventory results.

★ Contact

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

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Corporate website: http://www.saswafer.com/pages/sas/tw/

Message from the Chairperson

Since its establishment, Sino-American Silicon Products Inc. (SAS) has adhered to the business philosophy of "integrity, professionalism, innovation, and outstanding services" in order to achieve the triple-win vision of "growth with customers, pursue excellence with employees, and create value for shareholders." SAS has also focused on its social responsibilities while achieving sustainable company operations in hopes to create sustainable value for economic growth, environmental protection, and social progress.

★ Rising Revenues and Sustainable Governance

The general business environment for the solar energy industry in 2020 was filled with challenges.Including the external threats from COVID-19 and internal impacts by the Council of Agriculture's policies, and the size and product efficiency of monocrystalline applications have changed even more rapidly. In response to market conditions, the Company has reduced inventory via production capacity adjustment, adjusted the product combinations, actively maintained the domestic market, and strengthened its reinvestment operation deployments. Under the concerted efforts of all colleagues and the strong performance of the GlobalWafers Group subsidiary, SAS has bucked the trend to achieve record operating results in operating gross profit, operating income, net profit after tax, and EPS despite the impacts of COVID-19.

01 The combined operating gross profit was NT$21.11 billion, which increased by 9.58% over the previous year.

02 The net profit for the current period attributable to the parent company was NT$6.33 billion, which increased by 181.37% over the previous year.

03 The after-tax earnings per share reached a record high of NT$10.82.

04 Won the "Listed / OTC Company Corporate Governance Appraisal - Top 5% OTC Group" honor for 7 consecutive years.

Despite its leading PERC monocrystalline cell efficiency advantages, SAS has continued to cultivate advanced technologies, simplify product categories, and develop low-cost and high-efficiency cells to maintain market competitiveness. Global climate change issues have received increasing attention in recent years, and green power has become the future energy trend. Taiwan's solar power plant installations are expected to grow continuously this year due to the vigorous green energy policy promotion by the Taiwanese government. SAS will actively develop solar power plants while building smart grids to accelerate corporate operation profitability. Regarding corporate governance, we constantly refine our performance to strengthen our commitments to the pursuit of sustainable operations.

★ Forward-looking and Industry-leading Technologies

The R&D teams of SAS has spared no effort in the R&D of high-efficiency and high-value-added products. In 2018, the polysilicon wafer process was converted from Slurry to DW, which has effectively improved production efficiency and reduced environmental pollution. The average efficiency of N-type monocrystalline cells in mid-2019 has reached 22.7% with the highest efficiency could reach 23.0%, and the latest N-type cell has been launched during a shareholders' meeting. The average mass production efficiency of P-type monocrystalline cells has reached 22.3% in 2019. In terms of new product development, new products such as the new monocrystalline Busbar-less and Metal-Wrap-Through PERC were successfully introduced into mass production.

In addition, various solar cells that meet customer needs have been developed based on the monocrystalline high-efficiency solar cell manufacturing process. These products include back-side contact crystalline solar cell (MWT cell), Multiple BusBar cell, half cut cell, and Multiple cut cell. The diversified design capabilities and design flexibility of SAS have enabled its products to meet the needs of various customers, allowing them to use the SAS solar cells to obtain a higher green energy conversion efficiency rate, which can be applied to different solar module installation fields.

The long-term R&D technology experiences of SAS have enabled the Company to expand into the silicon material application products field by leveraging its deep technical foundation during the period in which the global solar market is sluggish. SAS will continue to accumulate R&D capabilities with a focus on the development of advanced technologies and high-performance diversified products. The company's overall competitiveness is enhanced through value-added innovation and optimized product combinations.

★ Create a Green Energy Environment to Achieve Net Zero Carbon Emissions

Countries worldwide are actively working on emission reduction targets to prevent the intensification of climate change, and nations have proposed the "2050 Net Zero Emission" target in order to fulfill the "Paris Agreement" to control global warming within 1.5 °C. The net zero emission target has now become a clear indicator for the international climate negotiation agenda. As of the end of October 2020, 125 countries have proposed to meet the net zero emission target by 2050. Microsoft and 30 other global companies have signed The Climate Pledge jointly initiated by Amazon and Global Optimism. Companies that sign this commitment will regularly measure and report greenhouse gas emissions, introduce the decarbonization strategies of the Paris Agreement via actual business reforms and innovations, and adopt various practical and permanent methods to neutralize carbon emissions. The goal is to achieve Net Zero Carbon by 2040, which is 10 years earlier than the 2050 target set by the Paris Agreement. In contrast to international countries or even private companies that have actively advocated carbon reduction goals, Taiwan should also contribute to climate change mitigation as it was the global leader in electronics manufacturing and one of the top 5 coal imports worldwide. As a member of the green energy industry located in Taiwan and despite its insignificant individual strength, SAS has continued to support the climate initiatives/carbon neutrality under the harsh challenges brought by COVID-19. In addition to following the nationally determined contributions (NDCs) of the Taiwanese government, SAS has also developed its own climate roadmap in hopes to create a green energy environment, gravitate towards net-zero emissions via sustainable strategy development and organizational transformation, and achieve net-zero emissions as soon as possible.

In terms of actual implementation improvement, the 2020 Energy Conservation Improvement Action Results showed that SAS has achieved an annual energy conservation of approximately 2.2 million kWh. In terms of strategic layout, SAS has deployed its FZtech Branch and Yilan Branch (which established the Power Station Development Department in 2020) to fully enter Taiwan's renewable energy market and actively planned and invested in the constructions of roof-, ground-, and water-surface-type solar power plants. The Company has also introduced a water surface buoyancy solar power generation system to lower the water surface temperature and significantly increased the solar panel as well as power generation efficiency. Since the start of the efforts (in 2014) until the end of 2020, total domestic grid-connected solar power generation system operations have reached approximately 74 MW with the total annual power generation capacity of 84,858,716kWh, which could reduce approximately 43,193 metric tons (Note) of carbon dioxide emissions. The total installed capacity for grid-connected operations at home and abroad was approximately 124MW with the total annual power generation capacity of 151,209,405 kWh, which can reduce approximately 76,966 metric tons (Notes) of carbon dioxide emissions. The goal under the government's renewable energy promotion plan is to complete 20 GW of solar energy installations by 2025. In addition to providing energy management-related services, SAS has invested and owned solar power plants since 2019, and the total investment amount has reached NT$3 billion. SAS has transitioned from an energy management services provider into a member of green energy provider. As of the end of 2020, the total investment and power plants held would reach approximately 3 MW with the total power generation capacity of 796,008 kWh in 2020, which could reduce approximately 405 metric tons (Note) of carbon dioxide emissions. Moreover, SAS Zhunan Branch has cooperated with the FZtech Branch in 2019 to construct a hybrid energy system on the roof of the Zhunan Branch plant; integrate 99 KW overlay solar photovoltaic power generation system, 100 KW/350 kWh energy storage system, and adjustable grid-connected 600 KW generator; and retrofit the micro-grid system in the plant. Constructions for the various subsystems have been completed in Q2 of 2020. Total power generation for the entire year of 2020 has reached 131,432 kWh, which could reduce a total of approximately 67 metric tons (Note) of carbon dioxide emissions. The power generation system has also combined the development and integration of energy storage devices into the energy management system platform in order to meet the future market demand for power storage management. The future outlook for the SAS Group includes continuing to respond to the global trend of low-carbon green energy, build more high-quality solar system power plants in Taiwan, strengthen energy security and innovate green economy, and endeavor to protect the sustainable environment of Taiwan and worldwide.

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 0.509 kgCO2e/KWH as announced by the Bureau of Energy, MOEA, in 2019.

★ Employee Care and Public Cause

SAS believes that employees are the Company's most important asset, and ensuring the physical and mental health of employees can help to improve Company productivity. Therefore, the Company is committed to create a safe, healthy, and friendly workplace; uphold the pledge to respect and provide people-oriented care for employees; abide by the government's labor laws; create a comprehensive salary and welfare system; guarantee a friendly working environment; and ensure the safety of employees at work. Emphasize employee career development by planning diversified training courses to improve employee knowledge and skills, and pay attention to the balance of work & life for employees. With all efforts, we hope to build a blissful healthy workplace and continue to pursue excellence together with our employees, in face of fiercely challenging global competition.

In terms of social welfare, SAS adheres to the concept of taking from society and giveing back to society. The Company has actively participated in various public welfare activities, and guided its employees to provide care for disadvantaged groups. The SAS Group has long been committed to caring about the remote-tribe-related issues in Taiwan. Each year, SAS has held rural fundraising and care event in hopes to send care and support to more regions and help more children in rural areas. Even the COVID-19 crisis did not affect the Group's determination and mission to assist children in remote villages. We have expressed our love in practical ways, practiced corporate responsibility by taking care of the society, fulfilled the various specific actions and results in terms of corporate social responsibility, and demonstrated our determination to achieve the sustainable operation target.

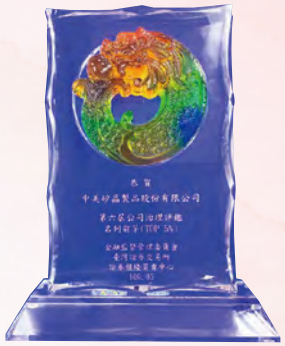
The business philosophy of SAS is to focus and cultivate the Taiwanese market. 2021 will continue to be a uncertain and challenging year, and COVID-19 will add more uncertain factors to the market environment. Undauntedly, SAS will continue to focus on innovative R&D, reduce costs, and develop in the direction of strength accumulation. We are deeply confident in terms of our solar energy and semiconductor global deployment resource integration. We will look forward to steadily improve operating efficiency, rebuild Economic Performance, and achieve a sustainable green enterprise with stable growth in revenue and profit.

Good corporate governance and focus on social responsibility are the core impetus for the Company's existence. SAS will go all out to realize its pledge of a friendly workplace, environmental protection, and social care. Our goal is to become a sustainable green enterprise while achieving stable growth in revenue and profit.

Chairperson of Sino-American Silicon Products Inc.

徐秀蘭

Affirmations and Honors



Ranking in the Top 5% of all Listed OTC Companies in the 7th Corporate Governance Appraisal

Won the 2020 Outstanding Enterprise of Waste Reduction and Circular Economy Group-B Excellency Award sponsored by the Hsinchu Science Park

Received the Healthy Workplace"Health Promotion Badge" Accreditation by the Health Promotion Administration, Ministry of Health and Welfare

About Sino-American Silicon Products Inc.

Company Profile

Sino-American Silicon Products Inc. (hereafter "SAS") was established on January 21, 1981 as a professional wafer manufacturer. SAS operates two major business groups - semiconductor business group and solar energy business group. On October 1, 2011, SAS divided its semiconductor silicon wafer operations independently under GlobalWafers Co., Ltd. (hereafter "GlobalWafers). Subsequently, SAS started to focus on the solar energy field with production lines for solar silicon ingots, solar silicon wafers, solar cells, and modules. SAS also engages in downstream power generation system businesses to become one of the most comprehensive vertical-integrated companies nationwide. However, 2018 was considered as the winter of the solar energy market, and SAS has actively adjusted its product sales strategy and expanded into silicon material application products in order to expand the product application fields.

We are committed to the intensive R&D of advanced technologies, and actively launching new-generation solar cell products with high conversion efficiency has always been our main key to success as it continues to attract niche customers. Through the strategic goal of vertical industry integration, SAS is able to achieve the multiplier benefits of comprehensive upstream, midstream, and downstream industry integration while expanding the global deployment for terminal solar systems. SAS aims to play a key role in the solar energy and green environmental protection fields while creating greater benefits for the Company's shareholders and employees.

On August 1, 2014, we acquired Sunrise Global Solar Energy Co., Ltd. a high-performance solar cell manufacturer. Meanwhile, we acquired the solar energy module manufacturer, Aleo Solar GmbH, in Prenzlau, Germany which had been acquired by Sunrise Global on May 16, 2014.

In 2015, we were actively involved in the global solar energy generator plant investment. Via our subsidiary, SAS Sunrise Inc., we constructed the 50MW solar energy generator plant in Palo, Leyte, the Philippines which was later officially running in a commercial capacity in May 2016.

GlobalWafers is a key subsidiary of SAS. In 2016, GlobalWafers successfully acquired Denmark's Topsil Semiconductor Materials A/S (hereafter "Topsil") and SunEdison Semiconductor Limited (hereafter "SEMI"). Since then, its product field has successfully advanced from CZ to large-size epiwafers, polished silicon wafers, silicon-on-insulator wafers, and FZ semiconductor wafers. GlobalWafers has also combined its top-notch operating model and market advantages with the global bases and product R&D capabilities of SEMI to establish a more comprehensive product line with a total of 16 operation and production bases that are strategically distributed throughout 10 countries in Asia, Europe, and the United States; which enables GlobalWafers to become the 3rd largest wafer supplier worldwide.

★ Shareholders Structure

Data base date: April 26, 2021:

Shareholders / Structure Quantity	Government Agencies	Financial Institutes	Other Juridical Persons	Natural Persons	Foreign institutes and foreigners	Total
No. of People	7	69	320	80,515	453	81,364
Shareholding (shares)	23,968,450	66,846,000	91,038,094	232,041,933	172,327,174	586,221,651
Shareholding percentage	4.09%	11.40%	15.53%	39.58%	29.40%	100.00%

★ SAS Basic Information

Date of Establishment: Foundation Date: January 21,1981

Capital: NT$5.86 billion

Main Product and Technology: Solar ingots, solar wafers, solar cells, solar modules, solar power generation system operations, and silicon material application products

Employee no.: SAS (headquarters & Zhunan, Yilan, FZtech branches): 667 employees

Chairperson & CEO: Doris Hsu / Hsiu-Lan Hsu

Vice Chairperson / Deputy CEO: Tang-Liang Yao

President: Tang-Liang Yao

Headquarters: 4F., Hsinchu Science Park, No.8, Industry East 2nd Road, East District, Hsinchu City

Operating Bases: Headquarters: 4F., Hsinchu Science Park, No.8, Industry East 2nd Road, East District, Hsinchu City

Zhunan Branch: Hsinchu Science Park, No.6, Kezhong Road, Zhunan Township, Miaoli County

Yilan Branch: No.1, Sec.2, Ligong 1st Rd., Wujie Township, Yilan County

FZtech Branch: Hsinchu Science Park, No.6, Kezhong Road, Zhunan Township, Miaoli County

Affiliated Enterprises: SAS affiliates are engaged in the following industries: semiconductor and wafer manufacturing, solar cell and module manufacturing, and solar power generation system services

Note: The number of employees is calculated based on those still working at the headquarters and branch as of December 31, 2020 (excluding subsidiary employees).

SAS is able to grow and produce high-efficiency solar wafers, cells, and modules products under the concept of integrity and boldly facing the challenges. SAS has actively entered the system end to achieve the vertical industrial integration benefits and expand its solar business deployment, allowing SAS to become one of the most successful domestic professional green energy solution suppliers in the nation. SAS is constantly looking for the next growth momentum, and hopes to pursue sustainable operation and growth with customers and suppliers. At present, our products are primarily sold in Asia, Europe, America, and other regions. SAS is committed to further strengthen environmental protection, and is expected to become the top technologically leading green energy solution provider worldwide.

Market and product services

Solar Energy Industry

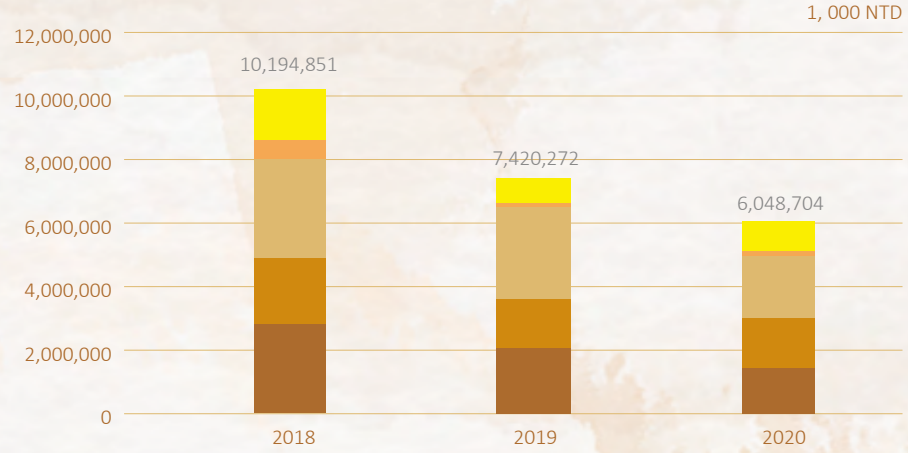
★ Product sales

Since 2019, the global economy was shaken by the impacts of geopolitical trade wars, and the solar energy market also experienced an industrial winter with sluggish demands. After the turmoil of the U.S.-China trade war and the impact of solar energy policy changed in various countries, market demand has declined, and prices as well as volumes have fallen simultaneously. In response, we have adjusted our product sales strategy to produce niche products, adapted production capacity to reduce operational risks, and respond to market changes.

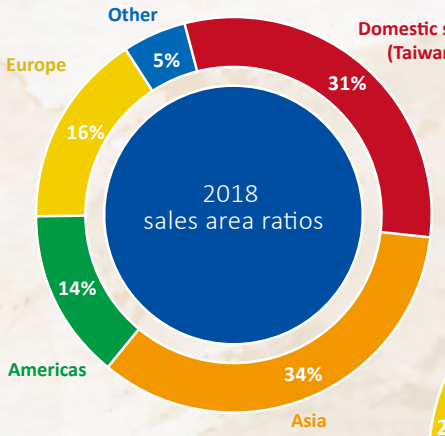
★ Sales area ratios

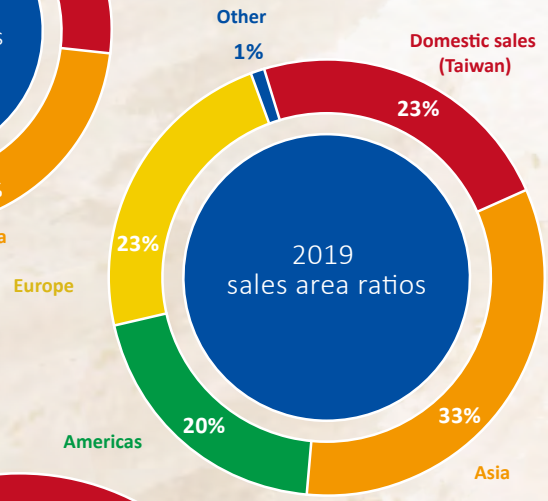
In recent years, the manufacturing locations have changed in response to the market sales fluctuations and the locations of major module manufacturers. We have sold high-efficiency and diversified products, and adjusted our sales regions accordingly. Asia has the highest sales ratio of over 30%, and domestic sales accounted for 23%~32%.

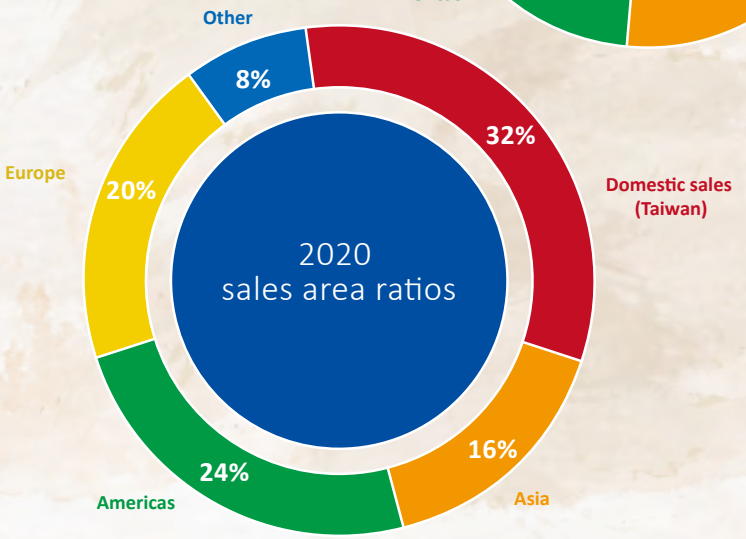
Revenue



	2018	2019	2020
Other	2,796,322	2,051,636	1,418,792
Solar Module Products	2,066,427	1,553,577	1,593,096
Solar Cell Products	3,141,457	2,877,421	1,937,190
Solar Wafer Products	581,924	144,716	170,789
Solar Ingot Products	1,608,721	792,922	928,837







Semiconductor Industry

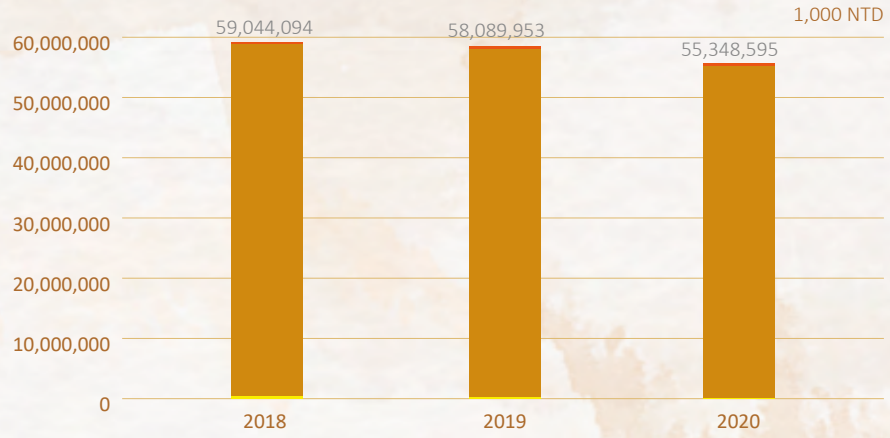
★ Product sales

The COVID-19 epidemic and the geopolitical trade conflicts shrouded the year 2020, and many industries have suffered. Fortunately, the semiconductor market was relatively undisturbed by the downfall of the world economy. COVID-19 has also driven new business practices and lifestyles, and stimulated the development of basic Netcom facilities such as the Cloud and servers. Due to the strong appreciation of NTD in 2020, the semiconductor industry's annual revenue has slightly decreased compared to that of 2019.

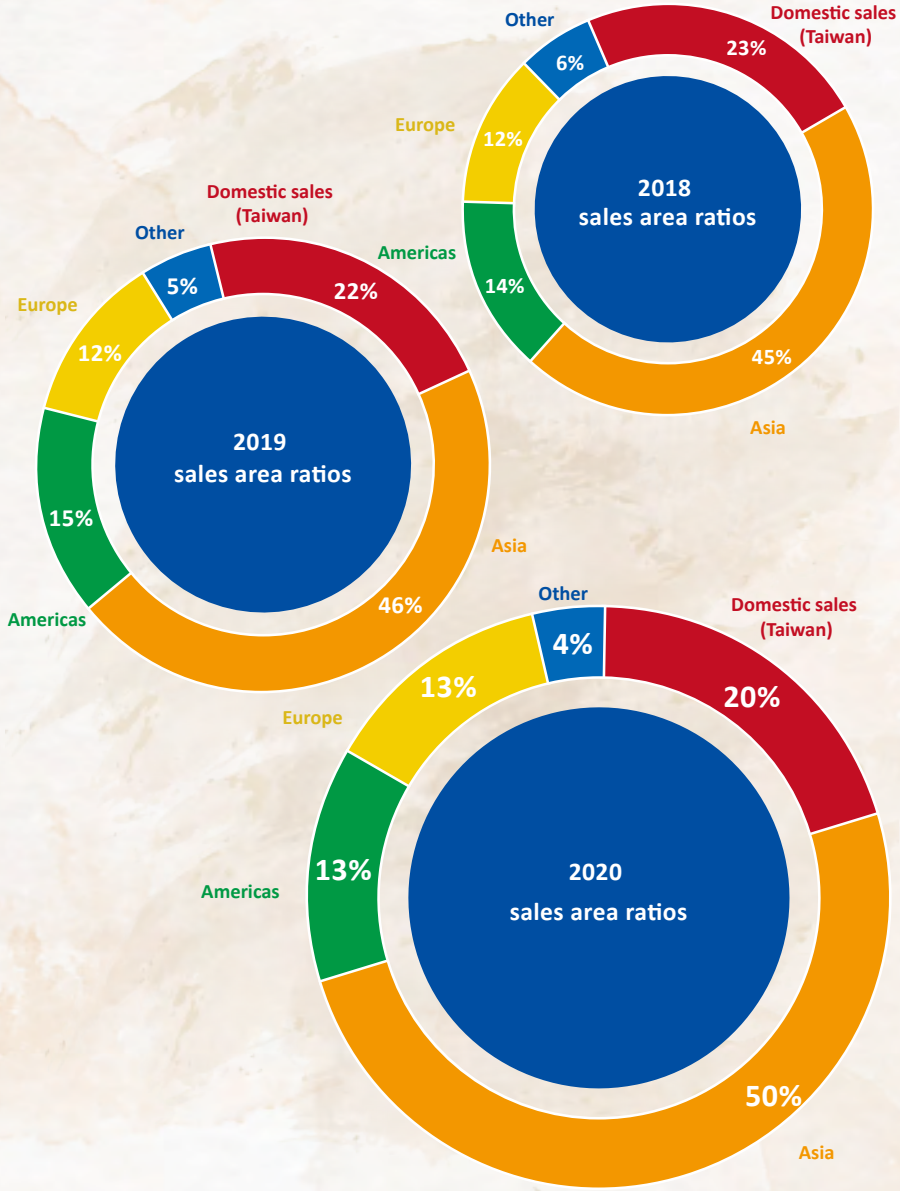
★ Sales area ratios

Subsidiary GlobalWafers has acquired Topsil and SEMI in 2016, and successfully gained their existing customer orders and a global sales network. In recent years, the sales revenue ratio of sales regions has become balanced and stable. Asia is the largest sales region whereby domestic sales accounted for over 60%, followed by the Americas.

Revenue



	2018	2019	2020
Semiconductor ingot	492,114	275,284	113,541
Semiconductor wafer	58,447,151	57,721,510	55,138,940
Other	104,829	93,159	96,114



Company Philosophy

SAS adheres to a philosophy of integrity, constant innovation, customer satisfaction, and giving back to society. It also strives to provide superior quality, technologies, and services, while striving for sustainable operations and growth in close cooperation with customers and suppliers. It aims to create outstanding value for shareholders and employees and thereby fulfill its corporate social responsibility.

Honesty and Integrity

SAS upholds integrity and strictly observes corporate regulations and social and ethical norms to honor its commitment to the active implementation of its ethical management policy.

In the field of technology, strategy, and profitability, the company builds mutually beneficial cooperative relationships with its customers to create a win-win environment conducive to collective growth.

Customer Satisfaction

Constant Innovation

The development of new-generation ultra-high-performance products is accelerated and corporate competitiveness is strengthened through innovative concepts and business models, a firm grasp of opportunities and pursuit of new knowledge, as well as a deep commitment to developing advanced technologies.

SAS embraces a spirit of giving back to society, shows concern for underprivileged groups, and actively participates in social welfare and environmental protection to fulfill its corporate social responsibility.

Giving back to the society

Participation in External Associations

Associations/Organizations	Participant	Member	Role
Taiwan Photovoltaic Industry Association		●	Director
Chinese Professional Management Association	●	●	Supervisor
Taiwan Mergers & Acquisitions and Private Equity Council		●	
Chinese Professional Management Association of Hsinchu		●	
Taiwan Science Park Association of Science and Industry		●	
The Institute of Internal Auditors—Chinese Taiwan		●	
Computer Audit Association		●	
Taiwan Semiconductor Industry Association (TSIA)		●	

About the Sustainability Topic

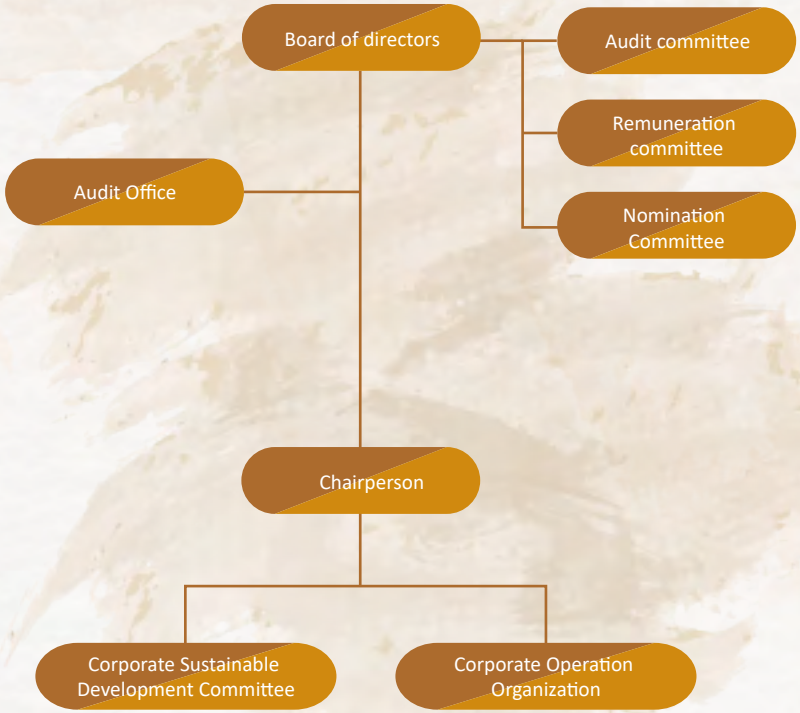
Sino-American Silicon Products Inc. (SAS) has adhered to the business philosophy of "integrity, professionalism, innovation, and outstanding services" in order to achieve the triple-win vision of "growth with customers, pursue excellence with employees, and create value for shareholders." SAS has also focused on its social responsibilities while strengthening sustainable corporate operations in hopes to create sustainable value for economic growth, environmental protection, and social progress.

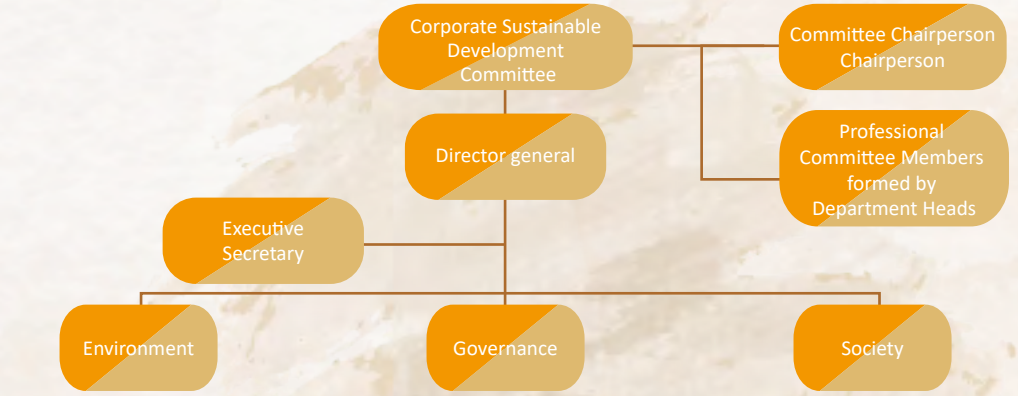
SAS has formulated the Company's Corporate Social Responsibility Best Practice Principles for compliance in order to fulfill corporate social responsibility; promote economic, environmental, and social progress; and achieve the goal of sustainable development. The goal is to enable the Company to actively practice corporate social responsibility while engaging in business operations in order to comply with international trends; take the corporate citizenship responsibility to enhance the national economic contribution; improve the quality of life for employees, communities, and society; and promote corporate responsibility based on competitive advantages. The Company shall fulfill its corporate social responsibility by implementing corporate governance, developing sustainable environment, maintaining social welfare, strengthening corporate social responsibility information disclosure, etc.

Sustainable Organization

To achieve the goal of sustainable operation and fulfill corporate social responsibility, SAS has established the "Corporate Sustainability Development Committee" in April 2016 as the highest-level corporate social responsibility implementation organization for the Company. The organizational structure of the committee is shown in the figure below. The chairperson of the committee was originally held by the president, but was switched to the chairperson of the board in June 2020 due to organizational changes. The committee members comprised of department heads in order to coordinate the development direction of the Company's corporate social responsibility and sustainability goals.

Three major teams are formed under the Corporate Sustainability Committee (Environmental Team, Governance Team, and Social Team) to implement environmental, social, and governance activities. Each professional committee member integrates the various departments of the Company to focus on implementing the various corporate social responsibility issues, and conduct regular follow-up inspections and reviews. Each year, the chairperson of the committee reviews the performances and target achievement levels, continual improvement measures, and implements corporate sustainability commitments via division of labor among the various departments. In addition, the committee has reported to the board of directors on August 6, 2020 regarding implementation priorities, annual goals, and implementation results of the year.





- Energy efficiency enhancement
- Greenhouse gas checks and disclosure
- Pollution preventions and management
- Energy conservation and water recovery technology development
- Resources recycling management
- Waste reuse advocacy
- Green manufacturing process / Clean production
- Green buildings / Green factories

- Strengthen the board of directors' competency
- CSR info transparency
- Rights protection of stakeholders
- Internal control and risks management
- Finance and operation performance management
- Occupational ethics and integrity principles
- Supply chain management

- Employee care and benefits policies
- Diversified work opportunities
- Friendly workplace and labor-management communication
- Community concern and charity participation
- Cooperative education / Industry-academic collaboration
- Customer service / satisfaction level
- Customer privacy / asset protection
- Product safety

Major Sustainability Issue Identification Process

SAS is open to accommodate all kinds of opinions and reference the sustainability report guidelines issued by the Global Reporting Initiative (GRI) to define the report content by following such principles as stakeholders' inclusiveness, sustainability context, materiality, and completeness.

- Stakeholder inclusiveness: We communicate with stakeholders and respond to their reasonable expectations.
- Sustainability context: Use the GRI Standards to reveal the improvement and performance of SAS in terms of economic, environmental, and social conditions.
- Significance: Collect the opinions or concern topics of stakeholders, and submit them to the CSR committee to identify the importance.
- Completeness: Major topics and their scope, boundary, and timeline are confirmed.

Identification

6 Major Types of Stakeholders

Based on the Company's operating features and through cross-departmental discussions, 6 major categories of stakeholders are identified. They include staff members, customers, shareholders (investors), suppliers (contractors), government agencies (Science Park Bureau, Environmental Protection Bureau, Environmental Protection Administration, Energy Conversation Bureau, Ministry of Labor, etc.), and the media.

Collect

13 Sustainability Topics

The President's office, Sales office, Procurement office, Administration office, and related external units as well as the stakeholders interactive experience and communication records shall collect the issues of concern to employees, customers, shareholders (investors), suppliers (contractors), government agencies (Science Park Bureau, Environmental Protection Bureau, Environmental Protection Administration, Energy Conversation Bureau, Ministry of Labor, etc.), and media. Moreover, refer to the official website for survey results on the issues of concern to stakeholders.

Materiality

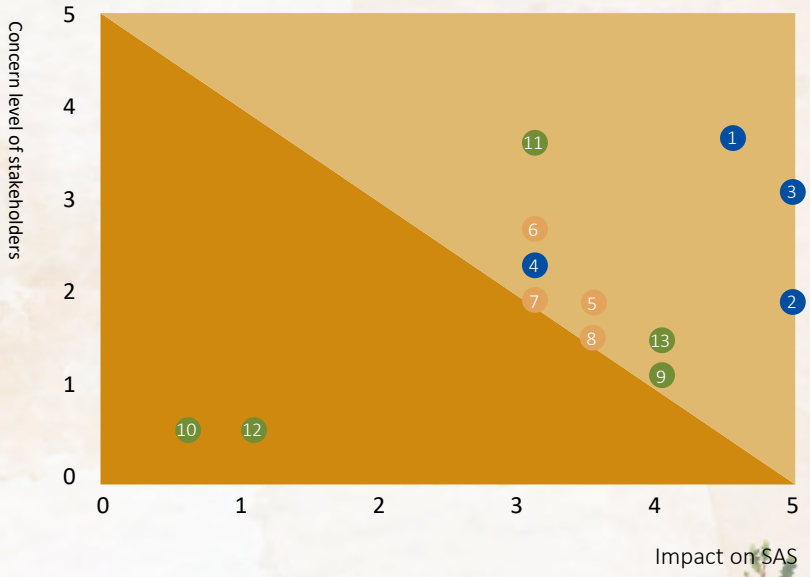
11 Material Issues

Various team representatives of the Company's Corporate Sustainability Committee shall consider the degree of stakeholders' concern on the issue, the impact of the topic on the Company as well as the external society, environment, and economy; and assess the "degree of stakeholders concern" and "impact on SAS" for the issue. Plot a materiality matrix based on the "degree of stakeholders concern" and "impact on SAS," and list topics with high degree of concern and impact as material issues.

We will disclose the Management Approach for the material sustainability issues in this report. Other issues that do not have a major impact will be disclosed as a summery or may not be disclosed in this report.

Material Issue Analysis

Aspects	Serial no.	Issues	Material
Economic Aspect	1	Legal Compliance (including economic, environmental, and social aspects)	V
	2	Corporate governance	V
	3	Economic Performance	V
	4	Integrity and Ethics / Anti-corruption	V
Environmental Aspect	5	Energy Resources Consumption and Reduction (including energy conservation and carbon reduction measures)	V
	6	GHG emissions	V
	7	Waste Management (including reuse)	V
	8	Pollution Prevention (air and water)	V
Social Aspect	9	Employee education & training	V
	10	Local Job Opportunities	
	11	Friendly workplace (including occupational health and safety, occupational health)	V
	12	Labor's Human Rights	
	13	Product quality and customer satisfaction	V



Boundary and scope of material issues

Material topics		Boundary - within the organization						Boundary - outside the organization	Corresponding GRI standards	Corresponding chapters
		Sino-American Silicon				Subsidiary				
		Head-quarters	Zhunan Branch	Yilan Branch	FZtech Inc. Branch	GlobalWafers Wafers	Other Subsidiary			
Economic Aspect	Legal Compliance (including economic, environmental and social aspects)	○	○	○	○	○			GRI 419 GRI 307	1.1.4 Legal Compliance
	Corporate governance	○	○	○	○	○			GRI 102-Governance	1.1 Corporate Governance
	Economic Performance	○	○	○	○	○	○		GRI 201	1.2 Operation Performance
	Integrity and Ethics / Anticorruption	○	○	○	○	○			GRI 102-Ethics and Integrity GRI 205	1.1.2 Integrity & Ethics
Environmental Aspect	Energy resources consumption and reduction (including energy conservation & carbon reduction)		○	○	○	○			GRI 301 GRI 302 GRI 303 GRI 305	3.1.2 Energy Management, Energy Conservation and Carbon Reduction 3.1.3 Renewable Energy Development 3.2 Raw Material & Water Resources Management
	GHG emissions		○	○	○	○			GRI 305	3.1.1 Greenhouse Gas Inventory
	Waste Management (including reuse)		○	○	○	○			GRI 306	3.3 Pollution Prevention and Waste Reduction Management
	Pollution Prevention (air and water)		○	○	○	○			GRI 305 GRI 306	3.3 Pollution Prevention and Waste Reduction Management
Social Aspect	Employee education & training	○	○	○	○	○			GRI 404	4.3 Education and Training
	Friendly workplace (including occupational health and safety; workplace health)	○	○	○	○	○			GRI 403	4.4 Friendly Workplace
	Product quality and customer satisfaction		○	○	○				GRI 102-43	2.2 Customer and Product Services

Note: FZtech Inc. was merged into SAS on 2019.12.12, and became the FZtech Branch on 2020.1.3. Therefore, its organizational boundary has been incorporated into SAS as a subsidiary.
Other subsidiaries: Including all subsidiaries in the consolidated financial report other than those associated with "GlobalWafers" (based on companies listed in the "About this Report" coverage remarks).

Stakeholders' engagement

Employees

Significance to SAS

Employees are the Company's most important assets. Only by taking good care of the employees will both parties grow in sync with each other.

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
- Various Complaint Boxes or Hotlines/ Irregular

Issues of concern

- Salary
- Benefits
- Work Environment (Including occupational health and safety, and healthy workplace)

Our Responses

Employees are the Company's most important asset, and the Company attaches great importance to communication channels with employees. In 2020, we constructed a human resources area, increased the consultation options and paths for colleagues, and regularly held labor-management meetings to listen to the voices of colleagues.

- 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.

Communication Frequency / Method

- Shareholders' meeting,institutional investors conference, domestic investment institute seminars, and face-to-facecommunication meetings / a total of 6 meetings were held in 2020
- 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

Issues of concern

- Economic Performance
- Corporate governance
- ESG Performance
- Integrity and Ethics / Anti-corruption

Our Responses

- Continue to use our stable financial structure and rich management experiences 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, cooperation, and major shareholders.
- Continue to improve corporate governance performance and realize the commitment of sustainable operation.
- "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

Customers

Significance to SAS

Company's main source of revenue

Communication Frequency / Method

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

Issues of concern

- Price
- Quality
- Delivery period
- Environmental responsibility
- Occupational health and safety

Our Responses

- Adhere to the spirit of "customer satisfaction." For customer survey items with "lower" satisfaction, the quality assurance unit must conduct interviews and propose the corresponding improvement plan.
- Actively understand customers' voices. When customers make various demands, the organization must evaluate and discuss feasible solutions in order to "meet the requirements."

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.

Communication Frequency / Method

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

Issues of concern

- Price
- Suppliers / Contractors Management Regulations

Our Responses

- Reduce costs by implementing supplier localization
- 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

Government Agencies

(Science Park Bureau, Environmental Protection Bureau, Environmental Protection Administration, Energy Conversation Bureau, Ministry of Labor, etc.)

Significance to SAS

We need to maintain an open and pleasant communication relationship to express our determination of complying with regulations

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

- Regulatory Compliance
- Add / Revise Regulation Announcements
- Environmental Permit Review / Verification
- Regulations (Draft) Interpretation and Communication

Our Responses

- Purchase Legal Cloud to grasp the regulatory updates
- Participate in competent authority regulatory meetings and understand the requirements
- Communicate with competent authorities through association or union channels
- Cooperate with the competent authority for plant visits or unscheduled plant audits

The media

Significance to SAS

We establish a contact channel with the media and provide non-scheduled, correct, fair, and objective industry and corporate news.

Communication Frequency / Method

- Publish news / average of 2-3 press releases each quarter
- Sporadically receive interviews by the media and provide industry news / Irregular

Issues of concern

- Company Development Direction
- Economic Performance

Our Responses

- Contact the media irregularly to let media professionals understand the Company's industry and Economic 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.

Material Issues and Sustainability Goals

★ Sustainability Performance Overview

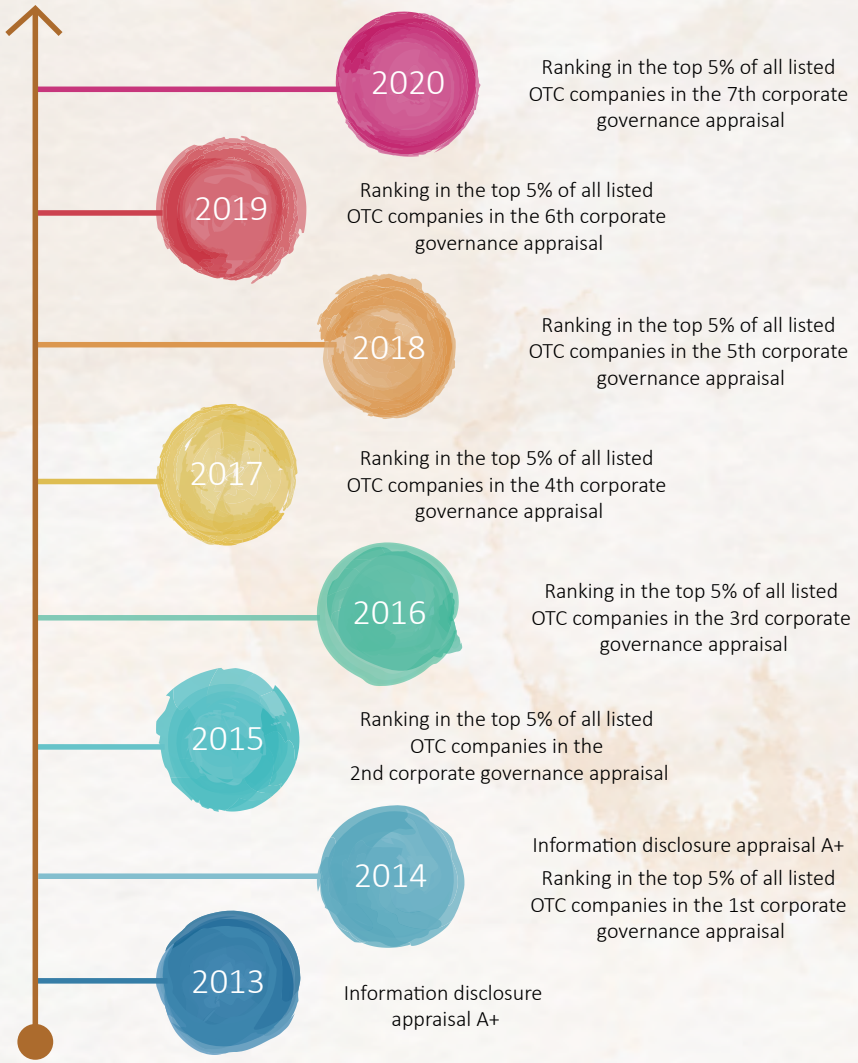
Aspects	Material issues	2021 Targets	2020 Targets	2020 Targets Achievement Status
Economic Aspect	Corporate governance	*Maintain ranking in the top 5% of all listed OTC companies governance appraisal	*Maintain ranking in the top 5% of all listed OTC companies governance appraisal	V Goal Achievement
	Integrity and Ethics / Anti-corruption	*Maintain 0 corruption incidence rate	*Maintain 0 corruption incidence rate	V Goal Achievement
	Operational performance	*Continuous operating profit *Maintain a good financial structure	*Continuous operating profit *Maintain a good financial structure	V Goal Achievement
	Legal Compliance	*Complete inventory and improvement of internal regulations compliance for all departments in Taiwan	*Complete inventory and improvement of internal regulations compliance for all departments in Taiwan	X Goals not fulfilled
Environ-mental Aspect	Energy resources consumption and reductionGHG emissions	*Zhunan Branch annual power saving rate > 1% *Yilan Branch annual power saving rate ≧ 800,000 KW *Zhunan branch established the ISO 50001 power management system *Zhunan branch obtained the green factory badge *Introduced the climate change risk and opportunity assessment mechanism *Optimized greenhouse gas inventory and strengthened disclosure of GHG emissions from transportation and products used by the organization	* Zhunan Branch annual power saving rate > 1% * Yilan Branch annual power saving rate ≧ 800,000 KW	V Goal Achievement
	Pollution prevention	*Zhunan Branch recycled over 50% of the wastewater from its drilling process *Yilan Branch improved the quality of the wastewater discharged - COD <200 mg/L (standard 480mg/L) - SS<150 mg/L (standard 320mg/L) - Nitrate Nitrogen < 40 mg/L (standard 50mg/L)	*Operating parameters of the prevention (manufacturing) equipment conform to the environmental protection permits and service center management standards *Established the "Emergency Response Plan for Sudden Air Pollution Incidents" *Yilan Branch established the VOCs emission factor plan	V Goal Achievement V Goal Achievement X Plan terminated
	Waste Management	*The frequency of activated carbon replacement in Yilan Branch's organic air pollution treatment system is reduced by 30% (lower the output of waste activated carbon)	*The total amount of waste is treated using the resource method ≧ 85%	V Goal Achievement
Social Aspect	Salaries and benefits	--	*Staff spring tour trip *Staff autumn tour trip *Employee birthday gifts and cakes	V Goal Achievement
	Employee education & training	*Yilan Branch general course attendance rate ≧ 85% *Zhunan Branch education and training program implementation rate 100%	*Yilan Branch general course attendance rate ≧ 85% *Zhunan Branch education and training program implementation rate 100%	V Goal Achievement
	Friendly workplace (including issues like occupational health and safety, occupational health)	*Zhunan Branch added labor-saving devices to the drill station to reduce the risk of musculoskeletal injuries to employees *Establish the charging safety-related mechanism in the plants *Special group care and tracking management 100% *Zhunan Branch health management course ≧ 10 sessions	*Zhunan Branch multi-cutting station human factors engineering improvement *Special group care and tracking management 100% *Established a respiratory protection plan *Zhunan Branch health management course ≧ 10 sessions	V Goal Achievement
	Product quality and customer satisfaction	*Customer satisfaction survey “quality aspect” Zhunan Branch score > 8.5 Yilan Branch score > 8.0 *Customer satisfaction survey “services aspect” Zhunan Branch score > 8.5 Yilan Branch score > 8.0	* Customer satisfaction survey “quality aspect” score > 8.0 * Customer satisfaction survey “services aspect” score > 8.0	V Goal Achievement

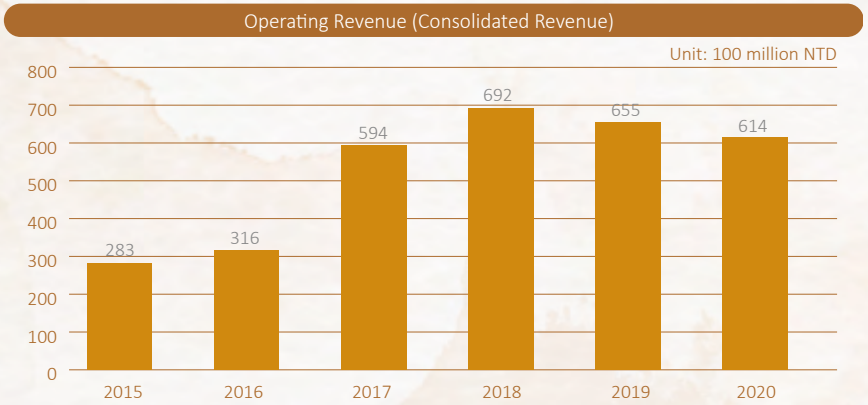
Note: 1.The legal compliance inventory and improvement cannot be completed in 2020 because of the large quantlty, and the deadline has been postponed until the end of 2021.
2. It is no longer necessary to implement the factory coefficient establishment project dud to process changes. The project was terminated because the BDG material that created VOCs is no longer being used.

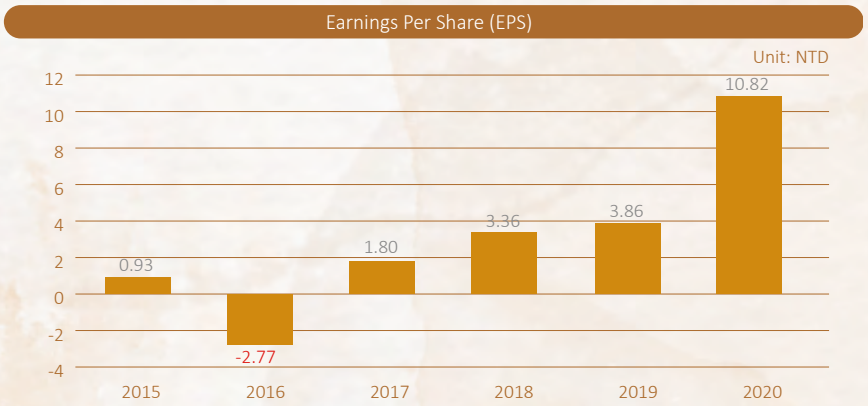
KPI

★ Economic KPI

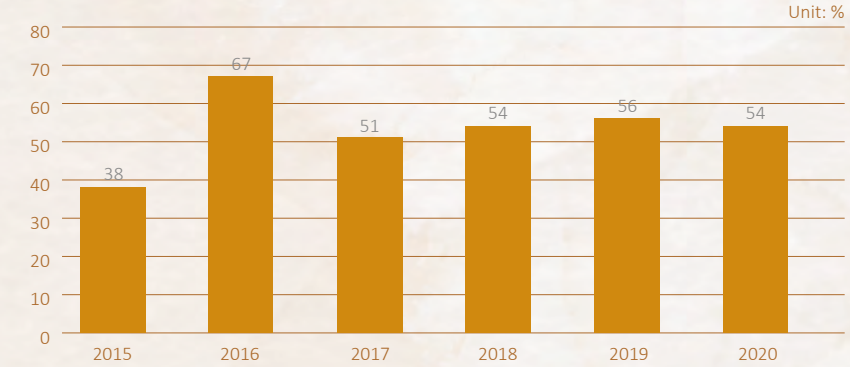
Information disclosure and corporate governance appraisal and rating of TWSE listed companies



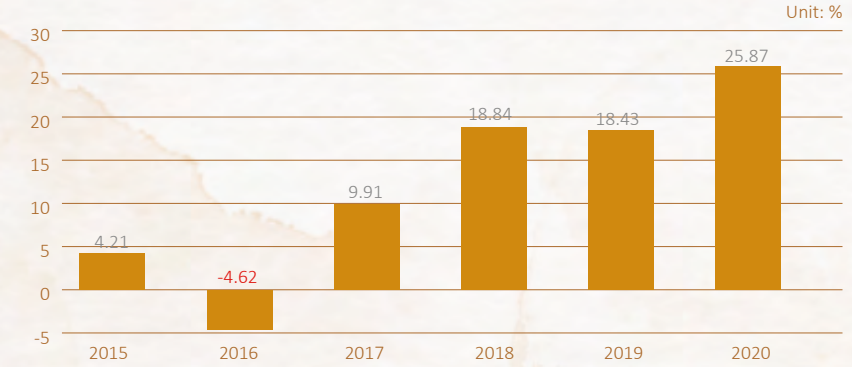




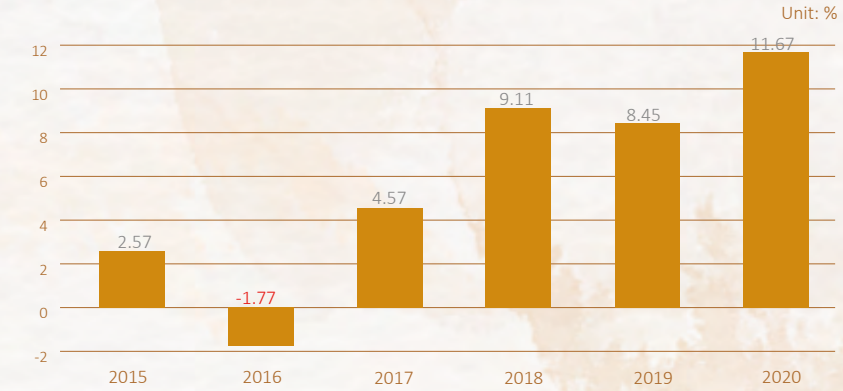
Debt to Asset Ratio



Return on Equity

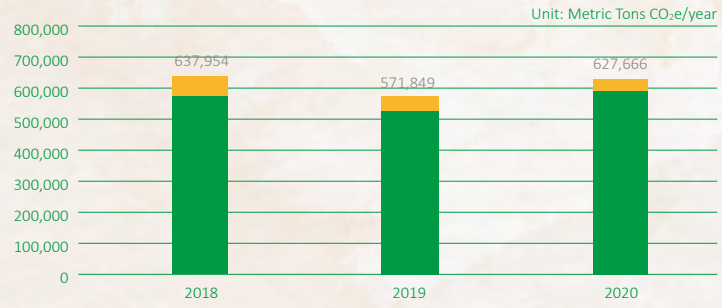


Return on Assets



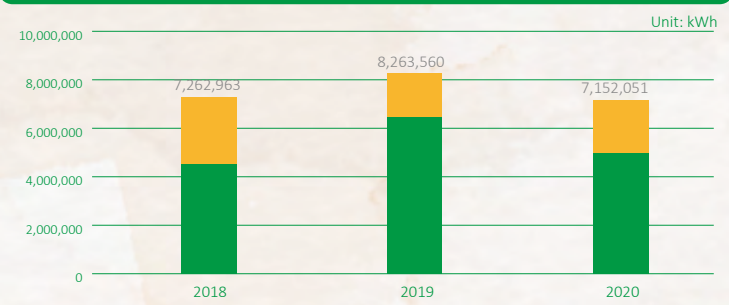
★ Environmental KPI

Carbon dioxide equivalent



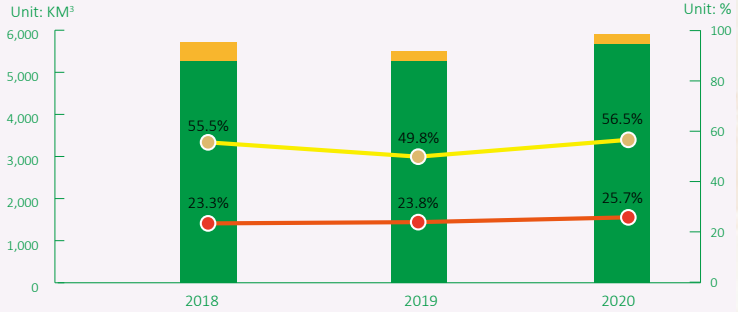
	2018	2019	2020
Sino-American Silicon	64,900	45,322	36,905
Global Wafers	573,054	526,527	590,761

Power conservation effects



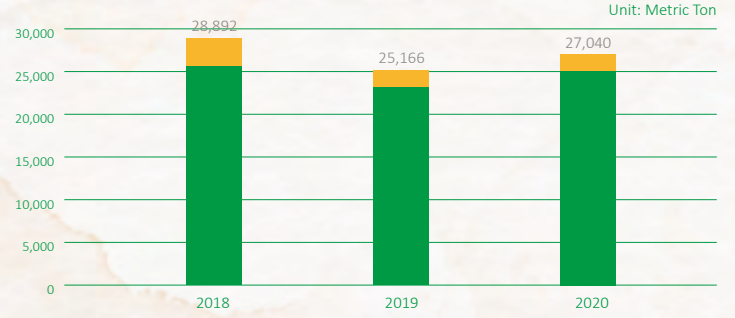
	2018	2019	2020
Sino-American Silicon	2,764,367	1,812,631	2,195,898
Global Wafers-Taiwan	4,498,596	6,450,929	4,956,153

Recycled water



	2018	2019	2020
Sino-American Silicon recycled water quantity	455	250	236
Global Wafers recycled water quantity	5,265	5,258	5,674
Sino-American Silicon recycled water rate	55.5%	49.8%	56.5%
Global Wafers recycled water rate	23.3%	23.8%	25.7%

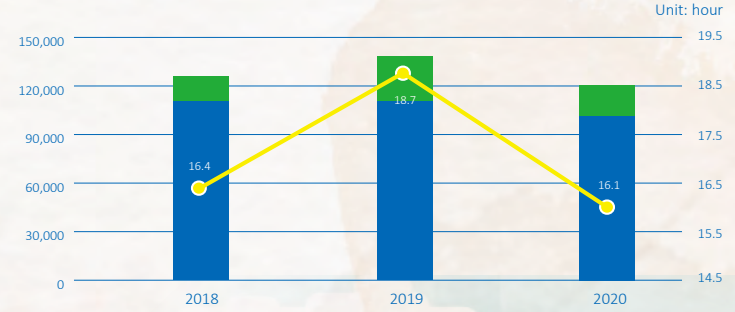
Resource recycle and reuse from waste



	2018	2019	2020
Sino-American Silicon	3,338	2,054	1,962
Global Wafers	25,554	23,112	25,077

★ Social KPI

Education and Training Hours



	2018	2019	2020
Sino-American Silicon	15,630	27,848	18,824
Global Wafers	110,586	110,511	101,398
Average employee education and training hours	16.4	18.7	16.1

01

Governance and Operation

1.1 Corporate governance

1.2 Operational perform

1.3 Risk management

★ Material Topic Strategy and Performance

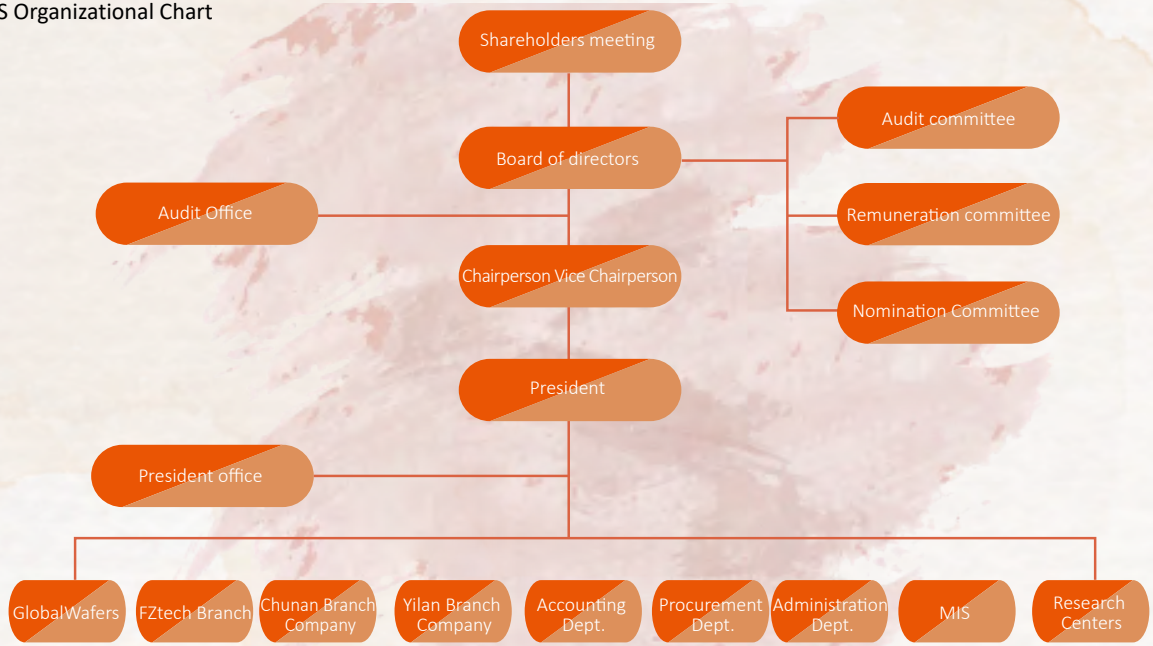
MATERIAL TOPICS / CHAPTER	STRATEGIES OF SINO-AMERICAN SILICON	2020 KEY RESULTS	2020 TARGETS	2021 AND FUTURE GOALS
CORPORATE GOVERNANCE / 1.1 CORPORATE GOVERNANCE	*Uphold the corporate culture of ethical management *Promote the long-term integrity management policy *Strengthen information disclosure transparency	Won top 5% of all listed OTC companies during corporate governance appraisal for 7 consecutive years	Achieved * Maintain ranking in the top 5% of all listed OTC companies governance appraisal	* Maintain ranking in the top 5% of all listed OTC companies governance appraisal
MORAL INTEGRITY (ANTI-CORRUPTION) / 1.1 CORPORATE GOVERNANCE	* Develop a rigorous internal regulation management mechanism to minimize integrity risk * Actively organize education and training as well as promotion integrity management policies * Establish reporting channels and whistleblower protection system	Maintain 0 corruption incidence rate	Achieved * Maintain 0 corruption incidence rate	* Maintain 0 corruption incidence rate
OPERATIONAL PERFORMANCE / 1.2 OPERATION PERFORMANCE	* Adjust strategy according to the market * Innovative R&D, reduce costs, and accumulate strength	Contiunal profit growth	Achieved * Continuous operating profit * Maintain a good financial structure	* Continuous operating profit * Maintain a good financial structure
LEGAL COMPLIANCE / 1.1 CORPORATE GOVERNANCE	* Continuous education, training, and advocacy * regular inventory self-evaluation system * strengthen internal organization and rectification * implement cross audits within the group to discover potential risks and improve internal mangemant	Suffered 0 major penalties	Fail * Complete inventory and improvement of internal regulations compliance for all departments in Taiwan	* Complete inventory and improvement of internal regulations compliance for all departments in Taiwan

1.1 Corporate Governance

Sino-American Silicon (SAS) has long promoted ethical operation policy and strengthened information disclosure transparency in order to uphold the ethical corporate culture. In the past 7 consecutive years, SAS has received the honor of ranking among the top 5% of all listed OTC companies during corporate governance appraisal, which demonstrates SAS' determination to pursue sustainable corporate operations.

1.1.1 Corporate Governance Structure

SAS Organizational Chart



Summary of key points for the corporate governance organization

* The GlobalWafers board of directors consists of 10 directors of whom 3 are independent directors.
* Among the 10 directors, 1 is a female director.
* The Audit Committee and Remuneration Committee both consist of independent directors.
* The Nomination Committee has 5 members of whom 3 are independent directors
* The organizational charter of all committees is publicly disclosed on the corporate website.
* *The board of directors and the functional committees have conducted annual self-performance evaluations and disclose the evaluation results on the company website
* A corporate governance supervisor has been established to implement corporate governance and strengthen the functions of the board of directors

Note: FZtech Inc. was merged into SAS on December 12, 2019 and became the FZtech Branch on January 3, 2020

★ Board Operations

Sino-American Silicon's board of directors consists of 10 directors with rich knowledge and experience, of which 3 are independent directors. The members of the board of directors have expertise in professional technology, operation management, legal affairs, finance, and strategic management. The members' academic and industrial experience can help them to fulfill their supervisory and management responsibilities while assisting the Company with its business decision-making strategies. Important decision-making proposals related to the board of directors are submitted to the audit committee for initial review and discussion before they are sent to the board of directors for resolution. Board resolutions are published on the Company's website to enhance Company information transparency and protect shareholders' rights.

To enhance the professional knowledge and legal literacy of the Company directors, they must continue to participate in relevant refresher courses during their tenure and take at least 6 hours of refresher courses per year.

★ Recusal by Board Members

The Rules of Procedure for Board of Directors Meetings and the organizational charter of the Audit Committee contain the following provision: If a director or a juristic person that the director represents is an interested party to an agenda item, the director shall state the important aspects of the interested party relationship at the respective meeting. When the relationship is likely to prejudice the interest of this Corporation, that director may state his/her opinions and respond to inquiries but shall not participate in discussion or voting on that agenda item and shall recuse himself or herself from the discussion or the voting on the item. The said director may also not exercise voting rights as a proxy for another director.

The election of SAS directors (including independent directors) shall be conducted via the candidate nomination system pursuant to Article 192-1 of the Company Act, whereby the shareholders meeting shall elect the directors from a list of candidates. In 2020, the SAS board of directors has convened a total of 6 meetings with an average attendance rate of 97%. The board organization and board members' professional and educational background and attendance records are illustrated as below:

★ Main academic (experience) background and attendance status of board members in 2020

Title	Name	Gender	Primary professional (educational) background	Actual no. of presence (in attendance)	No. of presence by proxy	Actual presence (attendance) rate (%)	Notes
Chairperson	Doris Hsu / Hsiu-Lan, Hsu	♀	MA in Computer Science from University of Illinois President of Sino-American Silicon	6	0	100%	Reelected on 2020.06.24
Vice Chairperson	Tang-Liang, Yao	♂	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.	6	0	100%	Reelected on 2020.06.24
Director	Ming-Kuang, Lu	♂	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	6	0	100%	Reelected on 2020.06.24
Director	Wen-Huei, Tsai	♂	Accounting Department, National Chengchi University Director of Easywell biomedical Inc. / Director of Ene Technology Inc.	6	1	83%	Reelected on 2020.06.24
Director	Feng-Ming, Chang	♂	Master of Computer Engineering, USC / Master of Economics, Texas A&M University Director of TECO Electric & Machinery Co., Ltd. / Director of Syntec Scientific Corp.	4	0	100%	Elected on 2020.06.24
Director	Kai Jiang Co., Ltd Representative: Hau Fang	♂	MA in International Business Management from National Chengchi University Vice President of Taiwan United Medical Inc.	6	6	100%	Reelected on 2020.06.24
Director	Kun Chang Investment Co., Ltd Representative: Guang-Ying, Ou	♂	Department of Energy Economics, U.C. Berkeley Chairperson of Edison's Co., Ltd. / Director of VIA Faith and Love Charity Foundation / Director of Chinese Christian Faith and Love Foundation	4	0	100%	Representatives elected on 2020.06.24
Independent Director	Jin-Tang, Liu	♂	Bachelor of Accounting, Tamkang University CPA of KPMG / 21st Council Member of CPA Associations R.O.C. (Taiwan) / Teaching Assistant, Tamkang University	4	0	100%	Elected on 2020.06.24
Independent Director	Hou-Chung, Kuo	♂	PhD, Electrical Engineering and Computer Science, University of Illinois, Urbana-Champaign	4	0	100%	Elected on 2020.06.24
Independent Director	Shao-Lun, Li	♂	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.	4	0	100%	Elected on 2020.06.24
Director	Kun Chang Investment Co., Ltd Representative: Yu-Da Chang	♂	MA from the NTU Graduate Institute of Finance Vice President of Weilian Technology Co., Ltd.	2	0	100%	Representative relieved of office on 2020.06.24
Director	United Renewable Energy Co., Ltd. Representative: Chuan-Hsien, Hong	♂	PhD in Electrical Engineering from National Tsing Hua University Head of Solar Cell Research Team, ITRI / Vice President of Guanghua Amorphous Silicon Company / CEO of United Renewable Energy Co., Ltd. / Chairperson of United Renewable Energy Co., Ltd. / Academician of Asia Pacific Society for Materials Research	2	0	100%	Relieved of office on 2020.06.24
Director	Mao Yang Co., Ltd. Representative: Rong-Kang, Sun	♂	Chinese Culture University Department of Law Chairperson of Yuanjie Investment Co., Ltd.	2	0	100%	Relieved of office on 2020.06.24
Director	Hung Mao Investment Representative: Chu-Wang, Chen	♂	Bachelor of Engineering, University of California, Berkeley President of VIA Technologies Group for Greater China / Special Assistant to the Chairperson of VIA Group	2	1	50%	
Independent Director	Ting-Ko, Chen	♂	PhD in Business Administration from the University of Michigan General Counsel of Ruentex Group / President of CP Pokphand New York / Vice President of U.S. Formlsa Plastics J-M Company / Chairperson of Jinhua Xinyin Securities Co., Ltd. / Prefessor of Business Administration (currently the Management School), National Taiwan University / Director / Superintendent / Dean and Prefessor of School of Management, Tamkang University / Dean and Chair Professor of College of Management, Asia University / Visiting Chair Professor, College of Management, NTNU	2	0	100%	Relieved of office on 2020.06.24
Independent Director	Shing-Hsien, Lin	♂	Master of Commerce, Tulane University, USA Bachelor Department of Electrophysics, National Yang Ming Chiao Tung University / President of Lite-On Technology Co., Ltd. and Vice Chairperson of Lite-On Group / CEO of Lite-On Technology Co., Ltd. / President of Silitek Corp. / President of Texas Instruments Taiwan	2	0	100%	Relieved of office on 2020.06.24
Independent Director	Mong-Hua, Huang	♀	Master of Commerce, Tulane University, USA President of Leotek Electronics / Manager of Texas Instruments Taiwan Ltd. / Director of Accounting for Texas Instruments Taiwan Ltd. / Silitek Company, Director of President Office (Deputy President) / Lite-On Group Auditor General (Vice President) / Lite-On Technology Senior Vice President	2	0	100%	Relieved of office on 2020.06.24

• Please refer to SAS 2020 Annual Report for information on directors concurrently holding positions in SAS and other companies, director remuneration, and board resolutions.

★ Remuneration committee

SAS established a Remuneration Committee on December 20, 2011 to implement a systematic compensation scheme. The Remuneration Committee is in charge of formulating and reviewing performance assessment and remuneration policies, systems, standards, and structures for directors and managers.

For the organizational charter of the Remuneration Committee, please refer to the SAS corporate website.

In 2020, a total of 4 meetings were held with an average attendance rate of 100%. The attendance status of independent directors is shown in the table below:

Remuneration Committee independent director attendance status for 2020

Title	Name	Actual attendance no.	No.of presence by proxy	Actual attendance rate	Notes
Convener	Jin-Tang, Liu	2	0	100%	Elected on 2020.06.24
Board member	Hou-Chung, Kuo	2	0	100%	Elected on 2020.06.24
Board member	Shao-Lun, Li	2	0	100%	Elected on 2020.06.24
Convener	Ting-Ko, Chen	2	0	100%	Relieved of office on 2020.06.24
Board member	Shing-Hsien, Lin	2	0	100%	Relieved of office on 2020.06.24
Board member	Mong-Hua, Huang	2	0	100%	Relieved of office on 2020.06.24

★ Audit committee

To strengthen the corporate governance internal supervision mechanism, SAS has established an Audit Committee on June 26, 2014, which is composed of all independent directors. The main responsibilities of the Audit Committee are to review and discuss the Company's financial reports, qualification review and selection (dismissal) of CPA, independence and performance, CPA public expense, implementation and amendment of the Company's internal control system, legal compliance, control the Company's existing or potential risks, etc.

For the organizational charter of the Audit Committee, please refer to the SAS corporate website.

For details on Audit Committee resolutions, please refer to the SAS 2020 Annual Report

In 2020, a total of 5 meetings were held with an average attendance rate of 100%. The attendance status of independent directors is shown in the table below:

2020 Audit Committee Independent Director Attendance Status

Title	Name	Attendance in Person	No.of presence by proxy	Actual attendance rate	Notes
Independent Director	Jin-Tang, Liu	3	0	100%	Elected on 2020.06.24
Independent Director	Hou-Chung, Kuo	3	0	100%	Elected on 2020.06.24
Independent Director	Shao-Lun, Li	3	0	100%	Elected on 2020.06.24
Independent Director	Ting-Ko, Chen	2	0	100%	Relieved of office on 2020.06.24
Independent Director	Shing-Hsien, Lin	2	0	100%	Relieved of office on 2020.06.24
Independent Director	Mong-Hua, Huang	2	0	100%	Relieved of office on 2020.06.24

★ Nomination Committee

To improve the functions of the Company's board of directors and strengthen the management mechanism, SAS has established a Nomination Committee on November 5, 2020. The committee is composed of 5 directors, of which 3 are independent directors. The main responsibilities of the Nomination Committee are to construct and develop the organizational structure of the board of directors and various committees; 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 the independence needs of board members and senior managers; and formulate and review the directors' training plans and succession plans for directors and senior managers.

For the organizational charter of the Nomination Committee, please refer to the SAS corporate website.

★ Performance Assessment

The Company has performed annual performance evaluation work in accordance with the "Board of Directors and Functional Committee Performance Evaluation Method" in order to implement corporate governance, enhance the functions of the company's board of directors and functional committees, and establish performance targets to enhance operational efficiency. An evaluation report shall be submitted to the board of directors before the end of the first quarter of the following year. The 2020 performance evaluation results have been submitted to the board of directors' report on March 18, 2021, and the 2020 board of directors and functional committee performance evaluation results of excellent.

1.1.2 Integrity & Ethics

★ Core Values

"Honesty and integrity" is one of the core values of SAS. Sino-American Silicon has formulated the relevant specifications and communication mechanisms for all directors, managers, and colleagues to follow in order to establish an honest business environment. Rigorous management mechanisms are executed to minimize the risk of dishonesty, create value for customers, and achieve benefits for the shareholders and stakeholders.

★ Internal Regulation System

To implement integrity management, SAS has established important internal regulations such as "Code of Integrity Management," "Code of Ethical Conduct," and "Integrity Management Operating Procedure and Action Guideline" to stipulate specific items that SAS directors, managers, and employees must pay attention to during business operations. These contents cover topics such as integrity management, ethical behavior, prohibition of unreasonable hospitality or improper interests, prohibition of intellectual property rights infringement, prohibition of anti-competition behaviors, and conflict of interests. These documents are published on the Company website and internal website for colleagues to review at any time in order to improve law compliance and professional ethics awareness for all colleagues.

Sino-American Silicon has revised its internal regulation system on August 6, 2020 pursuant to the integrity management-related provisions provided by the Taipei Exchange. The Company has also considered its operating status to amend the "Integrity Management Operating Procedure and Action Guideline," added "Assessment Mechanism on the Integrity of Transaction Partners before Establishing Business Relationships" as well as the "Dishonest Behavior Risk Assessment Mechanism," prevented its products or services from harming stakeholders, and amended the definition of "Conflict of Interest for Directors" according to the Company Act. On November 5, 2020, the Company has adjusted its processing procedures for political donations, charitable donations, or sponsorships according to the Company's actual operational requirements to verify legal compliance by the Legal Compliance Unit before the case is submitted to the Chairperson for approval.

For first-line marketing and procurement colleagues, the Company has reiterated the importance of "ethics and integrity" via "Sales Management Measures" and "Procurement Management Measures," and established a comprehensive business law compliance mechanism covering topics such as fair competition, due diligence, trade control (trading counterparty, subject matter, purpose of use, cash flow, and relevant trade control and restrictions of major trading countries), anti-corruption, anti-bribery, and conflict of interests prevention and exemption mechanism. The Company also uses supply chain control to ensure compliance with conflict-free minerals provisions.

In addition to signing "Intellectual Property Rights and Confidentiality Agreements" with employees, the marketing and procurement units are also required to sign non-disclosure agreements (NDAs) before cooperating with suppliers and customers in order to prevent acts of information-related dishonesty such as disclosing company secrets to others. Employees are also prohibited from inquiring or collecting non-job-related company operation secrets in order to fully protect the sensitive or confidential information of business partners. Sino-American Silicon has established the "Personal Data Protection Management Measures," regularly implemented personal data inventory, and practices personal privacy confidentiality obligations with the highest ethical standards.

★ Anti-Corruption

Sino-American Silicon insists on "3 Nos": No bribe offering, no bribe receiving, and no bribe demanding. The "Code of Integrity Management" clearly stipulates that colleagues shall not directly or indirectly provide, promise, request or receive any improper benefits during the process of engaging in business activities. The "Integrity Management Operating Procedure and Action Guideline" further provides clear codes of conduct for colleagues, and the key points include: (1) If payment is provided or promised due to threat or intimidation, record the process, report to the supervisor, and notify the compliance unit. (2) If others provide or promise illicit benefits, return or refuse the offer, and report to the supervisor and notify the compliance unit. If it cannot be returned, hand it over to the legal compliance unit for processing within 3 days from the date of receipt.

Sino-American Silicon has adopted the "self-legal-compliance evaluation," "e-mail tracking," "qualitative interviews," "donation review," and other dishonest behavior risk assessment mechanisms for all operating locations in order to identify units and personnel with a higher risks of corruption. Among them, the marketing and procurement units are the first-line external contact units due to their business attributes, so they are faced with more internal/external incentives and opportunities for dishonest behaviors (i.e., cash, gifts, services, entertainment, facilitating fees) and are identified as a higher risk of corruption by the Company.

As such, the Company has provided education and training (2020 courses, content, and targets are described later) to marketing, procurement, and other departments as well as all new employees and new directors in order to convey the correct concepts, enhance the awareness of legal compliance, and ensure that the risk of corruption is properly controlled. In detail, SAS spares no effort in conveying the following code of conduct to colleagues:

1. Be vigilant and cautious about all interests that may affect business decision-making.
2. Regardless of value, "no bribe offering, no bribe receiving, and no bribe demanding."
3. "No prior gifts and no subsequent gratuities."

For higher-risk marketing and procurement units, SAS has clearly stipulated the "anti-bribery and anti-corruption" clauses in the "Sales Management Measures" and "Procurement Management Process" measures to prohibits any bribery and corruption such as direct or indirect requests, appointments, deliveries, request or acceptance of bribes, any unreasonable gifts, entertainment, or other improper benefits from any third party. In case of violation, the violator must face criminal and civil liabilities in addition to punishment according to the Company's employee Reward and Punishment Provisions. If the Company has suffered damages due to such actions, the violator must also compensate the Company for the losses thus incurred.

In addition to the aforesaid internal risk control, SAS also urges all suppliers and customers to adopt the highest corruption prevention standards, and sign written "Supplier Code of Conduct" or "Customer Code of Conduct" documents to declare the "anti-bribery and anti-corruption" concepts to all of the Company's transaction partners. The Company requires suppliers and customers not to pay or accept bribes to the Company or its representatives in order to prevent improperly influencing transaction decisions under any circumstances. In addition, the Company shall also instruct its marketing and procurement personnel to fill-in the "Customer/Dealer/Agent Integrity Management Evaluation Form" and "Supplier Integrity Management Evaluation Form" before establishing business relationships, which shall serve as the basis of transaction risk evaluation by the Company.

The employees of SAS shall obtain a high level of knowledge about anti-corruption behaviors through continuous education and training. No corruption incident was confirmed or established after investigation in 2020. So, no employee received disciplinary punishment and no business partner contract was terminated due to corruption incidents.

For Code of Integrity Management and other internal regulations, please refer to the SAS website.

★ Recusal for conflicts of interest

Sino-American Silicon attaches great importance to ethical integrity, and has formulated the "Code of Integrity Management," the "Integrity Management Operating Procedure and Action Guideline," and the "Code of Ethical Conduct" to clearly provide that when directors, managers, and other interested parties participating or attending a board of directors meeting have a conflict of interest with the proposals listed by the board of directors; the conflict of interest shall be explained to the board of directors. If such conflict of interest is harmful to the Company, said person shall be prevented and recused from discussion and voting, and shall not act on behalf of other directors to exercise their voting rights.

To effectively prevent conflicts of interest, SAS has stipulated that its employees shall not use their positions in the Company to obtain improper benefits for the following persons or companies:

- employee himself/herself, spouse, parents, children, or relatives within the second degree of kinship;
- enterprises in which the aforementioned personnel directly or indirectly enjoy considerable financial benefits;
- an enterprise in which the employee serves concurrently as the chairperson, director, independent director, or senior manager;

SAS has provided appropriate channels for directors, independent directors, or managers to proactively explain whether they have potential conflicts of interest with the Company.

★ Education and Training

SAS believes that "integrity management is achieved by the compliance with laws and regulations." So, it has actively organized education and training as well as integrity management policy advocation, promoted the integrity policy and its importance to directors and employees. The goal is to ensure all colleagues fully understand and comply with the policies, execute operations according to the highest standards, and practice the core value of "Honesty and Integrity" in daily work. Specific course contents offered in 2020 related to ethics and integrity are as follows:

- ◆ 1 hour of education and training for new directors on the "Legal Overview of Insider Trading and Insider Equity Transfer." The contents include insider trading law analysis (constitutive elements, major news disclosure method and time period, judicial opinions) and insider equity transfer law analysis (The obligation to declare before/after the event, and maintaining the number of shares held by directors and supervisors).
- ◆ 2 hours of "Integrity Management Education and Training" for new directors. The contents include trade secret protection, competition law topics, anti-bribery and corruption, conflicts of interest prevention, and KYC/export control.
- ◆ 1 hour of "New Employee Education and Training" for new employees. The contents include integrity management and code of ethical conduct, and an overview of insider trading laws.
- ◆ The contents of education and training on "U.S. Trap Topic Sharing" for solar power business division supervisors and executive directors include the analysis of the U.S. Foreign Corrupt Practices Act (FCPA), the long-arm jurisdiction of foreign laws and huge fines, the Alstom bribery case, and their revelation to our nation's companies.

★ Reporting channel and informant protection

SAS has established the "Illegal and Unethical Behavior Report Handling Method" in order to ensure integrity management compliance and clearly stipulate the disciplinary and appeal system for integrity management violations. The Company has also established and provided employee suggestion boxes, e-mails, and appeal hotlines on the Company's internal website; and promised to protect whistleblowers from any mistreatment due to whistleblowing. The goal is to encourage the Company's colleagues and stakeholders to report unethical behaviors or misconducts.

The identities of the informants and the contents of the report shall be kept confidential, and the relevant personnel involved in the report verification and investigation are also required to sign a written confidentiality statement. If an integrity management regulation violation is proven, the punishment shall be issued according to the severity of the case. The specific reporting process and the responsible units are summarized as follows:

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	Same as spokesperson and personnel supervisor accepted parties

2. Processing Unit and Procedure

The Accused	Processing Procedure		Processing Unit
General Employees	Money Case	Report to the President	Human Resources (legal affairs must assist)
	Non-money Case	Report to the President	Human Resources + Department Director (legal affairs must assist)
Chairperson, Director, Senior Executive	Report Submission Independent Director or Audit Committee		Human Resources + Legal Affairs

3. Handling Method

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 dishonest 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.

1.1.3 Professional Independent Internal Audit Operation

The Audit Office subordinates to the board of directors. Its mission is to assist the board of directors and managers in designing appropriate internal control mechanisms to promote smooth company operations, reasonably ensure the operational objectives are met, and ensure the following goals are achieved:

- Operation effectiveness and efficiency.
- Ensure reports are reliable, timely, transparent, and in compliance with relevant regulations.
- Compliance with relevant laws and regulations.

The Company's internal auditors must uphold the spirit of detachment and independence, perform their duties with an objective and fair standpoint, and provide due care as professionals. In addition to regularly reporting about the audit results to the Audit Committee (independent directors), the audit supervisor must also attend the board of directors' meeting to present the reports. The internal auditors must perform their duties in accordance with the principle of honesty and credibility, and shall not violate the code of practice for internal auditors.

Implementation items include:

- Internal control system: Assist managers in designing appropriate internal control mechanisms and conduct "Internal Control System Self-assessment." Each department shall evaluate the internal control status for its own responsible area. The goal is to achieve the self-examination effect and strengthen the internal control concept for the evaluation department.
- Annual audit plan: Formulate the annual audit plan via risk assessments, and perform audits for the various operating procedures based on the Company's business activities. Strengthen the computerized functions of various systems as well as supervise and promote management and project improvement operations in addition to providing irregular management system implementation reviews in order to ensure internal control proficiency.
- Audit project review: Perform project inspections in response to potential risks (including fraud and corruption) identified by senior executives or routine checks, conduct in-depth investigations on abnormal events, and make recommendations in order to improve internal control integrity.
- Discussion of audit findings: Discuss improvement measures with the inspected unit based on the audit findings, and continue to track the follow-up improvement status to realize internal control implementation.
- Report the audit operation: Report the auditing results to the Audit Committee and board of directors, convey the weakness of the internal control and obtain instruction to improve the supervision effectiveness for corporate governance enhancement.

1.1.4 Legal Compliance

In addition to formulating the relevant policies and provisions according to the domestic and foreign laws and regulations; SAS has also strictly required all employees to comply with and understand the relevant laws and regulations via continuous education, training, promotion, and regular inventory & self-evaluation system in order to effectively and continuously promote the concept of legal compliance and ethics for all colleagues. In addition, we have also continued to strengthen internal reorganization and rectification while requiring each plant within the Group to perform cross-auditing in order to identify potential risks from different perspectives and improve internal management. We did not receive any disciplinary penalties during 2020.

To comply with the regulations for various sectors, SAS has stipulated respective policies or guidance.

Securities regulations	**Strict management mechanism** Sino-American Silicon's stocks are listed on the OTC market by the Taipei Exchange, and shall abide by the Securities and Exchange Act and other relevant laws and regulations. ◎The President Office has established excellent communication channels with relevant supervising authorities and constantly monitors the latest legal developments. The Office is also responsible for searches of the latest legal announcements and changes. Upon identifying the latest developments, the Office will notify relevant business units to take responsive measures as required. ◎With regard to questions submitted by relevant business units, the legal affairs department will further analyze relevant regulations and propose accurate responsive strategies upon communicating and confirming with supervising authorities.
Labor Laws and Regulations	**Strict Compliance with Relevant Labor Laws** ◎Establish various work systems and management standards that can meet or exceed the various labor laws and regulations, develop high-quality labor conditions and communication mechanisms, and ensure good labor-management interactions with colleagues. ◎Valuing employee salaries and benefits; proactively cultivate talents; implement labor laws; ensure employees' rights for major policy changes, remuneration & benefits, leave system changes that may impact the rights of our employees; employees will be notified, prior to implementation via labor-management meetings, electronic newsletters, or announcements on the HR notice board to ensure employees' rights.
Data management	◎Main policy documents: Staff Employment, Business Secret Confidentiality, and Intellectual Property Rights Ownership Contract; Code of Ethical Conduct; and Intellectual Property Rights and Confidentiality Agreement. ◎Management mechanism: Education on the importance of intellectual property and business secrets through posters and slogans, employee training and education, and signing of confidentiality agreements with employees in charge of relevant operations.
Corporate governance / Supervision over subsidiaries	◎Main policy documents: Code of Integrity Management, the Code of Ethical Conduct, and the Integrity Management Operating Procedure and Action Guideline. ◎Management mechanism: Incorporate the relevant regulations into the education and training content for employees so that all colleagues can follow a clear code of conduct.
Environmental Protection / Occupational Health and Safety Regulations	◎Main policy documents: identification and management of environmental protection, Occupational Health, and Safety related laws and regulations as well as other requirements. ◎Management mechanism: Review the compliance with changes in environmental protection, Occupational Health and Safety, energy management, and other related laws and regulations or other requirements each month; and regularly assess compliance with other applicable regulatory requirements.

We have provided guidance on the relevant laws and regulations to our employees each year to enhance employees' awareness of compliance with laws and regulations, and offered the relevant health care and environmental protection as well as safety and hygiene courses. The courses provided in 2020 include:

★ Legal Compliance

- Legal Overview for Inside Trading and Insider Equity Changes
- Familiarize with Integrity Management related Laws
- New employee education and training (integrity management, code of ethical conduct, and an overview of insider trading laws)
- United States Trap Topic Sharing (FCPA)

★ Health Care

- Colorectal Cancer Prevention and Treatment Seminar
- Fighting against Metabolic Syndrome Seminar
- Healthy Life — Influenza Prevention Seminar
- Health, are you Ready?
- Sexual Harassment Prevention Course
- Workplace Violence Prevention Course
- Heart Care for Winter Health Lecture
- In-plant Emergency First Aid and Chemical Splash First Aid Education Training
- CPR+AED Practical Education and Training Course
- Tobacco Prevention and Treatment - Sharing by Oral Cancer Patients
- Workplace Relaxation Aromatherapy and Stress Relief Seminar
- Vision Care for Office Workers
- Anti-Cellulite and Weight Loss Campaign

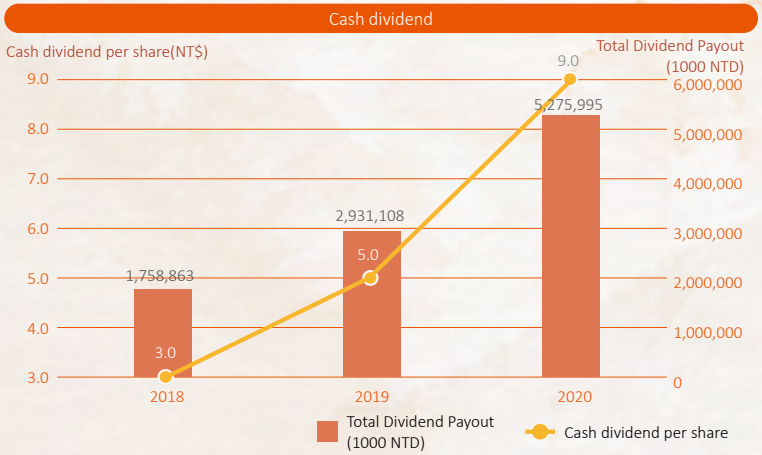
★ Environmental Protection, Safety, and Hygiene

- On-the-job Occupational Health and Safety Education Training
- Plant Affairs Self-construction Education and Training
- Emergency Response Education and Training
- Emergency Response Course - Introduction to Fire Fighting System and Operational PracticalPrecautions
- Fire Fighting Broadcast Equipment Education and Training
- Fire Fighting Equipment Operation Training
- Four-purpose Gas Detector
- Respiratory Protection Education Training and Fitness Test
- Crane Operation Safety Instructions
- Chemical Protection Equipment Utilization
- Contractor Safety and Health Management Education and Training
- Education Training on Operation Safety in Restricted Space
- Environmental Considerations / Hazard Identification and Risk Assessment
- Organization Greenhouse Gas Inventory
- Environmental Declaration (Raw Materials / Products)
- Occupation Safety and Health/ Fire Services Education & Training
- Environmental Protection Regulations (Waste Water Management and Air Pollution Control) Audit Practice
- Traffic Safety Promotion (Defensive Driving Concept Promotion)

1.2 Operation performance

COVID-19 has ravaged the globe since the beginning of 2020. Supply chain interruptions, shutdowns, and material shortages have had a serious impact on the planning and installation of solar energy as well as market demand, and prices have also fallen. In response to market conditions, the Company has reduced inventory via production capacity adjustment, adjusted the product combinations, actively maintained the domestic market, and strengthened its reinvestment operation deployments. Under the concerted efforts of all colleagues and the strong performance of the subsidiary group GlobalWafers, SAS has bucked the trend to achieve record operating results in operating gross profit, operating income, net profit after tax, and EPS despite the impact of COVID-19. In sum, the Group's consolidated revenue for 2020 reached NT$61.4 billion, which decreased by 6.3% from NT$65.51 billion in 2019. The after-tax net profit attributable to the parent company is NT$6.33 billion, and the after-tax earning per share is NT$10.82.

For details on the Company's operating performance and financial information, please refer to SAS' 2020 Consolidated Financial Statements.



2020 Economic value Analysis

Unit: NT$ Thousand

Generated direct economic value	Annual report: income	61,397,299
Distributed economic value	Operational costs	40,283,700
	Employee salaries & benefits	12,365,013
	Payment to investors	2,931,108
	Payment to the government	28,213
	Community resources	113

★ Overall economic environment and industry trends

As the climate changes intensify, governments of various countries increase the proportion of renewable energies in energy utilization and stipulate such increases in policies and legislation while striving to reduce carbon dioxide content. More and more companies also promise to fully apply renewable energies to supply their power, or further become the "negative emission" companies. It is obvious that the international consensus is to counter the climate changes and lower the greenhouse effect collectively. Renewable energies have become an irreversible trend in the world. Sino-American Silicon has completed solar energy production lines and abundant experiences in power station construction, maintenance, and operation. We will fully exploit our advantages while actively positioning for the innovative green economics, including highly efficient cells, power station establishment, management of maintenance and operation, and solutions for energy storage. The Company has strengthened the key investment layout in the semiconductor industry chain via reinvestment, which can help to diversify industrial structure risks and transform them into future economic benefits. Look to the future, the robust operation in the major business, solar energy, and the addition of the subsidiary, GlobalWafers' outstanding performance, Sino-American Silicon's overall performance will have solidified roots for profitability. It is expected to steadily and robustly improve the operating results, achieve another operating outperformance, and become a green enterprise with stable growth in revenue and profit and sustainable development for higher value contributed to our shareholders.

1.3 Risk Management

★ Risk Management Method

In response to the rapidly changing management environments and to ensure the company's stable management and sustainable development, SAS has stipulated in risks management policies and risks management guidelines. The three major objectives of the risks management system stimulation:

- Proactively engage in all businesses to enhance the quality and quantity of income, within the limits of acceptable risks standards.
- Strengthen the width and depth of risks control and management and respond, when necessary, with negative listings regarding standardized and key principles
- Thoroughly facilitate systems, computer operation, and disciplines to ensure compliance with risks control and management

SAS' risks management procedure includes risks identification, risks assessment, risks supervision, risks reporting and disclosure, and response to risks. With this risks management procedure, we aim to effectively implement and facilitate the company's risks management strategies.

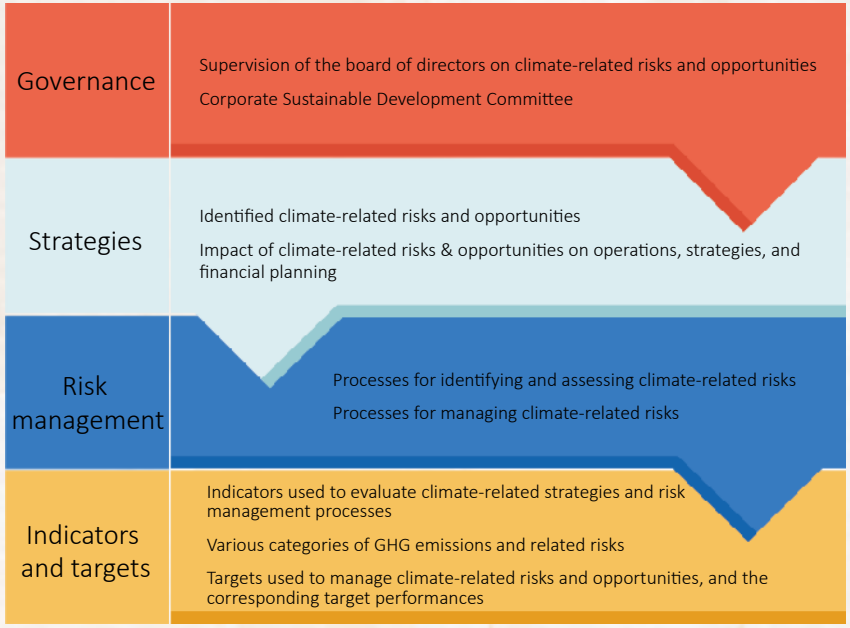
SAS has stipulated an assessment method for risks management for the referencing of risks management. Regarding quantifiable risks, we adopt rather stringent statistics analysis and techniques for analysis management and manage such quantifiable risks with a progressive method. Risks that are more difficult to quantify are measured using the qualitative method. Text descriptions are used to express the possibility of risk incidences and the extent of their impacts. The relevant operational and operational risk management information is disclosed in the Company's annual report and on the Company website.

In addition, SAS has identified 3 major emerging risks in 2020: climate change, information security, and epidemic infectious diseases. The Company has formulated corresponding risk strategies and implementation mechanisms for all aspects based on their possible impacts to ensure that the risks can be effectively controlled.

★ Climate Change

In December 2015, nearly 200 countries have strengthened their response to the threats posed by climate change through the "Paris Agreement," and greenhouse gas emission mitigation has become a key topic for global economic development. In June 2017, the Financial Stability Board (FSB) has published the Task Force on Climate-Related Financial Disclosures (TCFD). We have followed the 4 core elements (governance, strategy, risk management, indicators & goals) under the framework recommended by TCFD to reveal the climate change-related information.

Climate-related financial information disclosure framework



Sino-American Silicon's Corporate Sustainability Development Committee members have collected the risk and opportunity information related to climate change, and incorporated the stakeholders' concerns. The Corporate Sustainability Development Committee team members would identify and score the topics, and report the results in the Corporate Sustainability Development Committee meeting held every year. The relevant team members would formulate the management practices and goals in response to the risks (major topics), and report the results to the latest board of directors meeting.

★ Climate-related risks and opportunities

Type	Climate-related risks	Potential financial impacts	Response measures and goals
Transformation risks	Policy and regulations (1) - GHG emissions disclosure Current and revised energy regulations	• Increase operating costs • Policy changes leading to write-offs and early scrapping of existing assets	• Continue to track and identify trend changes in laws and regulations (1) • Develop low-carbon & renewable energy (2) (7) ◇ Continue to deploy solar power plants, and actively execute planning and investment for roof-type, ground-type, and water-surface-type solar power plants. Introduce a water surface buoyancy solar power generation system to reduce the water surface temperature and significantly improve the power generation efficiency of solar power panels. ◇ It is estimated that by 2020, the target installation volume for solar power plants in Taiwan is 30 MW, and the cumulative installation volume at home and abroad is 141 MW. • Energy and resource application management and energy-saving measures ◇ Communicate with customers and strive to obtain customer certification, put the silicon edge materials produced by the processing unit back into use for the crystal growth phase to reduce the amount of pure silicon materials used, and reduce raw material costs as well as product carbon emissions. (3) (4) (8) ◇ Optimize wastewater treatment to control the dosage of calcium carbonate and reduce the amount of calcium fluoride sludge. Established that the total amount of wastes from the plants treated using the resource method ≧ 85%. (4) ◇ A hybrid energy system was built on the roof of the Zhunan plant to replace part of the purchased electricity with solar power. (10) (14) ◇ Continue to formulate energy conservation measures, and the annual energy-saving rate of each plant area must be at least > 1% each year. (14) • R&D and optimization of products and services ◇ Polysilicon wafer process has switched from Slurry to DW in order to improve production efficiency, and significantly reduce the amount of carrying agent used as well as the waste cutting oil (mud) output. (4) (15) ◇ Improve the conversion efficiency of N-type & P-type monocrystalline cells. (3) (11) (12)
	Technology - Low carbon technology investment and transformation (2)	Capital investment in technology development	
	Market - Preferences and changes in customer behavior (3) - Rising costs for raw materials and waste disposal (4)	• Changes in consumer preferences resulted in a decline in demand for goods and services • Changes in income combinations and sources	
	Reputation - Industrial stigmatization (5)	Decline in demand for goods/services	
Physical risks	•Immediacy - Increased frequency and severity of extreme weathers (typhoons, heavy rainfalls) (6) •Long-term - Average temperature rise (7)	• Production capacity decline or interruption • Operating cost increase	
Type	**Climate-related opportunities**	**Potential financial impacts**	
Resource efficiency	- Recycle & reuse (8) - Reduce water - resource consumption (9)	Reduce operating costs	
Energy source	Use low-carbon energy (10)	Reduce operating costs	
Products and Services	- Develop low-carbon products and services (11) - R&D and innovation of products and services (12)	• Increase income through demand for low-carbon products and services • Improve competitive position to reflect changes in consumer preferences	
Market	Make good use of public sector incentives (13)	• Partner with the public sectors to enter new markets and increase revenue • Reduce operating costs	
Resilience	- Renewable energy plans and energy-saving measures (14) - Resource substitution and diversity (15)	Reduce operating costs	

Note: Climate-related risks, response measures, and targets are coded correspondingly

★ Information Security

According to the 2019 World Economic Forum Risk Report, large-scale cyber attacks and data theft have become one of the top 10 risks. In 2020, many well-known companies worldwide and in Taiwan also have virus extortion incidents that resulted in significant losses. Therefore, companies have strengthened their information security operations without delay. Sino-American Silicon has continued to optimize its information security management system and enhance its information security defense capabilities in order to ensure effective information security practices as well as reduce the risk of ever-changing and novel information security attacks. Sino-American Silicon 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.

The information security management and control mechanism is implemented in three major aspects (as follows) to ensure effective information security protection and reduce risks.

1. 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 in order to enhance email attack protection.
   - Important systems and databases are regularly backed up and stored off-site to ensure data availability.
   - Established a firewall in the internal network and set up firewall rules to protect important information systems.
   - Performed annual disaster recovery exercise drills for important application systems.
2. Information System Access Control
   - Strictly control the application system and file access setting permissions to ensure information confidentiality.
   - 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.
   - System service providers who perform system maintenance via remote login must go through the application process to gain permissions before connecting to the system and record the processing status.
3. Network Security Management
   - Established a firewall to protect the network's external connections, and analyzed the firewall's anomaly records to strengthen protection.
   - A multi-loop mechanism is adopted to connect to the Internet and the Company's internal network interface in order to prevent 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 in order to prevent the increasingly serious phishing and malicious fraud letter problems.
   - 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.
   - The VPN connection verification is required to connect to the internal network from the outside, and a two-stage verification method is used to ensure information security.

★ Pandemic Infectious Disease

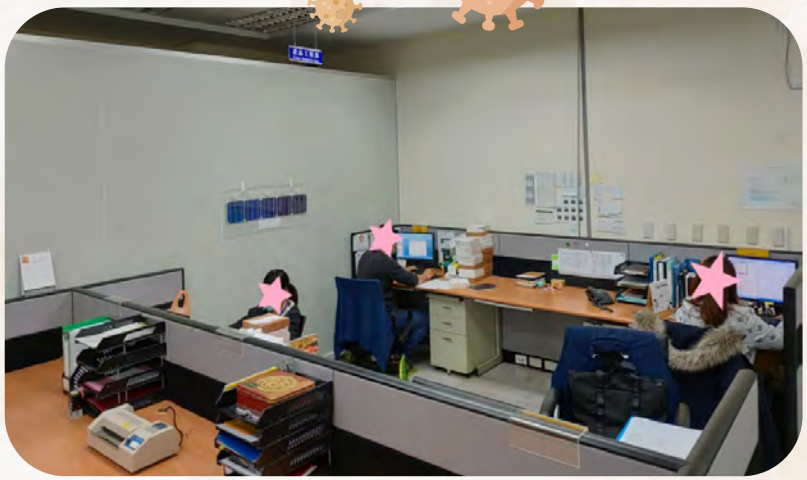
COVID-19 has rapidly spread throughout the globe in 2020 and lowered sales activities and customer orders, reduced factory labor operations, and halted international travels and cross-border R&D cooperation. COVID-19 has ravaged nations worldwide, and SAS has initiated the plant's epidemic prevention measures at the first instance. All of the departments have cooperated to execute comprehensive epidemic prevention operations, formulate epidemic prevention strategies for the plant areas, perform categorization measures and epidemic prevention resource inventory operations, hold regular meetings to formulate epidemic prevention response measures, and ensure the workplaces are healthy and safe.

The epidemic prevention control mechanism is implemented in 7 major aspects (as shown below) in order to reduce the subsequent negative impacts of COVID-19.

1. Epidemic prevention information: To enable employees to correctly grasp the real-time epidemic prevention information, the Health Management Center has regularly issued global epidemic information and in-plant epidemic prevention measures to enable employees to quickly receive correct epidemic prevention information.
2. Health monitoring: Temperature monitoring is implemented at all entrances to the plants. In case of a fever or suspected contact history with any infected, entry into the factory is completely prohibited. In addition, internal electronic questionnaire surveys are implemented in collaboration with the central command center to fully grasp the travel history of the infected, and fulfill employee proactive notification and independent health management objectives.
3. Visitor management: use emails and paper fliers to advocate on-site epidemic prevention measures to supply chain manufacturers, require visitors to fill-in the health declaration form before entry, and wear masks to protect the safety of employees.
4. Office epidemic prevention: To prevent the infection risks due to crowd gathering, office workers have taken a number of contingency measures such as: crisscross seating, cabin separation, traffic flow diversion, and working from home in order to minimize crowd gathering and reduce the frequency of employee contact. (Note: cabin separation, home office, etc., use remote systems to maintain smooth work.)
5. Safe dining environment: The Company has planned epidemic prevention dining lines, table plastic partitions, disposable lunch boxes, and divided the dining area into units to ensure worry-free meal dining safety in the plants.
6. Disinfection in the plants: The Company has formulated public area disinfection and cleaning measures, increase internal ventilation, encourage staff to open windows in confined spaces, affixed adhesive films on top of frequently used buttons, added partitions in restaurants, increased dry-cleaning equipment, and posted correct hand-washing instructions in all restrooms.
7. Employee care: The Company provides care and follow-up tracking for high-risk groups, conducts body temperature recheck follow-up management and control, and offers outpatient psychologist services when necessary to assist employees to deal with negative emotions and pressure.


疫情資訊
中國大陸武漢
肺炎疫情
2020/01/10
最新消息
疾病介紹
認識冠狀病毒


體溫計僅供量測使用
Thermometer only for checkup temperature
防疫物品
防疫小知識
勤用洗手乳洗手，防疫效果更加倍！
Please use hand wash.



02

Innovations and Services

2.1 Innovation Management

2.2 Customer and Product Services

2.3 Customer Privacy and Information Protection

2.4 Product Services

2.5 Upstream and Downstream Supply Chain

★ Material Topic Strategy and Performance

MATERIAL TOPICS / CHAPTERS	Strategies of Sino-American Silicon	2020 key results	2020 targets	2021 and future goals
Product quality and customer satisfaction / 2.2 Customer and Product Services	* 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	* Establish quality monitoring system and early warning mechanism * Introduce large-size low-light-decay solar cells (G1 Ga wafer) into mass production, and the battery output wattage is increased by 3% with the introduction of CELCO P+ new process technology * The conversion efficiency of Mono-Si P-type solar cells is actually increased by 0.20% (From 22.23% to 22.43%) * 10 high-efficiency solar cell products obtained MIT Smile Product Certification * Customer satisfaction score: 9.5 for polysilicon products and 8.9 for solar cells	Achieved * Customer satisfaction survey “quality aspect” score > 8.0 Achieved * Customer satisfaction survey “services aspect” score > 8.0	* Customer satisfaction survey “quality aspect” Zhunan Branch score > 8.5 Yilan Branch score > 8.0 * Customer satisfaction survey “services aspect” Zhunan Branch score > 8.5 Yilan Branch score > 8.0 * Continuous technical cooperation with customers to produce more cost-effective silicon material application products, and strive to achieve mass production * The customer service team is searching for ways to improve the yield rate of the current process according to customer requirements * Customer audit zero major deficiencies / main deficiencies * Set "developing new customers, expanding the application and market of silicon material-related products" as the top priority and future outlook

2.1 Innovation management

★ Current state and development trends of the solar energy industry

The solar power generation industry is one of the top growth potential industries in the 21st century. With the continual consumption of non-renewable resources such as coal, oil, and natural gas; irreversible energy resource depletion is inevitable, and solar-based renewable energy will become the primary energy structure component. In November 2016, the Paris Agreement officially went into effect. At the COP22 meeting, many governments have established renewable energy targets and listed renewable energy as the objective of their energy policies. The Bureau of Energy, MOEA, has promoted renewable energy via its "Wind and Solar Energy Transformation" implementation measure to focus mainly on solar and wind power generations. The goal is to achieve 20% renewable energy generation by 2025. Solar photovoltaic devices are anticipated to reach the capacity target of 20 GW, including 3 GW from rooftop-devices and 17 GW from ground-devices. The Executive Yuan has approved the "Solar Photovoltaic 2-year Promotion Plan" in October 2016 with the target of achieving 1.52 GW (1,520 MW) by June 2018. This plan would optimize the environment through short-term compliance with standards, strong foundations, and the establishment of medium- and long-term permanent measures. Installation goals for the roof-top and ground-mounted types The Roof-top type is aimed to include rooftops on central government-owned lands, in private factories, agricultural facilities and others. The ground-mounted type is aimed to include salt industry land, severe land subsidence areas, water bodies and landfills.

The latest report from SolarPower Europe indicated that the global solar installation capacity would reach 128.4 GW in 2019, grow to 180 GW by 2023, and enter the terawatt (TW) era in the future. The report also pointed out that 2018 was the most sluggish year for the global solar market. Although global demand continues to increase, global growth was inhibited because China (the largest solar market) was restructuring its solar policy.

★ Continued innovation and development of cutting-edge products and technologies

SAS has many years of solar crystalline growth experiences. Its high-efficiency polycrystalline quality is unique and industry-leading worldwide, and the Company also possesses thermal field simulation and design R&D capabilities. The A3+ chip developed by SAS in 2011 has dazzled the world stage. In September 2012, the Company's Aegis wafer solar chip won the Silicon Innovation Award, which was the most representative international award in the solar energy industry. In September 2014, SAS has obtained the unique global high-efficiency chip technology patent (announcement number: I452185), mass-produced A5+ chips by the end of 2014, and the Company's chip conversion efficiency has continued to lead the world. In 2017, the patented crystal growth technology was awarded the 2016 National Innovation Silver Award by the Intellectual Property Office, Ministry of Economic Affairs. The Company is capable of continuous development of high-quality multi-crystalline solar products.

In terms of development and mass production of mono crystalline high-efficiency solar cells, SAS has continued to provide the market with high-quality and high-conversion-efficiency solar cells, and mass-produced large-size solar cells (G1 Ga wafer). SAS has also introduced the new CELCO P+ process technology to increase the battery output wattage by 3% under the same conversion efficiency. In addition, the mono crystalline high-efficiency solar cell also has a low light attenuation effect, which can reduce the power decline of the solar module caused by long-term outdoor use.

In addition, various solar cells that meet customers' needs have been developed based on the monocrystalline high-efficiency solar cell manufacturing process. These products include back-side contact crystalline solar cell (MWT cell), Multiple BusBar cell, half cut cell, and Multiple cut cell. The diversified design capabilities and design flexibility of SAS have enabled its products to meet the needs of various customers, allowing them to use the SAS solar cells to obtain a higher green energy conversion efficiency rate, which could be applied to different solar module installation fields.

In line with the latest market developments, the adoption of diamond cutting processes for the cutting of solar wafers marked a critical change in the solar energy industry in 2017. SAS started adopting this technology in the fourth quarter of 2017. It has completed 51% conversion in all processes by end of 2017 and 100% conversion by 2018. Diamond cutting processes do not require any oil cutting and therefore help decrease raw material consumption, reduce air pollution, waste generation and transportation-based environmental impact.

As the largest solar market in 2018, China had reorganized its solar policy, which has curbed the global growth and affected the development of the solar market. The long-term R&D technology experience of SAS has enabled the Company to rely on its solid technical foundation and rigorous processing technology to continuously improve the crystalline quality, enter into the silicon material application product field, and provide product customization according to customer needs in order to expand the product application field during the period in which the global solar market is sluggish.

The R&D results of SAS are evident based on the number of patent applications. In 2013, the Science & Technology Law Institute has cooperated with Ocean Tomo (an authority in American intellectual capital) to analyze and investigate the management and effectiveness of the intellectual property rights for listed companies in Taiwan, and ranked SAS as the "Top 50 U.S. Patent Value for Listed / OTC Enterprises in Taiwan." Although the Science & Technology Law Institute has not updated this appraisal since 2013, the result indicated that SAS has reached the benchmark as a high-value patent enterprise in Taiwan. SAS has continued to cultivate patented technologies. In October 2016, the Company was rewarded patent certificate invention No. I452185 for "Silicon Wafer Manufactured from Silicon Crystal Ingots." SAS has won the recognition and affirmation from the Selection Evaluation Committee of the Intellectual Property Office due to its unique innovation, high practical value, high degree of commercialization, deep market potential, and huge business opportunities. As a result, SAS was able to stand out from the numerous contestants and win the silver medal during the "2016 National Invention and Creation Award" event organized by the Intellectual Property Office, MOEA. The management team of SAS firmly believes that by continuing to strengthen advanced technology R&D and global patent layout, it can grasp the market trend and create a blue ocean market.

★ R&D award records over the years

2008

Science and Technology Award of the Ministry of Economic Affairs

Innovative Outstanding Award

2010

Department of Economic Affairs

Industry Contribution Award

2011

Industrial Development Bureau

TIPS Industry Demonstration

2011

Science Park

Annual R&D Achievement Award

2012

Solar

Silicon Innovation Award

2013

PVSEC

Outstanding Technology Development & Research Contribution Award

2016

IOCG

Laudise Prize Award

2017

Intellectual Property Office, Ministry of Economic Affairs.

Won the Silver Medal for the 2015 National Invention and Creation Award

★ Continued product innovation

2019 R&D Achievements: Silicon material application product development, Ultra-high efficiency mono crystalline silicon solar cells

Future R&D development program: Ultra-high efficiency P-type mono crystalline silicon solar cells

★ Strategic deployment into the renewable energy market

As the global renewable energy power generation industry continues to grow, SAS will certainly be a part of this feast as it has deeply cultivated the solar energy industry for many years. Since 2015, SAS has invested in the solar power industry via its FZtech Branch (formerly FZtech Inc., which was merged by SAS on December 12, 2019 and renamed to SAS FZtech Branch on January 3, 2020). In 2020, the Yilan Branch has reestablished the power station development department while expanding the scope of the Group's renewable energy services in four aspects: power generation, maintenance and operation, energy storage, and green energy. SAS is fully committed to gain market share in the renewable energy market.


臺灣製MIT微笑產品驗證書
Taiwan-made MIT Smile Product Certificate


臺灣製MIT微笑產品驗證書 附件
Attachment to Taiwan-made MIT Smile Product Certificate

Four Core Services of Renewable Energy

2.2 Customer and Product Services

★ Customer Service

SAS is firmly committed to providing its customers with the best services and is deeply convinced that excellent service quality is the key to improving customer satisfaction and consolidating customer loyalty. SAS adheres to a philosophy of sustainable operation. In addition to maintaining business performance, the company also places great emphasis on listening to customers' opinions and satisfying customer demands to earn their long-term support and achieve sustainable operation goals.

SAS is a professional solar wafer and battery manufacturer. In 2019, the Company has focused on developing silicon material-related application products and providing advanced process technology and product services. Our goals are to meet the customers' product needs, emphasize on satisfying customer demands through professionalism, think from the customers' standpoint, provide comprehensive services based on the customers' needs, and achieve customer satisfaction and sustainable operation.

★ Product quality and customer satisfaction

SAS has long been firmly committed to the goals of "customer satisfaction, requirements conformity, total quality control and continued improvements" to increase customers' confidence in SAS products and services. Providing high-quality services and products to satisfy customers is the company's core mission. Professional teams are set up to take charge of product development, costs, manufacturing, quality, and customer services. Professional services are provided in response to customer problems and feedback in a rapid and active manner to assist customers in handling and resolving problems so as to earn their trust and satisfaction.

SAS schedules regular meetings with customers to maintain excellent communications with customers and conduct discussions on production and sales quality and engineering technologies. The company develops new-generation products in cooperation with customers and enhances product power conversion through technical discussions with the supply chain. It further optimizes the usage of social resources to reduce environmental pollution. The ultimate goal is to ensure in-depth cooperative relationships with customers and higher customer satisfaction with our products, technologies, and services.

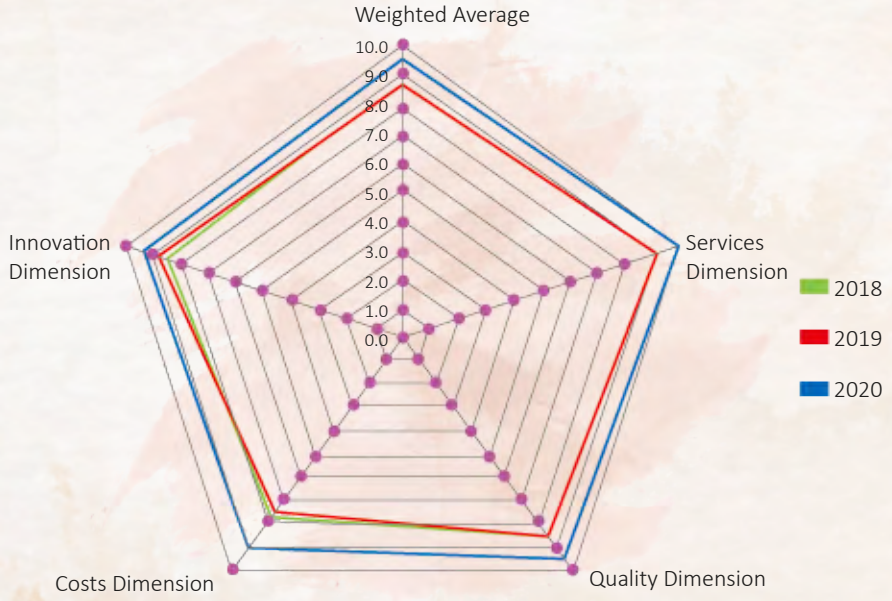
SAS therefore conducts customer satisfaction surveys on a bi-annual basis. Upon collection and organization of customer opinions, dedicated teams convene exclusive meetings to formulate strategies and directions of improvement with customer opinions as the main indicator. With regard to items with relatively low to zero satisfaction, the company conducts follow-up interviews with customers to clarify issues. Shortcomings will be analyzed and improvement strategies formulated to transform the concept of enhanced customer satisfaction into concrete action, hoping to earn the trust and praise of even more customers. The goal is to become our customers' best collaborative partner and to work with our customers in sustainable operations and development.

★ Customer Satisfaction for Polysilicon Products

The scope of satisfaction surveys consists of five major dimensions hoping to understand the needs of all customers from each different dimension: services, innovation, quality, costs and weighted average (general evaluation.) The maximum score for each dimension is 10 points (10 indicates maximum satisfaction, 6 indicates somewhat satisfied). If scores fall below 6 points, internal improvements are required. Customers assess each dimension and give their scores accordingly. They also identify shortcomings or directions for necessary improvements as a strategic reference for follow-up internal improvements.

In , the sales volume for solar products was greatly affected due to the poor solar energy market. So, SAS has drastically changed its sales strategy in 2019, and the focus was changed to silicon material application products instead of just solar products.

In 2020, the weighted average score of polysilicon products' overall customer satisfaction is 9.5 points (highest satisfaction), which is better than the score of 8.6 in 2019. This indicated that customers have a positive attitude towards the service quality of SAS. The scores from the five major aspects are all greater than 9 points (highest satisfaction), indicating good evaluation from customers. But SAS will not stop here, and will continue to uphold the spirit of "customer satisfaction" to actively communicate with customers to understand their voices, and seek solutions to meet the needs of the parties through mutual cooperation. In addition to regular conference calls and technical exchanges, SAS will continue to improve the cooperative relationship between all parties via on-site visits, telephone and email communications, etc.

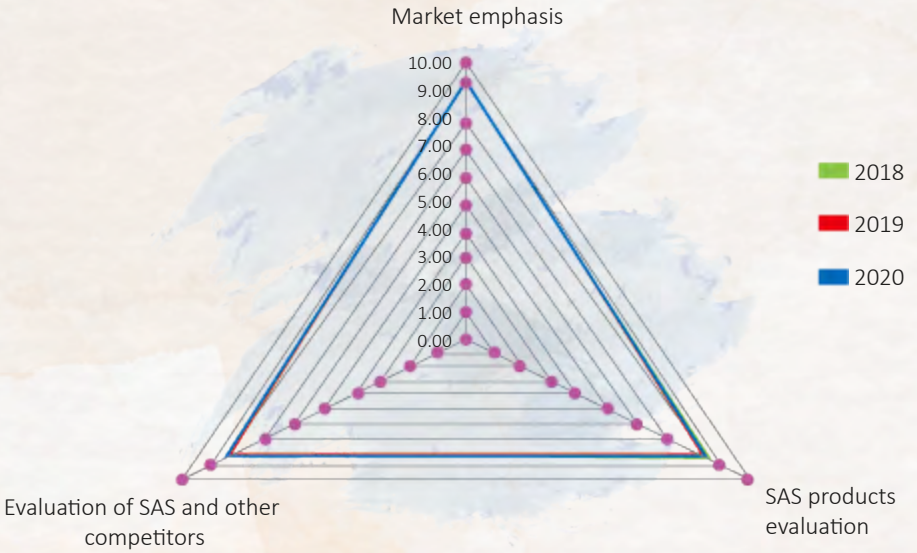


Polysilicon products customer satisfaction survey orientation

★ Solar Cells Customer Satisfaction

Since 2016, the existing 21 items of customer satisfaction assessment have been converted into 3 major dimensions for evaluation i.e. market emphasis, SAS products review, and review of SAS and other competitors, with a full score of 10 points for each dimension.

In 2020, the overall customer satisfaction for solar cell products received the full score of 10 (highest satisfaction). The weighted average score of the three major aspects is 8.57. In terms of customer evaluation for SAS, satisfaction levels for service, quality, and innovation items are all greater than 8 points, indicating that the satisfaction score is stable and positive. The overall satisfaction is maintained at a certain level in terms of client-side performance.



Dimensions for solar cells customer satisfaction survey

Our 2020 weighted average score for customer satisfaction is 8.57 points (mostly satisfied), indicating that the quality of our products and services did not slack due to the poor economy, and the client-side performance impression is still maintained at a certain level. Despite the positive feedback from customers, SAS does not rest on its laurels. The company continues to invest in the necessary equipment, upgrade product qualities, and conduct on-going technology development striving to break through the challenges from the market and the external economic environments. The company 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.

★ Product Services

SAS adheres to the principle of cells production with high-efficiency conversion, constant innovation and the development of high-efficiency products. SAS can rapidly integrate upstream and downstream technology development capacity through supply chain integration and technical interchange. The time required for a product launch is shortened; product reliability, enhanced; and quality confidence, increased, in order to more efficiently align products to the demands of end users. In terms of quality, SAS has stringent procedures, processes, and controls in handling customer information collection, product design and development, and manufacturing processes. Outstanding and stable product quality is ensured via systematic management at all phases. SAS also convenes daily, weekly, and monthly for management review meetings, plus annual review meetings to ensure continuous product improvements. PDCA is constantly carried out to enhance products and services, reduce costs and expenditures, and in turn, give back to society.

2.3 Customer Confidential Information Protection

★ Customer privacy

Not only committed to providing excellent customer services, SAS also places great emphasis on the protection of customer privacy and confidentiality. Relevant agreements are signed with customers to protect their classified information. Meanwhile, all staff members are required to strictly abide by SAS IPR policies and protect the confidential information of customers during business dealings in a rigorous manner.

In recent years, allegations of customer information leakage have emerged. SAS not only formulates confidentiality agreement regulations but also invests resources in the establishment of information security systems to ensure the proper protection of customer data. Regular and irregular audits are conducted to ensure the integrity of information security system operations. At the same time, internal personnel are required to strictly abide by SAS IPR policies and rigorously protect the confidential information of customers in business dealings. Relevant employee training is administered on an annual basis to emphasize the importance of confidentiality. Promote the concept of information confidentiality to protect the relevant privacy of customers and prevent losses caused by information leakage. In 2020, there has been no related complaints from customers or penalties imposed by the competent authority.

Customer Service Principles

★ Protection of intellectual property

In 2010, SAS adopted the Taiwan intellectual property management system (TIPS), and has successively passed the basic certification (2010-2011) and advanced certification (2012-2015), and obtained the AA-level certification in 2016. The company will remain committed to the protection and management of intellectual property. In recent years, we have strengthened confidentiality control and gradually structured a data classification system, defined confidentiality levels for internal and external documents, established different levels of labeling and circulation control methods, and established electronic equipment usage specifications. The Company has introduced Cloud virtual desktop and centralized data backup management, outgoing email inspection system, electronic storage device use restriction, and the factory shooting management methods. We also require key employees to sign NDA in order to prevent information security issues, and complete the deployment of the electronic TIPS internal audit form. Even more importantly, SAS organizes regular intellectual property training to reinforce the staff's understanding and awareness of the importance of confidentiality management and to shape a corporate culture concerned with confidentiality management. The goal is to apply excellent intellectual property management to safeguard the rights and interests of the company and its customers, improve customer trust, and increase product market share.

2.4 Product Liability

★ Product safety and liability

Due to the wide range of silicon material application products and to ensure the products comply with the EU RoHS (restriction of the use of certain Hazardous Substances in electrical and electronic equipment) international regulations and customer requirements for hazardous substances, SAS requires all of its products to be tested by a certified unbiased third-party laboratory. In addition, raw materials suppliers and packaging materials are also required to provide regular hazardous substance inspection reports issued by a certified third-party impartial unit laboratory in order to meet the product safety and non-toxicity requirements, and strengthen environmental friendliness and protection.

In addition, SAS is fully aware of the risks associated with solar cells and backend modules such as environmental impact of chemical substances used in manufacturing processes, risks of product use in different environments, and risks at different stages after the end of the product life cycle. Although there are currently no international laws and regulations for solar cell products labeling, SAS, upon much deliberation, still insists on complete labeling and indication of product ingredients, harmful substances, and usage safety to ensure safe and worry-free use by customers. In terms of marketing, SAS provides a detailed description of potential product risks in the media such as booklets of specifications and ensures conformity to legal, environmental, and customer requirements in all sales areas.

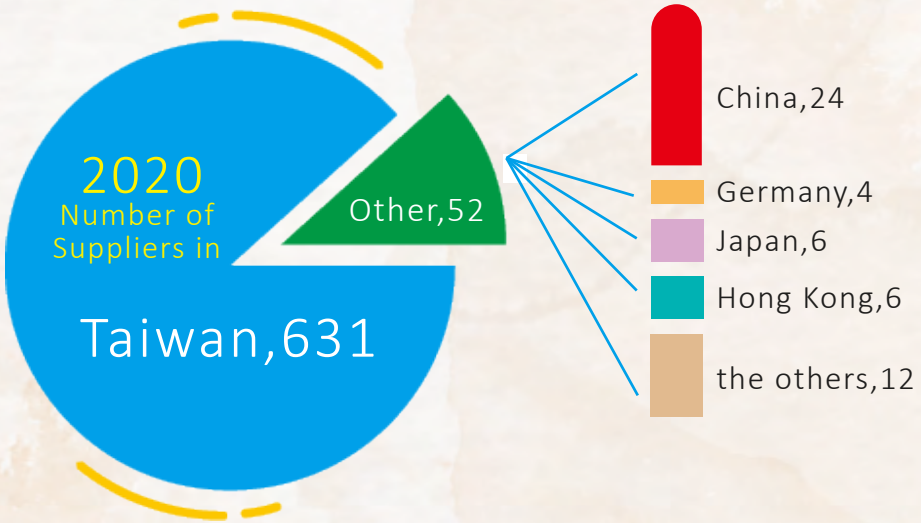
2.5 Upstream and Downstream Supply Chain

In view of increasing requirements for eco-friendliness, the demand for solar energy is growing and the cost for electricity generation is decreasing. Once the cost for solar power generation drops to the same price as market electricity, solar power will become one of the most competitive options available on the energy market. This will allow the market to expand further and thereby maximize eco-friendly effects. To pursue the ultimate objective of price competitiveness, the whole solar industry chain embraces the development goal of high efficiency at minimum costs.

★ Localized supply chain

SAS has its main production base in Taiwan and has therefore been actively cooperating with Taiwanese suppliers to implement the goal of supply chain localization. In 2020, Zhunan Branch, Yilan Branch, and FZtech Branch have a total of 683 suppliers. Among them, 631 suppliers are located in Taiwan and accounted for 92.4%.

By implementing supply chain localization, we can gradually reduce production costs via lowering the material transportation cost, reducing turnover inventory, and other measures in order to strengthen industry competitiveness in terms of cost. SAS adheres to concepts of green procurement from localized procurement to the management of raw materials. Localized procurement can enhance national competitiveness, increase local employment and stimulate local economic activities, minimize environmental impact and damage caused by long-distance transportation of raw materials, and thus reduce the importance of timeliness.



Number of Suppliers in 2020

03

Clean Green Energy Environment

3.1 Climate Change Risks and Opportunities

3.2 Raw Material and Water Resources Management

3.3 Pollution Prevention and Waste Reduction Management

★ Material Topic Strategy and Performance

MATERIAL TOPICS / CHAPTERS	STRATEGIES OF SINO-AMERICAN SILICON	2020 KEY RESULTS	2020 TARGETS	2021 AND FUTURE GOALS
GHG EMISSIONS / 3.1 CLIMATE CHANGE RISKS AND OPPORTUNITIES	* In terms of climate change "mitigation" actions, start from greenhouse gas/carbon footprint inventory to greenhouse gas reduction implementation * Actively achieve the greenhouse gas emission reduction goal through green design, green factory, energy management, efficient energy creation, energy conservation, as well as energy conversion products and solutions * Collaborate with 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 climate change-related challenges			* Introduce the climate change risk and opportunity assessment mechanism * Optimize greenhouse gas inventory and strengthen disclosure of GHG emissions from transportation and products used by the organization
ENERGY RESOURCES CONSUMPTION / 3.1 CLIMATE CHANGE RISKS AND OPPORTUNITIES 3.2 RAW MATERIAL AND WATER RESOURCES MANAGEMENT	* Continue to introduce the concepts of product life cycle and 4R circular economy, 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 * For high-efficiency energy creation operations, continue to adopt high-efficiency solar modules to plan and install solar power generation systems * Adopt a carbon reduction set up method for solar system constructions * Adopt environmentally friendly recyclable materials or recycled environmentally friendly second-use materials (such as environmentally friendly steel, environmentally friendly concrete, etc.) for system equipment or building a system * In terms of solar energy system maintenance operations, use the water, electricity, power generation, average performance ratio, and PR value soundness check management method to achieve effective system management.	* The energy-saving measures and management of Zhunan and Yilan branches can reduce approximately 1,117.7 metric tons of carbon dioxide emissions annually * In the second half of 2020, the proportion of recycled silicon ingot material was increased, and the percentage of recycled raw materials for polysilicon ingots reached 31.1% * The acceptance inspection of FZtech Branch's solar power system was completed, and the total grid-connected operation volume could reach 123,871.80 kW. * In terms of solar energy system maintenance and operation management, the global system operations in 2020 (including the Philippines power plant and the 151 maintenance power plant sites in Taiwan) have the total annual power generation capacity of 151,209,405 kWh, and the estimated carbon reduction is 76,965.59 metric tons of carbon dioxide emissions.	Achieved * Zhunan Branch annual power saving rate > 1% Achieved * Yilan Branch annual power saving rate ≥ 800,000 KW	* Zhunan Branch annual power saving rate > 1% * Yilan Branch annual power saving rate ≥ 800,000 KW * Zhunan Branch establish the ISO 50001 power management system * Zhunan branch obtain the green factory badge * Continue to construct solar energy systems with an annual capacity of ≥ 150,000 kW * Solar system power generation, unit power generation achievement rate ≥ 100%
POLLUTION PREVENTION (AIR AND WATER) / 3.3 POLLUTION PREVENTION AND WASTE REDUCTION MANAGEMENT	* Set improvement goals every year and continue to implement water recycling and waste reduction measures in order to collaborate with the promotion of the environmental management system * 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 according to the relevant regulations	The air, water, and waste pollution prevention and treatment is in 100% compliance with laws and regulations	Achieved * Operating parameters of the prevention (manufacturing) equipment conform to the environmental protection permits and service center management standards Achieved * Established the "Emergency Response Plan for Sudden Air Pollution Incidents" * Yilan Branch established the VOCs emission factor plan Plan termination	* Zhunan Branch recycle over 50% of the wastewater from the drilling process * Yilan Branch improve the quality of the wastewater discharge - COD <200 mg/L (Standard 480 mg/L) - SS<150 mg/L (Standard 320 mg/L) - Nitrate Nitrogen < 40 mg/L (Standard 50 mg/L)
WASTE MANAGEMENT / 3.3 POLLUTION PREVENTION AND WASTE REDUCTION MANAGEMENT	* Transform 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 of appropriately .	Through process transformation and optimization, the output of waste cutting sludge and sandblasting waste from Zhunan Branch has been zero	Achieved * The total amount of waste is treated using the resource method ≥ 85%	* The frequency of activated carbon replacement in Yilan Branch's organic air pollution treatment system is reduced by 30% (lower the output of waste activated carbon)

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 0.509 kgCO2e/KWH as announced by the Bureau of Energy, MOEA, in 2019

3.1 Climate Change Risks and Opportunities

In the 2020 World Economic Forum Risk Report, the top 5 items are all classified as "environmental" crises. Among them, "extreme weather" has been on the list for 8 consecutive years and ranked #1 for 5 consecutive years while "climate change" has occupied 2nd place for 3 consecutive years. According to the report, COVID-19 is the greatest short-term threat in 2021, but climate change is still one of the biggest long-term concerns. Therefore, global international enterprises and investment institutions are highly concerned about climate change-related issues. They have incorporated the possible climate change impacts into the overall business considerations, estimate the probability and impact of risks, and formulate risk response and mitigation plans as well as the crisis response mechanisms in order to deal with the possible impacts on their enterprises. For this topic, SAS has continued to support the climate initiatives/ carbon neutrality, and planned its own climate roadmaps. In terms of implementation, the Company has continued to implement the greenhouse gas mitigation and adjustment measures in phases from greenhouse gas inventory to energy management, energy conservation, carbon reduction, and then expanded to renewable energy development.

3.1.1 Greenhouse Gas Inventory

Greenhouse gas emission sources can be divided into six categories. Category 1 is direct GHG emissions, which include greenhouse gases (such as natural gas, gasoline, and diesel) used during the production process, greenhouse gases produced by fuels, as well as fugitive emission sources such as septic tanks and fire-fighting equipment. Category 2 is the indirect GHG emissions from imported energy, which mainly include indirect emission sources such as electricity and steam from purchased energy. Category 3 is the GHG emissions caused by transportation, which include the greenhouse gases produced by transportation and distribution of upstream raw materials and downstream products, employee commuting, and business travels. Category 4 is the GHG emissions caused by the organization's use of products, which include the greenhouse gases produced by the purchase of products and services, capital goods, and waste disposal from operations. Category 5 is the GHG emissions produced by using the organization's products, including greenhouse gases produced by the processing, utilization, and final disposal of products sold. Category 6 is indirect GHG emissions from other sources.

SAS currently discloses category 1 and category 2 GHG emissions. In the future, we will optimize the contents of the greenhouse gas inventory, and plan to strengthen the disclosure of category 3 to category 6 GHG emissions in 2021. SAS will also strengthen its carbon inventory database each year, compare the annual carbon emissions changes, conform to the establishment of the ISO 50001 energy management system to discover the hot spots that may require energy-saving improvements, and continue to improve and manage energy use in a more systematic manner.

According to the organization-based investigation results, the main emission source of SAS came from the carbon dioxide emissions generated from the power generation process for the electricity purchased to run the Company's operations, which accounts for over 90% of the Company's total GHG emissions. Therefore, SAS will give priority to power conservation as the Company's carbon reduction measure.

The results of SAS' 2020 greenhouse gas organization survey are shown in the table below.

GHG emissions

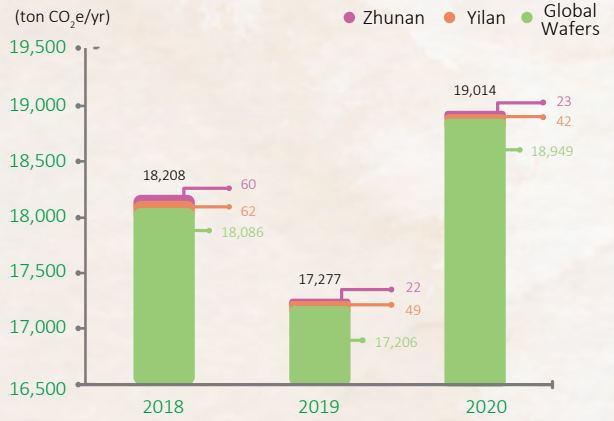
Unit: ton CO_2e

By company	Category	2018	2019	2020
Zhunan	Type 1	60	22	23
	Type 2	28,170	15,369	15,544
	Type1+2	28,229	15,391	15,568
Yilan	Type 1	62	49	42
	Type 2	36,608	29,883	21,295
	Type1+2	36,671	29,931	21,337
GlobalWafers	Type 1	18,086	17,206	18,949
	Type 2	554,968	509,321	571,812
	Type1+2	573,054	526,527	590,761
Total	Type 1	18,208	17,277	19,014
	Type 2	619,746	554,572	608,651
	Type1+2	637,954	571,849	627,665

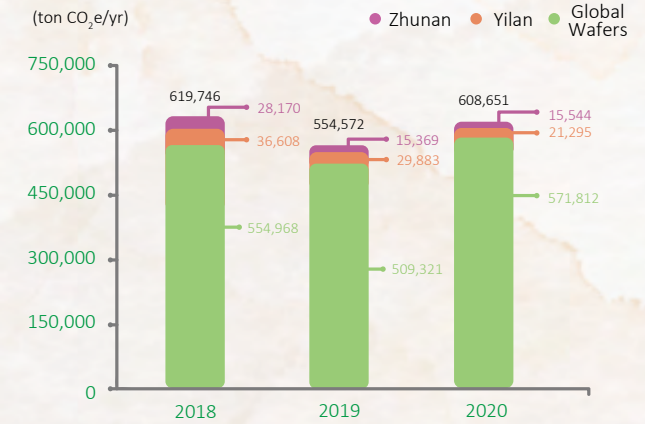
Note:

1. Scope of statistics:Zhunan Branch (originally Plant 2), Yilan Branch (Plants 1&3), and GlobalWafers.
2. The inventory was conducted in accordance with the "Greenhouse Gas Coefficient Management Table Version 6.0.4" of the EPA.
3. The 2020 electricity carbon emission coefficient is based on the announcement by the Bureau of Energy, MOEA; which is 0.509(kg CO_2e/ kWh) for 2019.

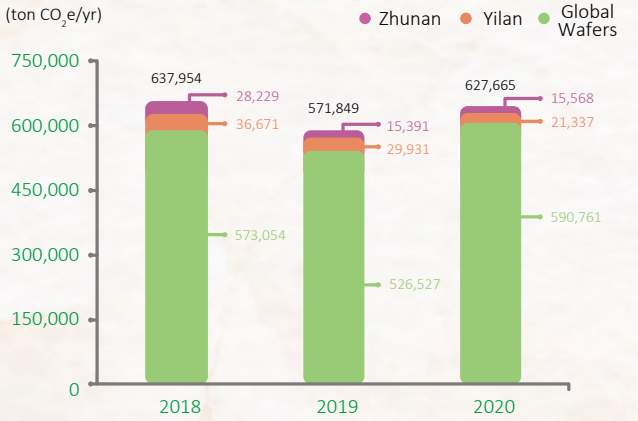
Type 1 GHG emissions



Type 2 GHG emissions



Total Greenhouse Gas Emission



Note: 1. Scope of statistics: Zhunan Branch (originally Plant 2), Yilan Branch (Plants 1 & 3), and GlobalWafers
2. The inventory was conducted in accordance with the "Greenhouse Gas Coefficient Management Table Version 6.0.4" of the EPA.
3. The 2020 electricity carbon emission coefficient is based on the announcement by the Bureau of Energy, MOEA; which is 0.509(kg CO_2e/ kWh) for 2019.

3.1.2 Energy Management, Energy Conservation, and Carbon Reduction

SAS uses electricity, natural gas, and diesel as energy sources. Its largest energy consumption is electricity. Therefore, electricity conservation is regarded as a priority for improvement measures. In collaboration with the statutory requirements of the Bureau of Energy, each plant has inspected its power consumption status to search for energy consumption reduction opportunities, and continuously achieved the power conservation target of over 1% each year via integrated control adjustments and equipment updates.

In terms of renewable energy utilization, in addition to the solar power system established by the Zhunan Branch in the early years to generate electricity for self-use, the electricity generated by the solar power system of the Yilan Branch and the solar system newly installed by the Zhunan Branch in 2019 have been sold to Taipower. So, they are not included and are repeatedly calculated as energy consumption.

Energy consumption volume by Zhunan & Yilan branches

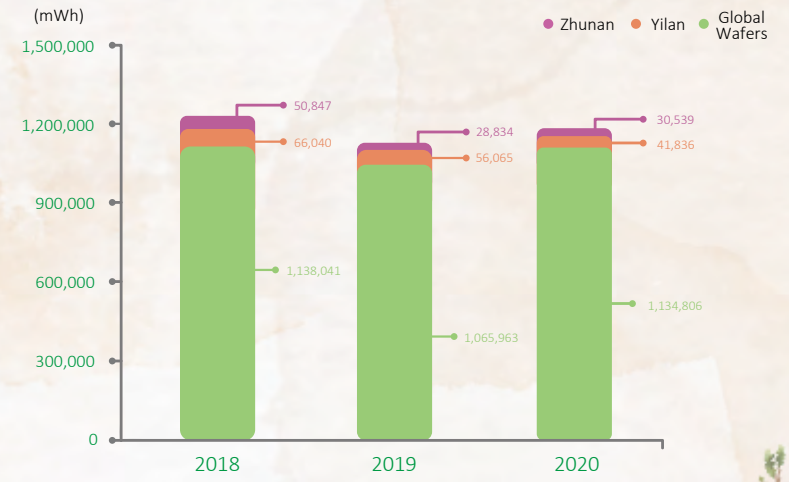
Unit: MJ

Item	Category	2018	2019	2020
	Externally purchased electricity	420,796.022	305,637,552	260,551,598
	Renewable energy (solar power)	5,760	277,186	6,505
	Natural gas	247,086	14,358	17,411
	Diesel	151,126	53,259	65,885

Note: 1. In 2018, Plant 1 of Zhunan Branch and Plant 2 of Yilan Branch were canceled. Scope of statistics starting 2018: Zhunan Branch (originally Plant 2), Yilan Branch (Plants 1 & 3)

2. Conversion unit: 1 degree of electricity = 3.6 million joules; 1 cubic meter of natural gas = 47.7 million joules; 1 liter of diesel = 31.524 million joules

Total electricity consumption



★ Energy-saving measures and results

Each plant of SAS has established energy-conservation plans every year with a single plant area's annual power conservation rate of >1% as the target. Zhunan and Yilan Branches have conserved 2,195,898 kWh of electricity in 2020, which is equivalent to reducing approximately 1,117.7 metric tons of carbon dioxide emissions. If the energy-conservation performances of GlobalWafers - Taiwan (GlobalWafers Headquarters, Zhunan Plant, and GlobalWafers Taisil Plant) are included, the total conservation rate is 7,152,051 kWh, which is equivalent to reducing approximately 3,640.2 metric tons of carbon dioxide emissions. The statistical energy-conservation performance is based on the newly added energy-conservation measures in the current year. Some of the energy-conservation measures extended from the previous year's cross-year performance are described in the table below to supplement the energy-conservation results.

2020 power conservation results for Zhunan & Yilan branches

Type	Measures	Total power savings (kWh)	Reduce carbon dioxide emissions ($kgCO_2e$)
Pure water system	RO water transfer pump frequency change control * Power saving estimation: Estimate power saving via the frequency conversion energy-saving formula	185,012	94,171
Wastewater system	Reduce the frequency of waste water blowers * Power saving estimate: Power saving by reducing the frequency of blower × operating time	81,760	41,616
Air compressor system	1.Reduce the operating pressure of the air compressor * Electricity conservation estimation: air compressor power × energy saving ratio of reduced operating pressure × operating time 2.Adjust the central vacuum supply pressure * Power saving estimate: Reduced vacuum pressure value for electricity conservation × operating time	130,874	66,615
Air conditioning system	1.Add frequency converter to air-conditioning hot water circulating pump * Power saving estimation: Estimate power saving via the frequency conversion energy-saving formula 2.Reduce P.C.W. output pressure * Power saving estimate: output power saved by reducing pressure × duty time 3.The water outlet temperature of the ice water machine is increased from 9℃ to 10℃ Add 1 PCW plate heat exchanger, increase the heat exchange contact area by 25%, and increase the temperature of ice water supply * Power saving estimate: Power saving rate for increasing the temperature of the ice machine × operating time 4.Reduce the operating frequency of the air-conditioning box fan * Power saving estimate: Reduce the operating frequency to save electricity × operating time	703,776	358,222
Lighting sources	Replacement of T5 lighting with T8 lighting * Power saving estimation: the power difference between T5 and T8 lamps × the number of replacement tubes × the operating time	50,457	25,683
Renewable energy	Install solar modules on the roof of the plant to generate electricity * Electricity saving calculation: the solar energy kWh production actually measured	1,044,019	531,406
Total		2,195,898	1,117,712

Note: 1. The electricity carbon emission coefficient is based on the announcement by the Bureau of Energy, MOEA; which is 0.509 (kg CO2 e/ kWh) for 2019.

2. 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.

3.1.3 Renewable Energy Development

SAS has continued to pay attention to various climate action plans after the Paris Agreement. After TSMC joined RE100, we are well aware that building and using renewable energy is a necessary and primary method for companies to achieve the SBT reduction goals. Therefore, SAS has actively invested in a solar power plant development since 2015 through the FZtech Branch. In addition to building a power station in Palo City, Leyte Island, Philippines; SAS is also cooperating with the non-nuclear homeland policy of the domestic government as well as the Bureau of Energy's "Million Rooftop Solar Panel" and two-year solar photovoltaic projects. The goal is to fully deploy the solar power station market in Taiwan and assist the government in continuously increasing Taiwan's renewable energy power generation capacity. In terms of solar energy system maintenance and operation management, the global system operations in 2020 (including the Philippines power plant and the 151 maintenance power plant sites in Taiwan) have a total annual power generation capacity of 151,209,405 kWh, and the estimated carbon reduction is 76,965.59 metric tons of carbon dioxide emissions.

The Zhunan Branch has cooperated with the FZtech Branch in 2019 to construct a hybrid energy system on the roof of the Zhunan Branch plant; integrated 99 KW overlay solar photovoltaic power generation system, 100 KW/350 kWh energy storage system, and adjustable grid-connected 600 KW generator; and retrofit the micro-grid system in the plant. The construction of each subsystem was completed in second quarter of 2019, which has also combined the development and integration of energy storage devices into the energy management system platform in order to meet the future market demand for power storage management.

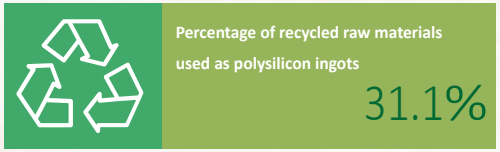
3.2 Raw Material and Water Resources Management

3.2.1 Raw Material Management

Since the second half of 2019, SAS Zhunan Branch has fully converted its products from solar silicon ingots and ingot bars to polysilicon application products. In addition to product transformation under market pressure, we have also optimized the process content.

- By substituting water for cutting carrier (cutting oil + silicon carbide powder) to cut/grind crystal ingots, there were 0 cutting sludge output and reduced VOCs and granular pollutants in 2020. The effort has also lowered the flow of washing sludge into the wastewater treatment system, which indirectly reduced the output of wastewater and sludge.
- The silicon sapwood impurities are removed via diamond wire instead of alumina blasting, and the cut silicon sapwood containing impurities is sold as scrap, which can be used as alumina. In 2020, there was 0 output of sandblasting waste.

Polycrystalline silicon application products are based on product specifications and customer requirements. The silicon materials used in the production of ingots are mainly pure silicon materials, and silicon recycled materials purchased externally cannot be used. Only a small amount of in-house silicon sapwood (silicon recycle material) can be recycled and used. However, we have continued to communicate with customers and gradually passed the customers' product verification. In the second half of 2020, we have increased the proportion of recycled silicon crystal ingots used. In addition to increasing the proportion of recycled raw materials and reducing the use of source materials, this effort can also create a positive impact on the carbon emissions of products.



2020 Recycled Raw Materials Utilization Status

Product item	Unrenewable Raw Materials Utilization Status (Silicon Pure Material + Boron)	Renewable Raw Materials (Silicon auxiliary material + scrap return material)	Water recycling rate
Polycrystalline silicon ingot	488,953 kg	220,546 kg	31.1%

Note: Recovery rate = total weight of renewable raw materials / (total weight of non-renewable raw materials + total weight of renewable raw materials)

For the solar power plant, the installed solar power plant system can be used for over 25 years. The materials used, including modules, electrical equipment, and steel structures, are all valuable metals that can be recycled. After the end of the wholesale contract with Taipower or if there is any damage during the process of use, it can be fully recycled and reused to reduce the production of waste.

In addition, SAS has introduced the 4R (Redesign) concept of product life cycle and circular economy to 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. Not only can this effort reduce energy consumption and pollution emissions from the source; it can also lower operating costs, reduce energy resource consumption, and mitigate the impact on the environment.

3.2.2 Water Resources Management

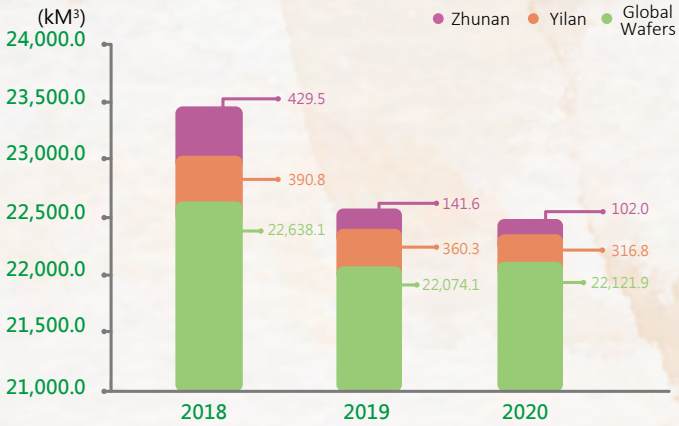
The extreme climate problem in recent years has caused extreme rainfall in Taiwan. The stability of water supply has been tested, and water resource management has also become particularly critical. Water utilization by SAS and its plants in Taiwan comes from tap water supplied by Taiwan Water Corporation and ground surface water. The Company does not use underground water. Therefore, there are no problems of underground water over-utilization, land subsidence, or environmental ecology damage. In terms of water resources, Zhunan Branch's water supply comes from Dongshing Water Treatment Plant, and its raw water source is Yongheshan Reservoir. Yilin Branch's water supply comes from Longde Water Treatment Plant, and its raw water source is Xincheng River. None of the original water sources are classified as national or international nature reserves or from sensitive water origins (considered by experts as relative area, special function, rare, threatened, endangered system, or some type of endangered species live in the water source). In the field of water resource conservation, SAS plant employees are fully committed to recycling (including rainwater and process water recycling) and reuse. Preservation of precious water resources has been incorporated as a key link of water recycling operations.

2018~2020 Water withdrawal, discharge, and consumption volume

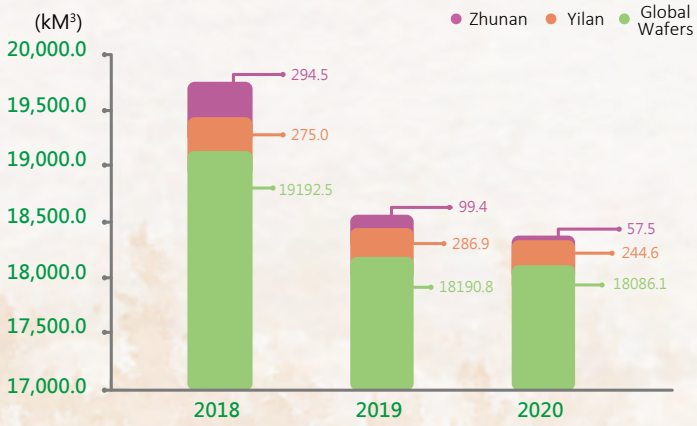
Unit: million liters (kM^3)

Category		2018			2019			2020		
		SAS	GlobalWafers	Total	SAS	GlobalWafers	Total	SAS	GlobalWafers	Total
Water withdrawal quantity	Surface water	0.0	1,275.7	1,275.7	0.0	1,240.2	1,240.2	0.0	1,250.3	1,250.3
	Underground water	0.0	11,587.6	11,587.6	0.0	11,287.0	11,287.0	0.0	10,810.2	10,810.2
	Seawater / produced water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Water plant - raw water	174.4	0	174.4	174.5	0	174.5	293.6	0	293.6
	Water plant	643.2	9,774.8	10,418.0	336.4	9,546.9	9,883.4	125.3	10,061.4	10,186.7
	Total	817.6	22,638.1	23,455.7	510.9	22,074.1	22,585.1	418.8	22,121.9	22,540.7
Water Discharge Quantity	Surface water	0.0	8,515.8	8,515.8	0.0	7,506.7	7,506.7	0.0	6,631.8	6,631.8
	Underground water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Seawater	0.0	4,679.3	4,679.3	0.0	4,584.7	4,584.7	0.0	4,652.8	4,652.8
	Wastewater Treatment Facility	569.5	5,997.4	6,566.9	386.3	6,099.4	6,485.7	302.1	6,801.4	7,103.5
	Total	569.5	19,192.5	19,762.0	386.3	18,190.8	18,577.1	302.1	18,086.1	18,388.2
Water Consumption Quantity		248.1	3,445.6	3,693.7	124.6	3,883.3	4,008.0	116.8	4,035.8	4,152.6

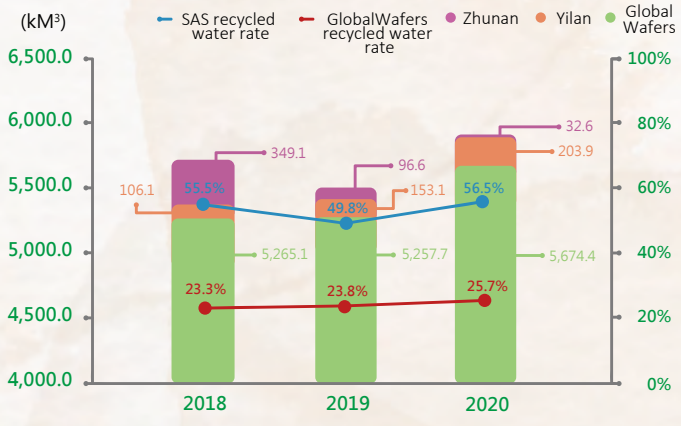
Water withdrawal quantity



Water Discharge Quantity



Recycled water quantity



Note: 1. Scope of statistics: Zhunan Branch (originally Plant 2), Yilan Branch (Plants 1 & 3), and GlobalWafers
2. Water recovery rate = recovered water/total water withdrawal.

In addition, many studies have shown that the establishment of a surface-type solar system can slow down the rate of water evaporation and increase the water resource utilization rate, and the solar panels can block direct sunlight to the water surface and reduce algae growth in the water. This can slow down the eutrophication phenomenon of water, and increase the utilization value of water resources. The FZtech Branch of SAS has integrated Taiwan's solar energy technology and invested in the development of surface solar systems by collaborating with the irrigation association to construct a 9.85 Mwp surface-type solar power generation system on a large pond in Taoyuan area, which has completed the parallel power generation connection. The goal is to increase the value of use for water resources, which is conducive to sustainable ecological development.

3.3 Pollution Prevention and Waste Reduction Management

Regarding pollution and emissions, SAS installs adequate pollution control equipment with corresponding treatment capabilities to maintain the efficiency of treatment operations. Every piece of equipment is regularly maintained and inspected. Dedicated specialist personnel are appointed to conduct relevant operations in accordance with relevant regulations to reduce pollutant emission concentrations, ensure compliance with legal standards, and minimize environmental hazards and impacts with the ultimate goal of realizing the vision of environmental protection and sustainability.

3.3.1 Air Pollution Control

The production processes of various SAS plants are different, so the process exhaust gas from each plant area is slightly different. Zhunan Branch has 4 types of waste gas: acidic, alkaline, volatile organic compounds, and particulate pollutants. Yilan Branch (including Plant 1 and Plant 3) has 3 major types of waste gas: acidic, alkaline, and volatile organic compounds. In terms of waste gas treatment, both acidic waste gas and alkaline waste gas are treated by a central scrubber. Volatile organic compounds waste gas is treated differently due to the different features of each plant. Zhunan Branch uses scrubbers for treatment while Yilan Branch uses activated carbon adsorption towers. Particulate pollutant waste gas is only produced in Zhunan Branch, and is treated via bag-type dust collectors.

The air pollution prevention equipment operations of SAS are performed in accordance with the contents of the fixed pollution source operating permit. To improve the efficiency of acid waste gas treatment in 2019, Yilan Branch Plant 3 has added a scrubber tower to the original control equipment to split the waste gas treatment volume. The goal is to enable the exhaust gas to come into full contact with the circulating water of the scrubber tower, and the residence time of the exhaust gas treatment is increased to improve the treatment efficiency. This can also help us flexibly arrange the tower cleaning and washing operations when the scrubber tower residue has built up and maintained the treatment efficiency of the scrubber tower.

▲ Yilan Branch Plant 3 adds a washing tower

We perform fixed pollution source inspections in accordance with the inspection frequency as specified by the permit. Zhunan Branch inspects acidic pollutants, volatile organic compounds, and particulate pollutants every year; and Yilan Branch inspects acidic pollutants once every 5 years and volatile organic compounds once per year. The air pollutant emissions disclosed below take into account the consistency of the scope of calculation every year. So, the acidic pollutants test conducted by the Yilan Branch once every 5 years is not included.

2020 Gaseous Pollutants Discharge Volume

Unit: (ton/yr)

Plant area / Pollutant item	Zhunan & Yilan branches	GlobalWafers - Taiwan	Total
Particulate Matter Pollutants (Par)	0.1743	0.7006	0.8749
Nitric acid (HNO_3)	0.1500	0.1068	0.2568
Hydrofluoric acid (HF)	0.0014	0.2181	0.2195
Hydrogen Chloride (HCl)	0.0002	0.2274	0.2276
Volatile Organic Compound(VOC)	0.7103	4.7806	5.4909
Nitrogen oxides (NOx)	-	7.5330	7.5330
Ammonia (NH_3)	-	1.1580	1.1580
Phosphoric acid (H_3PO_4)	-	0.0165	0.0165
Sulfuric Acid (H_2SO_4)	-	0.0025	0.0025

Note: 1. Air pollution emissions estimation is related to the environmental protection regulations of various countries and must take consistent estimation standards into account; therefore, GlobalWafers overseas region data is not included within the scope of statistics.

2. GlobalWafers Taiwan: GlobalWafers Headquarters, Zhunan Plant, and Taisil Plant.

3. Emission estimation is based on the data from third-party qualified laboratory test reports.

4. Regular pollution source emission matter is disclosed in accordance with the regular pollution source operation permit.

3.3.2 Water Pollution Prevention

The plants of SAS are located in different regions, and their wastewater was discharged to the Zhunan Park Sewage Treatment Plant and Letzer Industrial Park Sewage Treatment Plant of the Hsinchu Science Park Bureau, MOST, for management. To be able to monitor and respond immediately, water volume and water quality monitoring facilities (monitoring pH value and fluoride ion concentration) are set up before discharge, and regular wastewater testing and reporting are performed in accordance with the law. The quality of wastewater discharged must meet or exceed the regulatory requirements. There are also random inspections at the discharge outlets on an irregular basis to double check the quality of the discharged water. In 2019, there were no major leakage or overflow incidents from the SAS plant areas.

SAS gives priority to production source reduction as its water pollution prevention strategy. Under the principle of waste liquid separation and reclassification treatment, wastewater is classified according to its characteristics and then treated by the wastewater treatment facility in the factory. The Zhunan Branch and Yilan Branch Plant have established a complete biological treatment system (anaerobic + aerobic biological treatment) in addition to the chemical treatment system in order to strengthen the wastewater treatment efficiency. According to the 2019 SAS wastewater discharge water quality analysis results, the pH value of the wastewater discharged from each plant was controlled between 6-9 (the control standards of the two districts are all 5-9), suspended solids were controlled below 250 mg/liter (the control standards of the Science Park Bureau and Letzer Industrial Park Management Center are <300 mg/liter and <320 mg/liter, respectively), the chemical oxygen demand was controlled below 250 mg/liter (the control standards of the Science Park Bureau and Letzer are <500 mg/liter and <480 mg/liter, respectively), and the fluoride ion concentration was controlled at less than 11 mg/liter (the control standards of the two districts are all <15 mg/liter). The results indicated that the stability of the wastewater treatment equipment in SAS plants is exceptional.

3.3.3 Waste Management

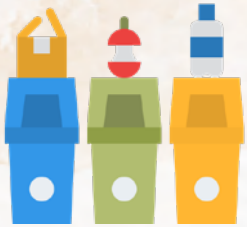
The first priority of waste management strategy by SAS is to focus on reduction at the source by improving process designation and reducing the use of raw materials from the source to lower waste output, followed by the second priority of recycling and reuse in the factory. Not only can the efforts increase the recycling rate for process materials and reduce waste output, they can also reduce the use of raw materials, outsourced semi-finished products, and consumables as well as transportation energy consumption. The third priority is to recycle and reuse the resources outside of the plant to enhance the residual value of waste. The last is commissioned treatment methods (incineration, physical treatment, chemical treatment, burial, etc.). In addition to the "Regulations Governing Determination of Reasonable Due Care Obligations of Enterprises Commissioning Waste Clearance," SAS has also established in-plant waste management procedures to visit high-risk waste treatment vendors at least once a year, perform written data review of newly cooperating waste treatment vendors before signing a contract, and conduct on-site inspections at the treatment plant to ensure that the treatment vendor has sufficient equipment (implementation) capacity to properly treat the wastes received. The discarded solar panels are legally recycled and processed via the Environmental Protection Administration's "Waste Solar Panel Recycling and Disposal System." At present, all wastes produced by SAS are treated domestically and there is no cross-border (overseas) handling.

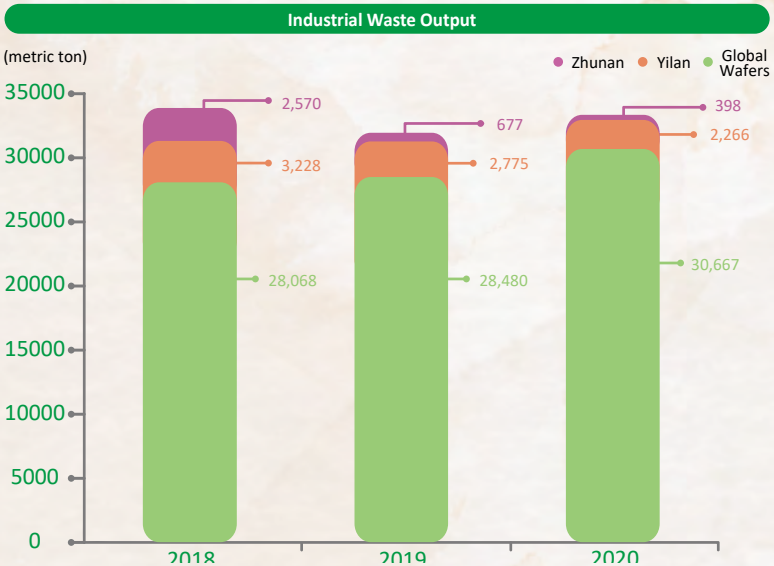
In 2018, approximately 50% of the total waste treatment volume of SAS Yilan Branch was calcium fluoride sludge. Therefore, how to reduce the amount of calcium fluoride sludge has become its first priority for waste reduction. In 2019, we first tested the effectiveness of calcium fluoride sludge reduction in the Yilan Branch Plant 1 by optimizing wastewater treatment methods. The main optimization measures include: 1. Extend the wastewater reaction time and regularly calibrate the detection electrode to effectively control the calcium carbonate dosage and avoid excessive dosing. 2. Regularly replace or clean the filter cloth of the dehydration machine to increase the dehydration efficiency and reduce the moisture content of the sludge. 3. Dry the temporarily stored sludge to further reduce the moisture content. Through optimization measures, the output of calcium fluoride sludge per unit produced by the Yilan Branch Plant 1 in 2019 was reduced by 1.52% compared to that of 2018. In addition, Plant 3 of Yilan Branch has planned to start the parallel wastewater treatment optimization measures in 2020 to reduce the amount of calcium fluoride sludge.

Our industrial waste output in the past 3 years has declined each year, of which the Zhunan Branch exhibited the most significant decrease. 2018 is the year of decline for the solar energy industry, and SAS has adjusted its production capacity and products according to the market trend. In 2018, SAS deactivated the Zhunan Branch Plant 1 and Yilan Branch Plant 2 while introducing the DW wafer to replace the SW wafer at the Zhunan Branch, which significantly reduced the amount of carrier used and the waste cutting oil (mud) output. In 2019, the solar energy market continued to shrink, and SAS has changed its sales strategy. The Zhunan Branch changed its output focus to silicon material application products and adjusted its production capacity, which greatly reduced the amount of grinding wastewater (the amount of sludge produced by treating wastewater) and the output of waste crucibles.

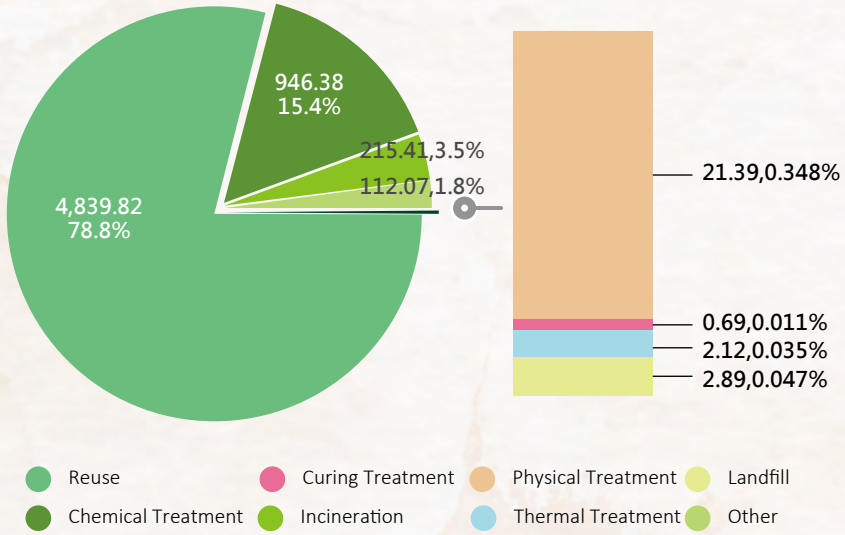
Among the total output of industrial waste by SAS and GlobalWafers, general industrial waste accounted for 81.6% (27,189.84 metric tons) and hazardous industrial waste accounted for 18.4% (6,140.77 metric tons). For SAS, the total output of industrial waste was 2,663.91 metric tons. Among them, general industrial waste was 2,657.43 metric tons (accounted for 99.8% of the total amount of silicon crystal waste produced by SAS). In terms of waste treatment methods, reuse accounted for the highest ratio of 63.1% (1675.56 metric tons), followed by heat treatment at 17.4% (461.68 metric tons). In terms of hazardous industrial waste, 6.48 metric tons were produced by SAS (accounting for 0.2% of the total waste produced by SAS), and the waste treatment methods composed of physical treatment at 78.4% (5.08 metric tons) and reuse at 21.6%(1.4 metric tons).

In 2020, there were no major leakage incidents in our plants, and no major regulation violations were found by the waste treatment vendors commissioned by SAS for treatment (reuse).

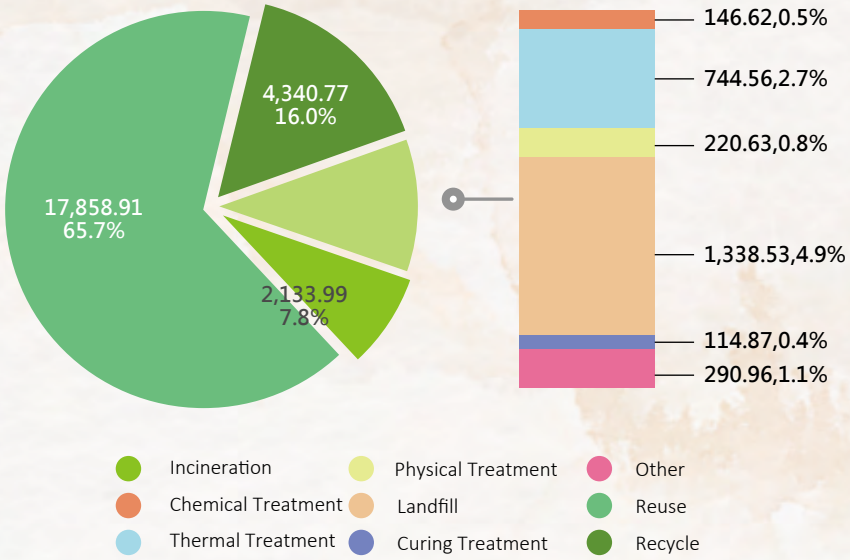




2020 Hazardous Industrial Waste Disposal Methods Distribution



2020 General Industrial Waste Disposal Methods Distribution



Note:1. Scope of statistics: Zhunan Branch (originally Plant 2), Yilan Branch (Plants 1 & 3), and GlobalWafers

2. Statistical information in Taiwan is based on the data declared by the "Solid Waste Report and Management System" of the Environmental Protection Administration.

04

LOHAS Workplace and Social Joint Prosperity

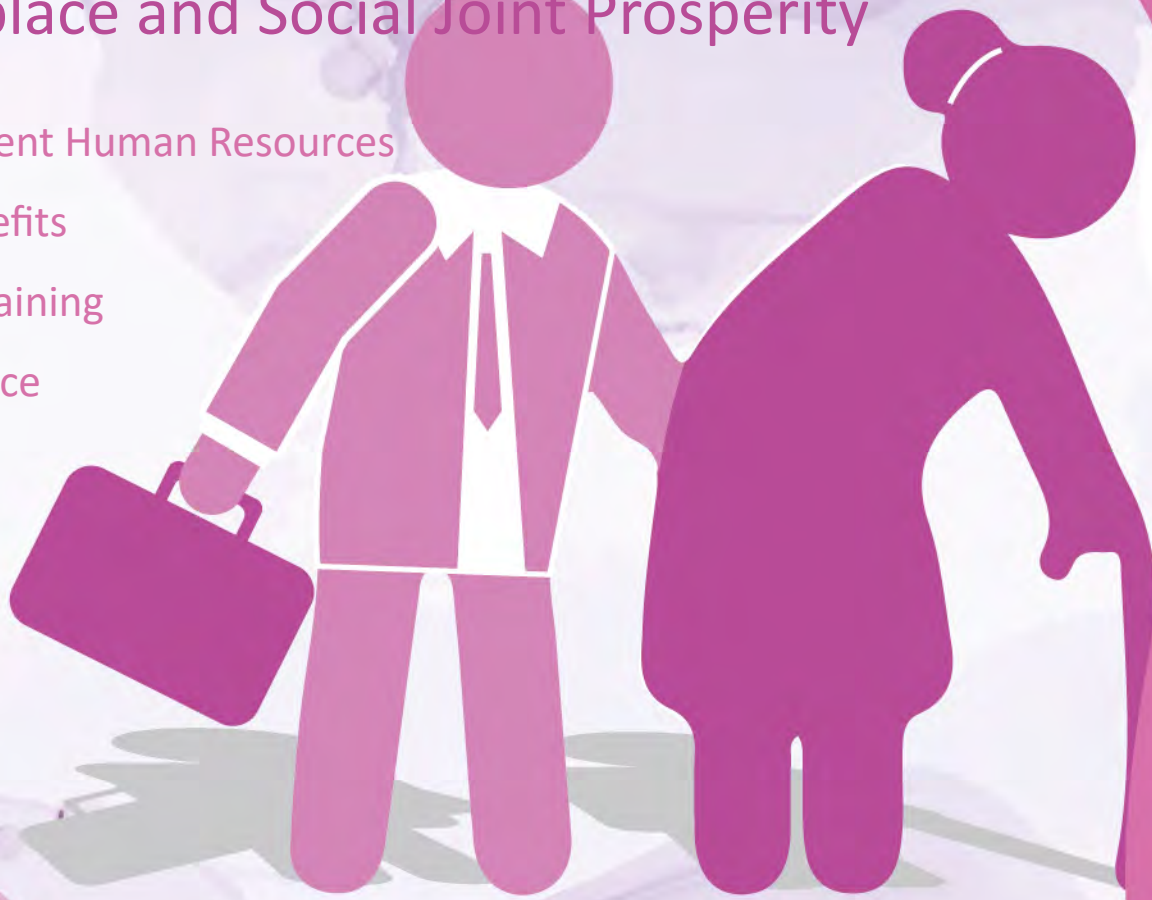
4.1 Talents Recruitment Human Resources

4.2 Salaries and Benefits

4.3 Education and Training

4.4 Friendly Workplace

4.5 Social Care



★ Material Topic Strategy and Performance

MATERIAL TOPICS / CHAPTERS	STRATEGIES OF SINO-AMERICAN SILICON	2020 KEY RESULTS	2020 TARGETS	2021 AND FUTURE GOALS
EMPLOYEE EDUCATION & TRAINING / 4.3 EDUCATION AND TRAINING	* Planning the next year's education and training based on the Company's operating goals, various department KPIs, functional requirements, etc. * Review the class performance and the goal achievement status each quarter as a reference for future improvement.	* Yilan Branch general course attendance rate ≥ 85% * Zhunan Branch education and training program implementation rate 100%	Achieved * Yilan Branch general course attendance rate ≥ 85% Achieved * Zhunan Branch education and training program implementation rate 100%	* Yilan Branch general course attendance rate ≥ 85% * Zhunan Branch education and training program implementation rate 100%
FRIENDLY WORKPLACE / 4.4 FRIENDLY WORKPLACE	* Create a friendly working environment to ensure the safety of employees in the workplace and pay attention to their physical and mental health as well as work-life balance * Introduce an Occupational Health and Safety management system; focus on social expectations, management level, and employee participation; and look at Occupational Health and Safety under the perspective of sound operation and sustainability	* Special group care and tracking management 100% * Zhunan Branch has added labor-saving devices to the polycrystalline cutting station, which can reduce handling by 1,604 kg/day and reduce the risk level from high/medium load to medium/low load	Achieved * Special group care and tracking management 100% Achieved * Zhunan Branch health management course ≥ 10 sessions Achieved * Zhunan Branch multi-cutting station human factors engineering improvement Achieved * Established a respiratory protection plan	* Special group care and tracking management 100% * Zhunan Branch health management course ≥ 10 sessions * Zhunan Branch added labor-saving devices to the drill station to reduce the risk of musculoskeletal injuries to employees * Establish the charging safety-related mechanism in the plants

4.1 Talents Recruitment Human Resources

SAS embraces a spirit of respect for the labor rights of its employees and equal employment opportunities. During the recruitment and hiring process, the company does not adopt any discriminatory decisions that have a negative impact on employment, salaries, promotions, and rewards based on ethnicity, skin color, age, gender, sexual orientation, gender identity and expression, race or nationality, disability, pregnancy, religious beliefs, political affiliation, group backgrounds, veteran status, protected gene information, or marital status. The company also provides fair, equal, and safe employment opportunities and environments and widely recruits professional talents of varied gender, age, experience, and expertise with the goal of becoming a further innovative and competitive enterprise.

In 2020, SAS (Headquarters and Zhunan, Yilan, FZtech branches) and GlobalWafers had a total of 7,593 employees, and 667 employees worked at SAS. Among them, male accounted for 71.2%, female accounted for 28.8%, under age 30 accounted for 11.7%, age 30~50 accounted for 83.7%, over age 50 accounted for 4.6%, and the average age of employees is 39. If divided based on work area, Hsinchu accounted for 4.9%, Zhunan accounted for 21.3%, and Yilan accounted for 73.8%. According to work attributes, direct personnel accounted for 61% and indirect personnel accounted for 39%. According to the type of employment, all of SAS employees are full-time, and there is no part-time employee. In terms of labor contracts, fixed contracts accounted for 3.7%, and non-fixed contracts accounted for 96.3%.

2018~2020 Staff Structure Analysis

Staff structure / Year		By gender		Full-time/ Parttime		By employment contract		By nature of work		By education level					By age			Area		Subtotal	Total
		Male	Female	Official (General Employees)	Non-official (Dispatch, part-time)	Unfixed Term	Fixed Term (Appoi-ntment)	Direct	Indirect	Doctorate degree	Master degree	College	Senior high school and vocational school	Junior high school and below	< age 30	age 30-50	>age50	Taiwan	Offshore		
2018	Sino-American Silicon	693	226	919	0	791	128	633	286	4	97	573	213	32	247	650	22	919	0	919	8027
	GlobalWafers	5,371	1,737	6,558	550	6,324	784	4,212	2,896	62	518	1,513	4,563	452	1,494	4,150	1,464	1,660	5,448	7,108	
2019	Sino-American Silicon	638	207	845	0	706	139	582	263	5	89	541	186	24	206	610	29	845	0	845	7,574
	GlobalWafers	5,145	1,584	6,286	443	6,054	675	4,133	2,596	56	497	1,452	4,309	442	1,240	3,951	1,538	1,590	5,139	6,729	
2020	Sino-American Silicon	475	192	667	0	642	25	407	260	3	87	411	146	20	78	558	31	667	0	667	7,593
	GlobalWafers	5,326	1,600	6,484	442	5,912	1,014	4,089	2,837	57	499	1,451	4,492	427	1,312	3,951	1,699	1,592	5,334	6,926	

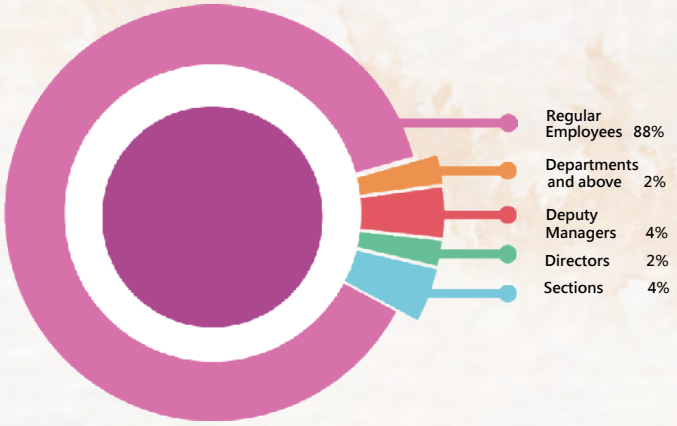
★ Hiring of local personnel and disabled persons

In terms of social care, SAS supports the employment of people with disabilities and has established channels to hire people from this demographic. As of 2020, SAS has employed a total of 8 people with disabilities, which accounted for 1.2% of all employees. SAS is in compliance with the government's regulations to employ people with disabilities.

★ Supervisor

In terms of management level, the total number of supervisors is 273 of which 74.4% are males and 25.6% are females. In terms of management ranks, there are 51 high-level supervisors (department level or higher), 93 managers or deputy managers, 35 director-level personnel, and 94 sectional-level personnel.

All Levels	Sino-American Silicon (Headquarters and Zhunan, Yilan, FZtech branches)				GlobalWafers Taiwan (GlobalWafers Headquarters, Zhunan Plant, Taisil Plant				Total			
	Male	Female	Total	Percentage	Male	Female	Total	Percentage	Male	Female	Total	Percentage
Departments and above	11	4	15	2.2%	32	4	36	2.3%	43	8	51	2.3%
Deputy Managers	25	4	29	4.3%	42	22	64	4.0%	67	26	93	4.1%
Directors	3	4	7	1.0%	22	6	28	1.8%	25	10	35	1.5%
Sections	10	10	20	3.0%	58	16	74	4.6%	68	26	94	4.2%
Regular Employees	426	170	596	89.4%	998	392	1,390	87.3%	1,424	562	1,986	87.9%
Total	475	192	667	100%	1,152	440	1,592	100%	1,627	632	2,259	100%



★ 2020 New Recruits and Leaving Employees Statistics

In 2020, the number of new employees for SAS and GlobalWafers in Taiwan is 196. In terms of gender for the previous year, new male employees account for 5.6% of the total, and women account for 2.4%. In terms of age, new recruits between 30 and 50 years old accounted for 4.8%, followed by new recruits younger than 30 years old at 3.0%. When employees submit their resignation letters, the HR department would immediately schedule an exit interview to understand the reasons for the resignation. This also enables the HR department to provide active assistance in adjustments and detailed explanations concerning work contents, personal characteristics, and identified problems to achieve the goal of talent retention. In addition, when the Group (including the solar business group and the semiconductor business group) has a job vacancy, priority will be given to each plant for internal recruitment. After the person who wants to transfer is approved by the unit manager, the HR personnel will assist employees with the interviews and subsequent transfer matters.

2018~2020 Statistical Analysis for New Employees

Year		2018										2019										2020											
Area		Yilan		Zhunan		Hsinchu		GlobalWafers - Taiwan		Total		Yilan		Zhunan		Hsinchu		GlobalWafers - Taiwan		Total		Yilan		Zhunan		Hsinchu		FZtech Inc.		GlobalWafers - Taiwan		Total	
Gender	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	%
Male	< age 30	10	0.3%	13	0.4%	2	0.1%	64	2.0%	89	2.8%	57	2.2%	0	0.0%	1	<0.1%	34	1.3%	92	3.6%	1	<0.1%	2	0.1%	2	0.1%	0	0.0%	48	2.0%	53	2.2%
	age 30~50	15	0.5%	6	0.2%	6	0.2%	108	3.4%	135	4.2%	39	1.5%	0	0.0%	1	<0.1%	43	1.7%	83	3.2%	3	0.1%	6	0.2%	0	0.0%	3	0.1%	68	2.8%	80	3.3%
	> age 50	0	0.0%	0	0.0%	2	0.1%	5	0.2%	7	0.2%	0	0.0%	0	0.0%	1	<0.1%	1	<0.1%	2	0.1%	0	0.0%	1	<0.1%	0	0.0%	0	0.0%	3	0.1%	4	0.2%
Female	< age 30	5	0.2%	1	<0.1%	3	0.1%	33	1.0%	42	1.3%	6	0.2%	0	0.0%	3	0.1%	31	1.2%	40	1.6%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	20	0.8%	20	0.8%
	age 30~50	4	0.1%	3	0.1%	7	0.2%	48	1.5%	62	1.9%	9	0.3%	1	<0.1%	3	0.1%	21	0.8%	34	1.3%	1	<0.1%	1	<0.1%	1	<0.1%	0	0.0%	33	1.4%	36	1.5%
	>age 50	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	<0.1%	1	<0.1%	2	0.1%	0	0.0%	0	0	1	<0.1%	0	0.0%	2	0.1%	3	0.1%
Total		34	1.1%	23	0.7%	20	0.6%	258	8.1%	335	10.5%	111	4.3%	1	<0.1%	10	0.4%	131	5.1%	253	9.8%	5	0.2%	10	0.4%	4	0.2%	3	0.1%	174	7.1%	196	8.0%

2018~2020 Statistical Analysis for Resigned Employees

Year		2018										2019										2020											
Area		Yilan		Zhunan		Hsinchu		GlobalWafers - Taiwan		Total		Yilan		Zhunan		Hsinchu		GlobalWafers - Taiwan		Total		Yilan		Zhunan		Hsinchu		FZtech Inc.		GlobalWafers - Taiwan		Total	
Gender	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	%
Male	< age 30	89	2.8%	109	3.4%	4	0.1%	48	1.5%	250	7.8%	57	2.2%	2	0.1%	1	<0.1%	49	1.9%	109	4.2%	93	3.8%	3	0.1%	3	0.1%	0	0.0%	37	1.5%	136	5.6%
	age 30~50	114	3.6%	226	7.1%	8	0.3%	57	1.8%	405	12.7%	64	2.5%	29	1.1%	3	0.1%	68	2.6%	164	6.4%	79	3.2%	7	0.3%	1	<0.1%	2	0.1%	75	3.1%	164	6.7%
	> age 50	3	0.1%	11	0.3%	2	0.1%	9	0.3%	25	0.8%	0	0.0%	3	0.1%	1	<0.1%	3	0.1%	7	0.3%	1	<0.1%	4	0.2%	2	0.1%	0	0.0%	9	0.4%	16	0.7%
Female	< age 30	29	0.9%	24	0.8%	0	0.0%	23	0.7%	76	2.4%	15	0.6%	2	0.1%	2	0.1%	28	1.1%	47	1.8%	7	0.3%	0	0.0%	0	0.0%	0	0.0%	19	0.8%	26	1.1%
	age 30~50	47	1.5%	79	2.5%	4	0.1%	33	1.0%	163	5.1%	14	0.5%	11	0.4%	5	0.2%	43	1.7%	73	2.8%	17	0.7%	1	<0.1%	1	<0.1%	0	0.0%	31	1.3%	50	2.1%
	>age 50	2	0.1%	2	0.1%	2	0.1%	8	0.3%	14	0.4%	0	0.0%	1	<0.1%	1	<0.1%	3	0.1%	5	0.2%	1	<0.1%	0	0.0%	1	<0.1%	0	0.0%	3	0.1%	5	0.2%
Total		284	8.9%	451	14.2%	20	0.6%	178	5.6%	933	29.3%	150	5.8%	48	1.9%	13	0.5%	194	7.5%	405	15.7%	198	8.1%	15	0.6%	8	0.3%	2	0.1%	174	7.1%	397	16.3%

Note:1. New employee statistical analysis table is based on the ratio of the total number of employees at the end of the previous year, and the percentages of new employees and resigned employees from 2018 to 2019 are revised (the number of employees remains the same) according to this definition.
2. GlobalWafers Taiwan: GlobalWafers Headquarters, Zhunan Plant, Taisil Plant.

4.2 Salaries and Benefits

★ Remuneration policies

SAS offers competitive salaries (including fixed salaries and holiday bonuses) to attract and retain outstanding talents. Annual salary adjustment standards are formulated based on the company's operational performance, the salary adjustment range of the entire industry, consumer price indices, and employee performance. In addition, compensation is provided in accordance with the profitability of the company to increase employee cohesion, motivate employees to exceed annual business goals, create profits, and share joint achievements. Promotion recommendations are submitted on an annual basis based on work performance and contribution appraisals.

Number of full-time employees as well as the average and median salary of non-supervisory positions

Category		Sino-American Silicon (Headquarters, and Zhunan & Yilan branches)			GlobalWafers (GlobalWafers Headquarters, Zhunan Plant, Taisil Plant)		
		2019	2020	Difference compared to the previous year	2019	2020	Difference compared to the previous year
Non-supervisory positions	Number of full-time employees (persons)	796	747	-6.2%	601	1,453	141.8%
	Average salary (1,000 NTD)	786	1,128	43.5%	1,489	1,104	-25.9%
	Median salary (1,000 NTD)	768	1,163	51.4%	1,460	1,068	-26.8%

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 the rough average working hours have exceeded 35 hours per week for those whose normal working hours were not set.

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; deputy President and equivalent; associate manager 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, provide authorization signatures, 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), which is different from the statistical method for the number of employees (employees still working as of December 31 of the current year) mentioned in Chapter 4.1.

★ Leave system

SAS provides a leave system and defined work systems and management guidelines in accordance with the Labor Standards Act. Regarding working hour policies, the company strictly abides by the requirement of imposing two rest days within every seven working days. Of which, one is a fixed day off and the other, a flexible rest day. The company also signs contracts with its employees and respects the employee's willingness to provide labor services. Workers will never be threatened or forced to provide labor services through any illegal means. The HR system allows our staff members to check on personal attendance records and remaining leave hours to ensure their rights and interests regarding working hours and leave.

★ Insurance and pension system

In addition to the health and insurance policies as legally required, SAS also provides group insurance for every employee exceeding the benefits set forth in labor laws. Insurance policies include term life insurance and other accident insurance for accidents, air travel accidents, severe burn injuries, as well as limited medical insurance and hospitalization insurance. The goal is to provide comprehensive protection measures and to minimize personnel losses.

SAS provides a monthly retirement reserve of 2% for employees who meet the old labor pension system, and saves it in the retirement reserve account of the Bank of Taiwan. At the end of the year, SAS allocates a full pension according to the law in order to ensure the rights and interests of employees' retirement pensions. Employees who fall under the new labor pension system shall contribute 6% of their pensions to their labor pension account.

★ Unpaid child care leaves

SAS provides employees with the right to parental leave. Employees who have worked for 6 months and have a child under the age of 3 may apply for childcare leave without pay from the Company in order to take care of their child. A total of 51 SAS colleagues in Taiwan have applied for parental leave between 2018 and 2020.

Execution results of unpaid child care leave application

Category	Gender	Sino-American Silicon			GlobalWafers - Taiwan		
		2018	2019	2020	2018	2019	2020
Total employee staff number eligible for unpaid child care leave	Male	87	54	48	67	58	58
	Female	44	11	9	23	13	16
Total number of employees who actually took unpaid child care leave	Male	11	3	2	3	1	4
	Female	23	5	7	12	5	8
Total number of reinstated employees upon the expiration of their child care leaves	Male	5	7	6	1	2	4
	Female	17	15	13	13	11	6
Total number of employees who actually resumed their duties upon the expiration of their child care leaves	Male	3	0	3	1	1	2
	Female	7	6	4	9	9	6
Ratio of employees who resumed their duties upon the expiration of their child care leaves (reinstatement rate)	Male	60.0%	0.0%	50.0%	100.0%	50.0%	50.0%
	Female	41.2%	40.0%	30.8%	69.2%	81.8%	100.0%
Total number of employees still in service 12 months after the expiration of their unpaid child care leaves	Male	5	2	0	0	1	0
	Female	6	7	7	5	9	7
The ratio of employees still in service 12 months after expiration of their parental leaves (retention rate)	Male	50.0%	66.7%	0.0%	0.0%	100.0%	0.0%
	Female	46.2%	100.0%	116.7%	100.0%	100.0%	87.5%

★ Employment meals

SAS provides free meals for its employees during working hours in staff restaurants. The goal is to provide a comfortable dining environment and diverse meal choices to cater to staff members' different culinary demands. A restaurant monitoring task force has been established to ensure the meal quality and nutritional value and implement staff health and catering controls.

★ Employee Benefits committee

SAS has established its Employee Welfare Committee in 1988, and actively passed more preferential welfare measures for employees such as emergency relief to help colleagues who have suffered significant changes and difficulties to tide over. The Company also offers marriage, childbirth, and funeral subsidies; three major festivals and birthday gifts; educational scholarships; illness and hospitalization subsidies; special discount stores; regular travel tours; year-end party; sponsor social welfare unit activities; organize family day events on an irregular basis and invite family members of colleagues to participate in order to create a sense of identity and cohesion; and establish employee clubs to improve the physical and mental health of colleagues, promote legitimate entertainment, cultivate teamwork, and inspire the spirit of mutual help and emotional exchanges between colleagues.

4.3 Education and Training

★ All-round learning environments

SAS organizes annual training courses and provides an all-around, diversified learning environment to enhance employee skills and literacy, optimize the use of human resources, and ensure continued personal development. Training plans for the following year are formulated by various departments in line with the company operation goals, company, department KPI, and competency demands. At the end of each quarter, reviews and assessments of goal achievement status are conducted with regard to courses offered in the said quarter. The results of these reviews and assessments serve as a key reference for improvements for upcoming courses. The SAS training system encompasses the following five categories: competency training for new recruits, professional competency training, general management competency training, intellectual property training, and health and safety management training. This system provides suitable training courses for employees in their different stages of career development.

SAS provides an all-around, diversified learning environment

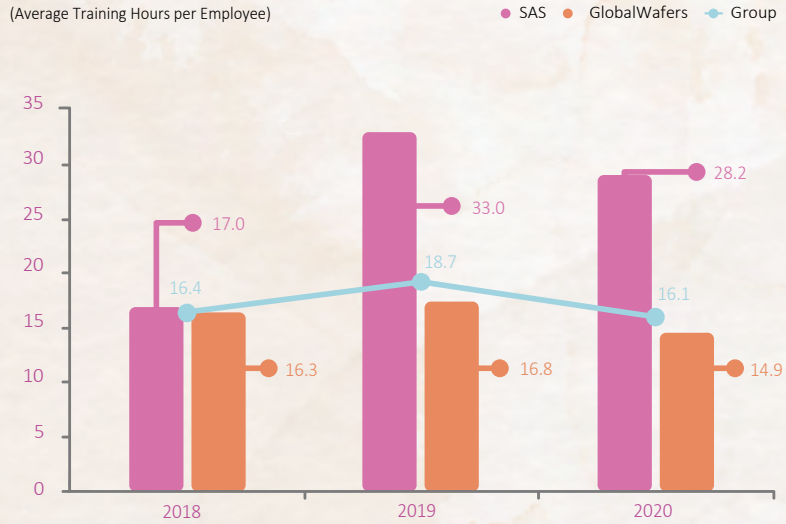
SAS has established an E-Library Academy to allow employees an opportunity to read and review training materials at any time. The stored data covers a wide range of diverse topics, easily accessible to busy staff members, thereby creating a reading culture in the company. The Academy also offers training materials for every professional field, allowing employees interested in cross-disciplinary learning an opportunity for self-study and rapid personal growth. SAS firmly believes that continuous learning leads to continuous improvements in overall company operational performance. The total training development hours for SAS and GlobalWafers in 2020 is 120,222 hours.

For SAS, the average hours of education and training received by our plants for men and women according to gender are 29.3 hours and 25.6 hours, respectively. Based on employee classification, the average hours of education and training received by direct and indirect personnel are 33.4 hours and 20.1 hours, respectively.

Number of people and hours for education and training from 2018 to 2020

Training Type		SAS Silicon ingot				GlobalWafers Wafers				Total
		Competency training for new recruits	Professional competency training	General management competency training	Total	Competency training for new recruits	Professional competency training	General management competency training	Total	
2018	Number of sessions	36	706	226	968	146	1,707	584	2,437	3,405
	Number of people	71	6,851	2,201	9,123	1,126	19,392	32,176	52,694	61,817
	In Session Total hours	235.0	2,384.0	411.0	3,030.0	775.1	6,142.8	1,428.7	8,346.5	11,376.5
	Total class hours	478.5	12,042.5	3,108.5	15,629.5	6,791.0	51,549.8	52,245.1	110,585.9	126,215.4
2019	Number of sessions	42	1,495	210	1,747	130	1,366	635	2,131	3,878
	Number of people	121	32,248	2,370	34,739	960	14,267	41,714	56,941	91,680
	In Session Total hours	270.0	2,065.5	387.5	2,723.0	727.0	6,038.5	1,530.8	8,296.3	11,019.3
	Total class hours	799.0	23,158.5	3,890.5	27,848.0	8,227	42,030.5	60,253.3	110,510.8	138,358.8
2020	Number of sessions	9	1,103	117	1,229	126	1,670	425	2,221	3,450
	Number of people	14	20,941	1,331	22,286	921	14,308	33,335	48,564	70,850
	In Session Total hours	70.5	1,659.0	169.6	1,899.1	747.0	5,462.3	780.6	6,989.8	8,888.9
	Total class hours	110.5	17,088.0	1,625.7	18,824.2	7,546.5	47,371	46,480.5	101,398	120,222.2

Average employee education and training hours from 2018 to 2020



Average hours of education and training of employees according to their gender and category in 2020

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.

★ Talent cultivation

SAS highly values research and development and is firmly committed to the cultivation of industry and academic talents. In addition to organizing campus lectures introduce current and future trends of the solar energy industry and providing students with assistance in their planning of future careers, the company also offers internship opportunities and plans factory visits for related academic departments and institutes. These activities allow students to gain an early understanding of workplace environments and career planning through shared experiences and exchanges with SAS workers. To deepen the links between the company and university campuses and pave way for the long-term cultivation of future talents, SAS sets up an industry-academia collaboration mechanism for students to fuse the theoretical knowledge learned in the classroom with practical work and provide them with internship opportunities prior to officially entering a workplace, thereby increasing their competitiveness in the job market.

4.4 Friendly Workplace

SAS firmly embraces the concept of Workplace Health and Safety. In addition to strict compliance with occupational health and safety laws and other relevant legal requirements, the company is firmly committed to organizational operations and staff participation. The company also continues to provide optimized resources for health and safety facilities improvements in the plants in accordance with the nature and risks of the organization to prevent injuries and hazards. The ultimate goal is to safeguard the health and safety of employees, contract workers, and relevant third parties.

4.4.1 Work Environment Safety

★ Occupational health and safety management system

SAS values the expectations of stakeholders as well as the participation of management and employees. We have introduced an Occupational Health and Safety management system (ISO 45001: 2018) so that Occupational Health and Safety are no longer regarded as “independent operations”, but must be handled from the operational soundness and sustainability perspective. Meanwhile, SAS has also provided a safe and healthy working environment, strengthened pollution prevention and work hazard elimination, and consulted with workers and their representatives so all employees can participate in environmental safety and health system activities and recognize personal responsibilities.

Note: Occupational Health and Safety management system covers: SAS Zhunan and Yilan Branches (the management system implementation and verification do not include the Hsinchu Headquarters and FZtech branch) and workers working at positions and/or facilities controlled by GlobalWafers - Taiwan.

★ Occupational health and safety organizations

SAS has established the Occupational Health and Safety Committees in each plant area according to law. Their purpose is to hold regular quarterly meetings, which shall be chaired by the president or presided by the vice presidents of each plant, and all department heads and labor representatives must participate in such meetings. The meetings shall discuss contents such as occupation safety and health management plans, work environment measurement improvement and countermeasures, occupation safety and health education and training, occupation safety and health auditing, occupation safety and health management performance, accident awareness and prevention, health management and promotion, etc. The matters discussed in the meetings must be recorded, and the improvement and completion rates must be tracked.

★ Labor representatives ratio in the occupational safety committee

Plant area / Category	Sino-American Silicon		GlobalWafers - Taiwan	
	Chunan Branch Company	Yilan Branch Company	GlobalWafers	Taisil Plant
Labor representative	5	5	20	32
No. of committee members	15	14	7	19
ratio	33%	36%	35%	59%
Note: Ratio = No. of labor representative / Total no. of committee members x 100%				

Note: Both SAS Hsinchu Headquarters and FZtech Branch have established Occupational Health and Safety professionals in accordance with regulations. But they have not set up an Occupational Health and Safety committee because they are under the legal threshold.

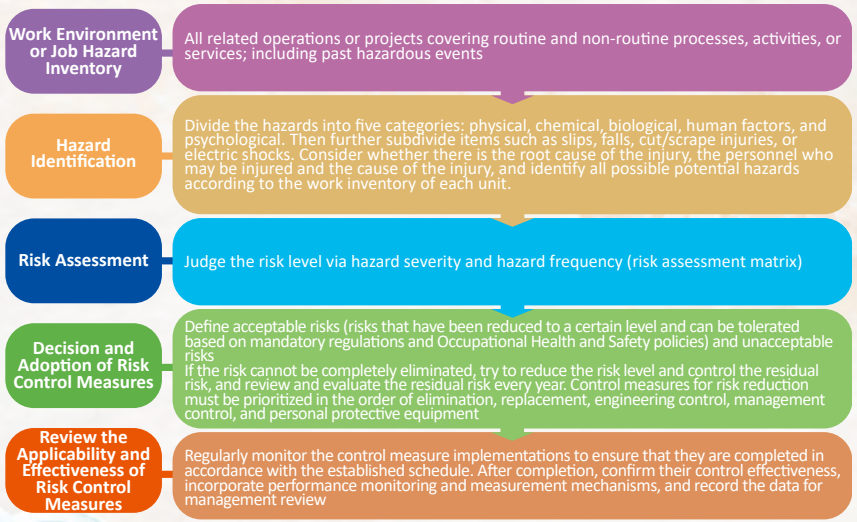
★ Occupational safety management

SAS is well aware of the importance of operating environment safety. The on-site management by supervisors at all levels is responsible to strengthen the discipline and autonomy of the employees, enhance the employees' safety awareness, and establish a corporate safety culture.

➢Hazard Identification and Risk Assessment

Appropriate hazard identification and risk assessment can effectively control hazards and risks, prevent and reduce disasters, as well as improve Occupational Health and Safety management performance. There are numerous hazard identification and risk assessment methods, and the main risk assessment models for routine and non-routine operations in SAS plants include: Job Safety Analysis (JSA), Failure Modes and Effects Analysis (FMEA), and what-if analysis. Qualified personnel are trained by each unit to perform hazard identification and risk assessment for their operations and activities, and the identification results are regularly reviewed annually.

Risk assessment process

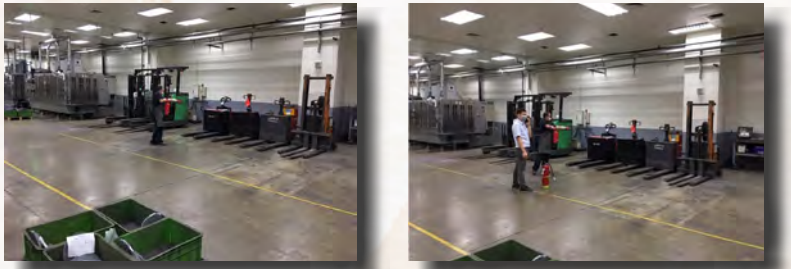


➢Emergency & Contingency

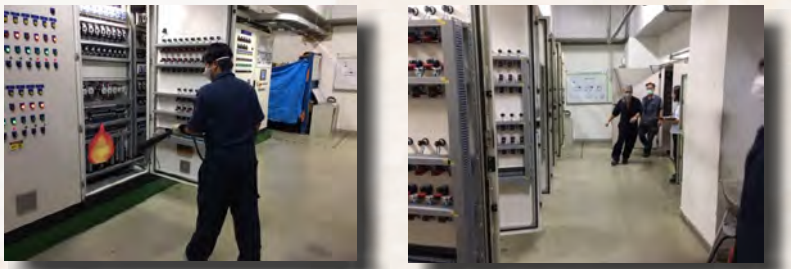
There is usually not enough time to decide who should be responsible for what, how to do it, and how to obtain outside support when an emergency occurs. But failure to take effective control measures within a short period of time may lead to serious consequences. In 2020, in response to the external issue - social fire incidents, SAS has comprehensively reviewed and strengthened the fire/electrical equipment, electrical control measures, and related emergency response information in the plants such as shortening the emergency response drills frequency of (half a year → quarterly), integrating emergency response organizing personnel and emergency response equipment, handling a series of emergency response education and training, and building an information disclosure platform to enhance personnel awareness.

Conduct contingency drills for possible emergencies based on the plants' hazard identification and risk assessment results.

Fire Drill

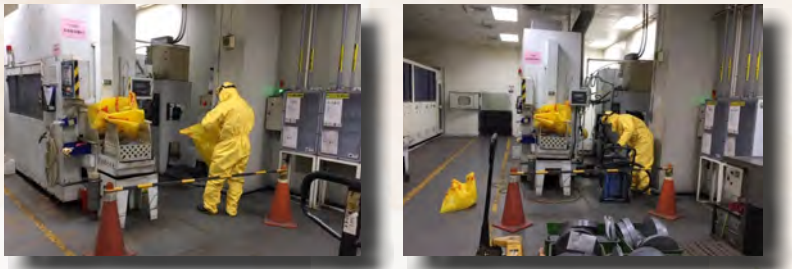


▲ Past false alarms are included in the emergency response drill plan to conduct drills on an irregular basis



▲ An unmanned computer room is used to test how long it will take for rescue/support personnel to arrive at the disaster site in case of a fire incident and review the fire extinguishing performance in the unmanned electrical machine rooms of the entire plant

Chemical Disaster Drills



▲ In addition to acid leak drills, an abnormal yellow smoke emission scenario was added to enable the responsible personnel to understand the air pollution control equipment emergency disposal and external notification processes.

➢Chemical Hazard Management

SAS has identified the hazardous substances used in personnel working environment and hazard exposure scenarios in accordance with its in-plant hazard risk assessment procedures, and establish a chemical hazardous substances management and control list. The goal is to implement labor working environment monitoring, evaluate hazard exposure risk levels using the quantitative estimation model, and report the priority management chemicals according to the laws and regulations for each chemical. SAS Zhunan Branch does not use Group-I carcinogenic, reproductive toxicity, germ cell mutagenic, and other related substances. The chemical exposure assessment results indicated Group-I management (exposure concentration is less than one-half of the allowable exposure standard), and the original control or management measures can be maintained continuously.

➢Other Prevention and Mitigation of Occupational Health and Safety Impacts Related to Operations, Products, or Services

- Change Management

  To prevent disaster accidents due to its operating conditions or environment deviating from the original safety range and control measures when there are changes or modifications to various operations such as manufacturing processes, activities, or services; SAS has established a change management mechanism whereby an application must be submitted prior to any operational changes in the manufacturing process, activities, or services (including operating conditions, methods, raw materials, machinery, equipment, or personnel job changes). The goal is to provide initial hazard identification and risk assessment, review and update the relevant procedure documents, personnel notification and training, and safety inspections before execution in order to reduce disaster risks and ensure personnel safety and health.

- Procurement Management

  SAS has integrated the engineering, property, or labor service safety and health requirements into the procurement management operating procedures. During procurement proposals, the safety and health specification requirements, safety inspections, and related record documents required for the case such as industrial safety facilities, protective gear, qualifications / operator techniques, safety protection that should be installed or used with mechanical equipment, equipment safety performance verification documents or test reports, and other items required according to laws, regulations, or international standards, etc., must be submitted in order to prevent safety and health hazards or risks that may occur during purchases and ensure they meet the requirements prior to acceptance.

➢Workers' Consultation and Communication

- Employee Communication

  SAS has formulated consultation and communication management procedures in order to effectively deal with complaints inside and outside the Company and suggestions from all levels. The goal is to strengthen consultation and communication with employees before executing any job security system plans. The content of the consultation includes occupational safety and health policies, how to fulfill legal and other requirements, occupational safety and health goals, supervision and measurement matters, and other relevant control measures. In addition, we have established a communication platform - "Environmental Safety Area" at the Company's internal information service station. Its purpose is to publish the fire-fighting facilities configurations in the plant, emergency response organization and information, accident investigation and analysis, operating environment monitoring, regulatory changes, industrial safety and environmental protection publicity (including social and industry accidents), etc.; and set up complaint mailboxes to strengthen employee awareness and communication.

- Non-employee worker communication

  SAS has also actively communicated with other workers who are not employees to establish contractor partnerships as well as operation management methods, and implement our commitment to health and safety. In addition to requiring the contractor to comply with the safety and health management laws and regulations, the contractor must also meet the Company's qualifications for construction personnel, equipment and materials, and safety protection before signing a contract with the Company. The Company shall inform the contractors of any working environment, project hazard risks, or relevant safety and health regulations before they enter the Company; and require them to participate in safety meetings convened by the safety and health management personnel. In addition, we have also established a comprehensive electronic construction application system to control the construction application and the management prior to, during, and after each project. In addition to requiring the contractor to assign on-site supervisors and hold daily pre-construction toolbox meetings, the on-site supervisors of the responsible departments and the security personnel also conduct audits on an irregular basis during the construction period to ensure that all operations are in compliance with safety regulations.

▲Toolbox meeting

➢Occupational Health and Safety Education & Training

To strengthen workers' Occupational Health and Safety awareness and adaptability; SAS colleagues must participate in the environmental, safety, and health education plans and training programs in order to comply with the management system requirements and external topics every year. The training subjects include new and in-service employees, supervisors at all levels, and contractors in order to develop their Occupational Health and Safety awareness, regulatory awareness, and adaptability. Moreover, dispatched and trained machinery and equipment operators, operation supervisors, occupational safety personnel, and first-aid personnel, etc., are trained to help them obtain the necessary licenses according to law. In addition to the relevant Occupational Health and Safety education and training courses, we have also organized a series of emergency response education and training courses in 2020 in response to the external topics.

▼ In addition to the general safety and health education and training, hazardous materials/ hazardous materials operation safety, contractor safety and health management, special operations in the factory, operation safety in confined spaces, and management system form evaluation personnel annual trainings; a series of emergency response training courses have also been held in response to external topics.

△ Commander Training

△ Fire-fighting equipment operation training for all plant personnel

△ Chemical Disaster Rescue Training

△ Emergency Response Measures and Chemical Spills in the Factory

△ Fire Monitoring System /Broadcasting System Operation

★ Incident Investigation and Correction

According to the iceberg effect based on Frank E. Bird's accident frequency, among the 1.75 million industrial disaster accident cases, every 641 incidents include 1 disabling injury accident, 10 minor injury accidents, 30 financial loss accidents, and 600 false alarm accidents. Accordingly, the occurrence of occupational disasters is only the tip of the iceberg. American scholar Heinrich studied the direct causes of Occupational Health and Safety accidents from the insurance industry's occupational accident claims database, and found that 88% of accidents are caused by unsafe behavior, 10% are caused by unsafe environments, and 2% are caused by unpreventable factors. Therefore, 98% of accidents can be prevented via management measures.

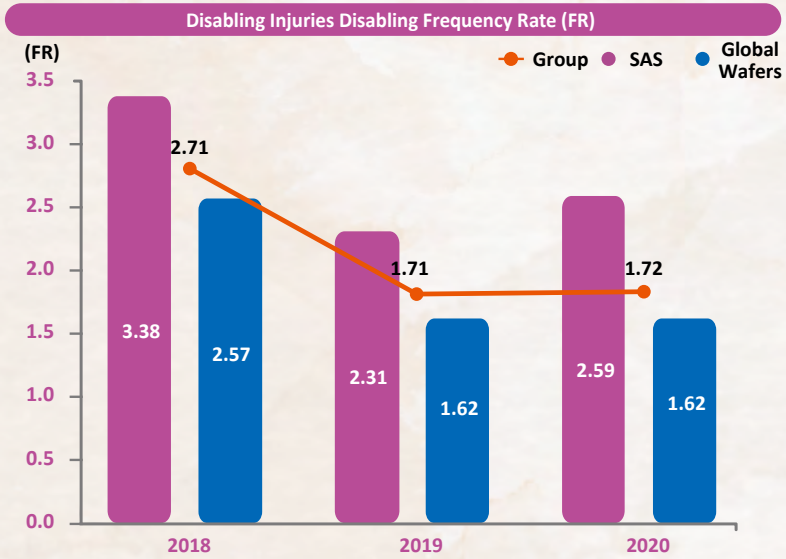
SAS has established incident notification, handling, and investigation procedures as well as non-conformity correction measure management procedures, and promoted incident notification procedures and emergency rescue procedures (including government / medical institution instant messages, emergency chemical spill handling) on its intranet platforms - "Environmental Safety Area" and "Health Area." All incidents must be investigated regardless of severity. Investigators include incident-related management, supervisory, operating personnel, and labor representatives who are qualified via incident investigation education and training. Tools such as the 5-WHY and the 8D report are used during incident investigations to find the root causes. The hazard risk assessment as well as the remedial and improvement measures must be reexamined and adjusted to ensure the improvement measures are able to eliminate the cause of the accident and prevent its recurrence. The safety and health personnel must track and review all such cases.

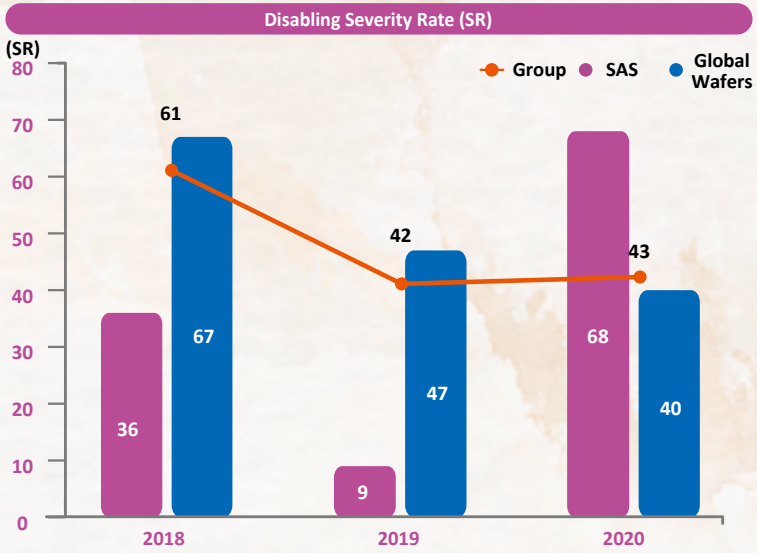
If any immediate danger at the workplace is discovered, the worker can stop the operation and retreat to a safe location on his/her own without endangering the safety of other workers, and immediately notify the on-site supervisor without receiving any unfavorable punishment from the Company.

▲ Health Area - Advocate Emergency Rescue Related Information

★ Occupational hazards management

In 2020, SAS has no incidents of death, occupational disease, or major occupational disasters caused by work. There were 8 recordable occupational injuries (excluding employee commuting accidents): 3 chemical burns, 2 cuts, 1 stab, 1 contusion, and 1 impact injury. According to the definition by the Ministry of Labor, the disability injury frequency rate (FR) is 2.59, and the disability injury severity rate (SR) is 68. We have conducted special investigations for each occupational disaster incident, and taken improvement measures (such as improving facilities/ equipment, establishing systematic document specifications, or strengthening personnel education and training) based on the root cause of the incident, and provided training to other departments to prevent similar incidents from occurring again. In 2020, non-employee workers operating in the SAS plants have no work-related injuries incidents (accidents).





Note: 1. Disabling Frequency Rate (FR) = total number of disabled employees $\times 10^6$ / Total work hours

2. Disabling Severity Rae (SR) = Total number of work days lost to injuries $\times 10^6$ / Total work hours

2020 Major Occupational Disaster Statistics

	Sino-American Silicon		GlobalWafers (Taiwan)	
	Employees	Other workers who are not employees	Employees	Other workers who are not employees
No. of people	667	115	1,592	92
Work Hours	1,546,725	338,300	3,158,528	271,790
No. of disability injuries	4	0	2	0
Days of disabling injuries	105	0	6	0
Death toll due to work	0	0	0	0
No. of severe occupational accidents	0	0	0	0
No. of recordable occupational injuries	8	0	10	0
Recordable occupational injury rate (IR)	1.03	0	0.63	0
Occupational disease rate (ODR)	0	0	0	0

Note:

1.Other non-employee workers: Refer to workers who are not employees but whose work and/or workplace are controlled by the organization. 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) * 200,000

6.Occupational disease rate (ODR): (total number of occupational diseases / total working hours) * 200,000

4.4.2 Healthy workplace

The physical health of employees is a key factor for the maintenance of work-life balance. Exceeding legal requirements, SAS has hired general practitioners to provide free on-site services including health consultation, guidance and assessment, as well as follow-up tracking health issues, referrals, and medical services. In addition, SAS is firmly committed to the three pillars of maternal care, prevention of ergonomic hazards and prevention of burnout. The company safeguards the physical and mental health of our staff members through a wide range of health care initiatives, sporadic health talks, and health promotion activities in an effort to create a blissful and healthy work environment.

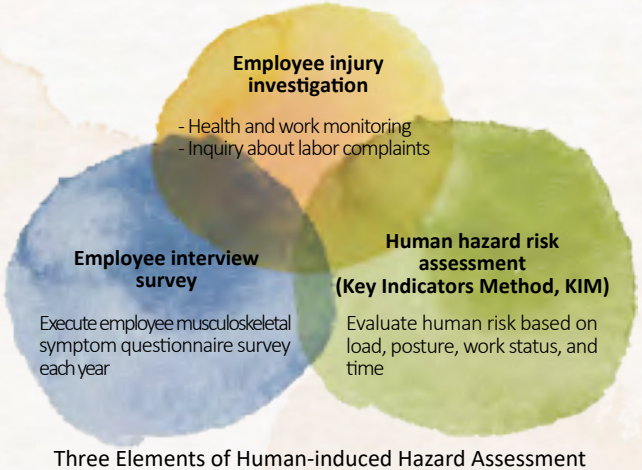
The four pillars of health protection

Pillars	Execution direction	2020 results
Maternity care	Assessment of health risks is conducted for female employees during pregnancy, after childbirth, and prior to return to the workplace. The mental and physical health of pregnant, postpartum, and breastfeeding employees is guaranteed via the provision of consultation and concern.	(1) Level I & II management: 41 people (SAS18 people; GlobalWafers Taiwan 23 people)Health risk assessment completion rate: 100%
Prevent overload	Based on employee health examination data, Framingham Risk Scores and burnout scale, high-risk groups are screened and identified. Workplace physicians are arranged to give consultations and health guidance with follow-up tracking and concern. Meanwhile, department supervisors are notified for stringent control and management of their work hours so as to prevent the occurrence of employee burnout.	Tracking management: 486 people (SAS 29 people; GlobalWafers Taiwan 457 people)
Prevention of unlawful violation	To provide a healthy and positive workplace, we conduct a risks assessment for the entire factory once every two years. Positivity courses like unlawful violation and spiritual growth are arranged to construct an excellent work environment.	Lectures on prevention of workplace violence, sexual harassment, and interpersonal relations.
Prevention of ergonomic hazards	We conduct ergonomic hazard risks surveys on all departments based on their work content/operation. Operation observation, personnel interviews, and medical treatment record investigations are conducted to screen and identify priority improvement targets (operation). Next, based on their operation hours, loading of weight, postures, and work conditions, a quantitative risk assessment is in place for the risk grade calculation (KIM) to gradually improve the operation/construction by the year and to prevent ergonomic hazards.	Human-factor hazard risk assessment: 3 cases (SAS 2 cases, GlobalWafers Taiwan 1 case, see description below for details)

Note: The statistical scope covers SAS and GlobalWafers Taiwan

★ Human-induced Injury Prevention

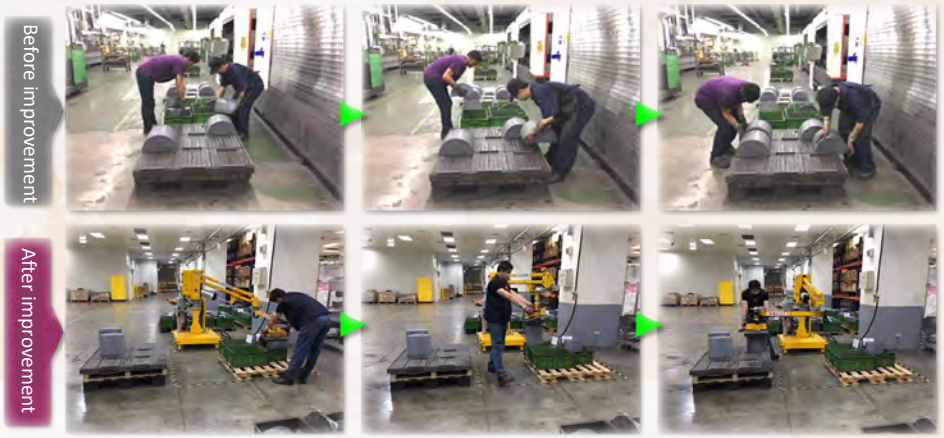
SAS plants have established human-induced hazard prevention procedures. The goal is to adopt employee injury surveys and questionnaires, and provide a ranking matrix according to the human hazard risk assessment survey results. When the risk ranking level is ≧ 4, a target improvement plan must be established. In 2020, 2 medium/high load human-induced risks were discovered. One case was improved via labor-saving devices instead of manual handling (multi-cut DW/cutting operation human factor improvement), and the other case was part of an improvement plan for 2021.



Three Elements of Human-induced Hazard Assessment

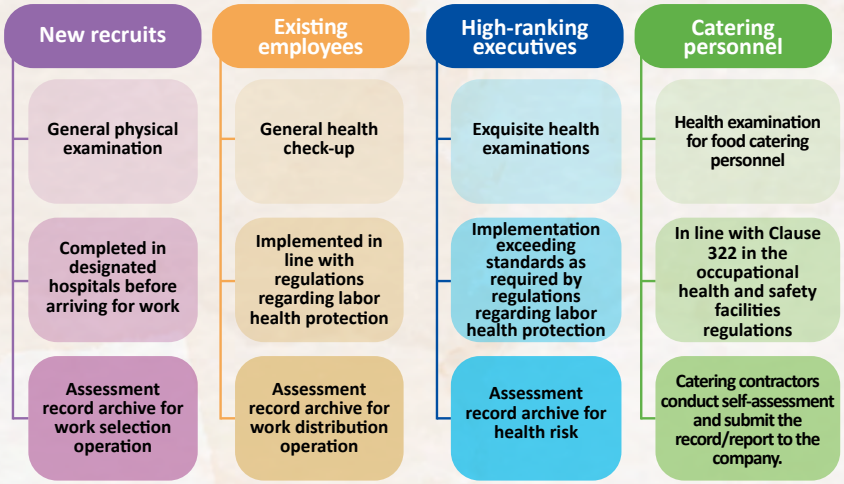
Multi-cut DW/Cutting Operation Human Factor Improvement

- Reduce physical handling by 1,604 kg/day
- Human factor hazard risk assessment (KIM rating points) reduced from high/medium-high load → medium/low load



★ Health promotion and reinforcement of health concepts

SAS embraces the concept of diversified employee health care. Analysis of health data is carried out annually based on employee health check reports. Annual health management plans that meet relevant needs and cover the planning of improvements are formulated to maintain employees' physical health. In addition, SAS carries out customized health checks according to the various physique of different operating personnel. Health check items and frequency exceed legal requirements and are combined with free cancer screening (colon cancer, cervical cancer, mammography, and oral cancer) in conjunction with hospital services to maintain a firm grasp of employee health conditions without any oversights. Upon completion of health check operations, professional on-site medical personnel will conduct follow-up tracking regarding abnormal results. This data serves as a key reference for health improvement activities and health promotion initiatives.



The health promotion activities promoted by SAS include blood drive activities, emergency rescue, bone density testing, health seminars, and weight loss activities. In 2020, the number of participants reached 4,801. To strengthen the health awareness of employees, the Company will announce and share critical illness or health information on an irregular basis, so colleagues can gain a comprehensive understanding of the health information, and thereby enhance their health awareness and self-weight management knowledge. Free flu vaccine benefits are provided to employees to help them prevent infectious diseases (influenza, etc.) and other diseases. The Company also offers comprehensive vaccine consultation services, and provides convenient in-plant vaccination shots to ensure the health of the staff and create a safety net.

2018~2020 Health Promotion Activities

Unit: Persons

Year	2018	2019	2020
Sino-American Silicon (Headquarters and Zhunan, Yilan, FZtech branches)	1,587	1,485	665
GlobalWafers - Taiwan (GlobalWafers Headquarters, Zhunan Plant, Taisil Plant)	4,443	4,556	4,136
Total number of people	6,030	6,041	4,801

The health center utilizes annual health checks and incoming employee data in conjunction with work burnout questionnaires and working time analysis results to identify medium- and high-risk groups. Health management measures such as one-on-one counseling with physicians, individual health education guidance, and work pattern adjustments are adopted to minimize risks for identified groups. Furthermore, convenient blood pressure self-check stations have been established in the company to allow employees to measure their blood pressure conveniently. Health education-related information is posted in offices to reinforce self-health care awareness among employees.

▲Safe places

To improve the safety of the workplace environment, the Company has established a 24-hour automatic external defibrillator (AED) in the plant, and arranged for the employees to participate in the CPR+AED education and training, so the colleagues can gain the basic rescue ability, and extend the emergency rescue forward to the scene of the incident. The goal is to create a healthy and safe working environment for employees, and receive the Safe Place Certification by the Ministry of Health and Welfare.

▲CPR + AED first aid training

▲Workplace Violence / Sexual Harassment Prevention Course

▲Health Promotion Activities

★ Tracking and concern for special groups

The SAS health center aims to gain a better understanding of groups with abnormal results in physical exams, e.g., new recruits, high-risk groups, and maternity health protection groups. In addition, the company would arrange for consultations with physicians, depending on individual needs, as well as expressing concern and psychological support.

The company will also provide concern and psychological support for staff suffering from occupational injuries or traffic accidents. Depending on individual needs, counseling is also provided by visiting professional physicians to facilitate an early return to their posts. For lingering cases, RPNs will provide continued tracking and concern through phone calls and report the recovery status of each case to unit supervisors.

Number of services for special ethnic groups and number of people tracked from 2018 to 2020

Number of service sessions		2018	2019	2020
Sino-American Silicon	Yilan Branch Company	171	322	269
	Zhunan Branch Company	829	269	236
	FZtech Branch	-	-	27
	Hsinchu Headquarters	21	43	47
	Total	1,021	634	579
GlobalWafers - Taiwan		884	1,346	1,298
Total		1,905	1,980	1,877

Number of people in special groups being tracked		2018	2019	2020
Sino-American Silicon	Yilan Branch Company	64	58	39
	Zhunan Branch Company	162	61	59
	FZtech Branch	-	-	7
	Hsinchu Headquarters	12	17	11
	Total	238	136	116
GlobalWafers - Taiwan		887	1,051	1,113
Total		1,125	1,187	1,229

Note: 1. Revise the special group definition, and amend the “special group tracking number” for 2018 and 2019 according to the following definition.

2. Special group definition: (1) Overload (tracking B2 or higher in the current year), (2) Maternity (tracking the case received in the current year), (3) Disability (track the current year, once every 2 years), (4) Newcomers (abnormalities), (5) Special class-2, (6) Annual health checkup (class -C or higher), (7) Work-related injuries (from the day of occurrence), (8) Psychology (above 19 points / suicidal intent).

3. FZtech Branch was included in the statistics in 2020, so information from 2018 to 2019 has not been disclosed.

★ Safe and healthy workplace

To create a healthy workplace where colleagues can work with peace of mind, SAS has established special parking spaces for pregnant women so pregnant colleagues can enjoy a convenient and safe working environment during pregnancy. The Company also supports breastfeeding after pregnancy, and has established breastfeeding rooms in each plant area to provide a safe and comfortable breastfeeding space for breastfeeding mothers. We also provide childbirth subsidies, and sign exclusive contracts with special discount nurseries and kindergartens so that colleagues can feel at ease with childcare while at work.

Moreover, based on the annual health exam results, we have planned the health promotion activity and lecture topics for the year, arranged consultations with the clinic service physicians, and collaborated with the medical and healthcare services provided by the Hsinchu Science Park employee clinic to promote preventive medicine and disease prevention while strengthening health awareness for colleagues. Our 2020 health promotion content includes various lectures and activities such as weight loss and body shaping, four-cancer screening and lung cancer screening, influenza vaccination, vision care, etc., to provide colleagues with correct health knowledge and concepts.

We attach great importance to the prevention and management of epidemic infectious diseases, and have established an active infectious disease notification system in order to prevent the threat of infectious diseases in the workplace and ensure continuous and normal company operations. The Company also posts the latest domestic and foreign epidemic information on the internal website on an irregular basis to remind colleagues to strengthen personal hygiene and strengthen their epidemic prevention knowledge. We have organized free influenza vaccination activities in the plants each year to strengthen employees' flu resistance, provided "epidemic prevention kits" for colleagues to carry along during business trips to provide epidemic and disease prevention related information as well as health promotion, and helped to protect colleagues from the threat of disease during business trips.

★ Physical and mental balance and a blissful workplace

SAS views its employees as its key assets. Only with healthy employees can we raise corporate productivity. As such, besides a firm commitment to providing a safe, healthy, and friendly workplace; the company organizes several staff outings through its Welfare Committee on an annual basis. These outings will hopefully replenish employees' energy and build team cohesion. Family members are encouraged to participate in these outings for employees to bond and build a strong rapport amongst themselves, to show concern for family members after work hours, and to enhance work-life balance.

SAS listens to the voice of its employees. Various channels such as labor-management consultation meetings, employee suggestion boxes, OSH committees, meetings on the old pension system, and a staff benefits committee allow employees to freely express their views and opinions. Employees are able to fully express their opinions via meeting exchanges and discussions. This enables an effective bidirectional communication channel between the labor and the management, rendering win-win results for both parties. In addition, the HR Department sends out electronic weekly newsletters containing articles, columns, English learning sections, and events and health information. These newsletters provide employees with new knowledge and an opportunity to participate in internal and external events. This also enables employees to achieve a work-life balance and maintain their physical and spiritual health while performing their work duties.

SAS also appoints dedicated management personnel to provide assistance and facilitate the work and daily lives of foreign blue-collar migrant workers. Annual activities are organized to show constant concern for the foreign staff members and to understand their needs and problems so as to conduct timely communication and assistance for them to enjoy work and lead a happy life in Taiwan.

4.5 Social Care

Since 2003, compassionate manufacturers in the Hsinchu Science-Based Park have been organizing Christmas gift collection activities on Christmas Eve to fulfill the dreams of underprivileged children. SAS and its subsidiaries in Taiwan continue to cooperate with www.17885.com.tw to promote the "Dream Realization Action" to realize the children's eager expectations for one year through small gifts. We can all be Santa Claus to send hope and love to children. Each year, the colleagues have participated in sponsorship activities to provide many gifts to children through their hometowns and social welfare organizations. In addition, we have also magnified the benevolence of colleagues to match the mooncakes donated by our colleagues in cash, and then double this amount in donations to convey our care and love to the disadvantaged groups. Since 2019, we have contacted rural schools, Huashan Social Welfare Foundation, and World Vision Taiwan proactively to learn about the resources they might need help with, provide appropriate assistance, Improve the inconvenience of life for certain elementary schools, and raise funds for the elderly living alone.

Highlights of public welfare activities by SAS and its subsidiary in Taiwan



Highlights of public welfare activities by SAS in Taiwan



The Health Center runs blood drives every year to care for the society, advocate blood donation to save lives, and showcase the passion to care for those in need.

Tidbits of the compassionate blood donation activities

GRI Guideline Index

Index No.	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
Organizational Profile (Core Option)					
102-1	Name of the organization	About Sino-American Silicon Products Inc. - Company Profile	7		◎
102-2	Activities, brands, products, and services	About Sino-American Silicon Products Inc. - Company Profile - Market and Product Services	7 8		◎
102-3	Location of headquarters	About Sino-American Silicon Products Inc. - Company Profile	7		◎
102-4	Operation Site	About Sino-American Silicon Products Inc. - Company Profile	7		◎
102-5	Nature of ownership and legal form	About Sino-American Silicon Products Inc. - Company Profile	7		◎
102-6	Markets Served	About Sino-American Silicon Products Inc. - Company Profile - Market and Product Services	7 8		◎
102-7	Scale of the organization	About Sino-American Silicon Products Inc. - Company Profile	7		◎
102-8	nformation on employees and other workers	4.1 Talents Recruitment Human Resources	54		◎
102-9	Supply Chain	2.5 Upstream and Downstream Supply Chain	41		◎
102-10	Significant changes to the organization and its supply chain	About Sino-American Silicon Products Inc. - Company Profile	7	Organization and Supply Chain have no Major Changes in 2020	◎
102-11	Precautionary Principle or approach	1.3 Risk Management	30		◎
102-12	External initiatives	-	-	Not Attending Relevant Advocacy	◎

Index No.	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
102-13	Membership of associations	About Sino-American Silicon Products Inc. - Participation in External Associations	10		◎
Strategy (Core Option)					
102-14	Statement from senior decision-maker	Message from the Chairperson	4		◎
Ethics and Integrity (Core Option)					
102-16	Values, principles, standards, and norms of behavior	1.1.2 Integrity & Ethics	26		◎
Governance (Core Option)					
102-18	Governance Structure	About the Sustainability Topic - Sustainable Organization 1.1.1 Corporate Governance Structure	11 22		◎
Stakeholder engagement (Core Option)					
102-40	List of stakeholder groups	About the Sustainability Topic - Major Sustainability Issue Identification Process	12		◎
102-41	Collective bargaining agreements	-	-	There are currently no union organizations. So, no employees have signed group agreements.	◎
102-42	Identifying and selecting stakeholders	About the Sustainability Topic - Major Sustainability Issue Identification Process	12		◎
102-43	Approach to stakeholder engagement	About the Sustainability Topic - Stakeholders Engagement	14		◎
102-44	Key topics and concerns raised	About the Sustainability Topic - Stakeholders Engagement	14		◎
Reporting practice (Core Option)					
102-45	Entities included in the consolidated financial statements	About This Report	3		◎

Index No.	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
102-46	Defining Report Content and Topic Boundaries	About the Sustainability Topic - Boundary and Scope of Material Issues	13		◎
102-47	List of material topics	About the Sustainability Topic - Material Issue Analysis - Material Issues and Sustainability Goals	11 12 16		◎
102-48	Restatements of information	About the Sustainability Topic - Environmental KPI - Social KPI 3.2.2 Water Resources Management 3.3.3 Waste Management 4.1 Talents Recruitment Human Resources	19 19 47 50 54	Data on sustainability issues/environmental key indicators/ recycled water (2018, 2019), social key indicators/data on education and training hours (2018, 2019), chapter 3 water consumption and recovery (Bar Chart) data (2018, 2019), and industrial waste output (Bar Chart) data (2018, 2019) are different between the 2020 report and the 2019 report. The difference in these data is primarily caused by subsidiary GlobalWafers' data change. Sino-American Silicon's 2020 report data are consistent with those of 2019. At present, GlobalWafers' data presented in this report are this year's data that have been verified by a third party. The percentage of new employees and resigned employees in Section 4.1 / new employee statistical analysis table is based on the ratio of the total number of employees at the end of previous year, and the percentages of new employees and resigned employees from 2018 to 2019 are revised (the number of employees remains the same) according to this definition.	◎
102-49	Changes in reporting	About the Sustainability Topic - Boundary and Scope of Material Issues	13	FZtech Inc. was merged into SAS on 2019.12.12, and became the FZtech Branch on 2020.1.3. Therefore, its organizational boundary is incorporated into SAS as a subsidiary. Other subsidiaries include all subsidiaries in the consolidated financial report other than those associated with “GlobalWafers” (based on companies listed in the “About this Report” coverage remarks).	◎

Index No.	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
102-50	Reporting Period	About This Report	3		◎
102-51	Date of the most recent report	About This Report	3		◎
102-52	Reporting Cycle	About This Report	3		◎
102-53	Contact point for questions regarding the report	About This Report	3		◎
102-54	Claims of reporting in accordance with the GRI Standards	About This Report	3		◎
102-55	GRI Content Index	GRI Guideline Index	70		◎
102-56	External assurance	Verification Disclaimer	77		◎
Category: Economy Economic Performance (Major Topic - Economic Performance)					
103	Management Approach	1. Governance and Operation	21		◎
201-1	Direct Economic Value Generated and Distributed by Organizations	1.2 Operation Performance	29		◎
201-2	The financial impact, other risks and opportunities that climate change caused on organizational activities.	1.3 Risk Management	30	Other risks caused by climate change on organizational activities are illustrated, but its financial impact is not yet quantified.	◎
Anti-corruption (Major Topics - Integrity and Ethics / Anti-corruption)					
103	Management Approach	1. Governance and Operation Material Topic Strategy and Performance	21		◎
205-1	Operations assessed for risks related to corruption	1.1.2 Integrity & Ethics	26		◎
205-2	Communication and training about anti-corruption policies and procedures	1.1.2 Integrity & Ethics	26		◎
205-3	Confirmed incidents of corruption and actions taken	1.1.2 Integrity & Ethics	26		◎

Index No.	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
Category: Environment Materials (Major Topic - Energy Resources Consumption and Reduction)					
103	Management Approach	3. Clean Green Energy Environment Material Topic Strategy and Performance	43		◎
301-1	The weight and volume of all raw materials	3.2 Raw Material and Water Resources Management	47		◎
301-2	Recycled input materials used	3.2 Raw Material and Water Resources Management	47		◎
Energy (Major Topic - Energy Resources Consumption and Reduction)					
103	Management Approach	3. Clean Green Energy Environment Material Topic Strategy and Performance	43		◎
302-1	Energy consumption within the organization	3.1.2 Energy Management, Energy Conservation, and Carbon Reduction	45		◎
302-3	Energy Intensity	-			◎
302-4	Reduce Energy Consumption	3.1.2 Energy Management, Energy Conservation, and Carbon Reduction	45		◎
Water and Effluents (Major Topics - Energy Resources Consumption and Reduction, Pollution Prevention)					
103	Management Approach	3. Clean Green Energy Environment Material Topic Strategy and Performance	43		◎
303-1	Interactions with water as a shared resource	3.2.2 Water Resources Management 3.3.2 Water Pollution Prevention	47 50		◎
303-2	Management of water discharge-related impacts	3. Clean Green Energy Environment Material Topic Strategy and Performance	50		◎
303-3	Water withdrawal quantity	3.2.2 Water Resources Management	47		◎
303-4	Water Discharge Quantity	3.2.2 Water Resources Management	47		◎
303-5	Water Consumption Quantity	3.2.2 Water Resources Management	47		◎

Index No.	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
Emissions (Major Topics- Energy Resources Consumption and Reduction, GHG emissions, Pollution Prevention)					
103	Management Approach	3. Clean Green Energy Environment Material Topic Strategy and Performance	43		◎
305-1	Direct (Scope 1) GHG emissions	3.1.1 Greenhouse Gas Inventory	44		◎
305-2	Energy indirect (Scope 2) GHG emissions	3.1.1 Greenhouse Gas Inventory	44		◎
305-5	Reduction of GHG emissions	3.1.2 Energy Management, Energy Conservation, and Carbon Reduction	45		◎
305-7	Nitrogen oxides (NO_X), sulfur oxides (SO_X), and other significant air emissions	3.3.1 Air Pollution Control	49		◎
Waste (Major Topic - Waste Management)					
103	Management Approach	3. Clean Green Energy Environment Material Topic Strategy and Performance	43		◎
306-1	Waste Generation and Significant Waste Related Impacts	3.3.3 Waste Management	50		◎
306-2	Management of significant waste-related impacts	3.3.3 Waste Management	50		◎
306-3	Waste generated	3.3.3 Waste Management	50		◎
306-4	Waste diverted from disposal	3.3.3 Waste Management	50		◎
306-5	Waste directed to disposal	3.3.3 Waste Management	50		◎
Environmental Compliance (Major Topic - Legal Compliance)					
103	Management Approach	1. Governance and Operation Material Topic Strategy and Performance	21		◎
307-1	Non-compliance with environmental laws and regulations	1.1.4 Legal Compliance	28		◎
Category: Society Labor-Management Relationship					
401-1	New employee hires and employee turnover	4.1 Talents Recruitment Human Resources	54		◎

Index No.	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	4.2 Salaries and Benefits	57	Employee remuneration is allocated based on Company profit, and no stock dividend is issued to employees.	◎
401-3	Parental leave	4.2 Salaries and Benefits	57		◎
402-1	Minimum notice periods regarding operational changes			Such cases shall be announced in advance according to law.	◎
Occupational Health and Safety (Major Topic - Friendly Workplace)					
103	Management Approach	4. LOHAS Workplace and Social Joint ProsperityMaterial Topic Strategy and Performance	53		◎
403-1	Occupational health and safety management system	4.4.1 Work Environment Safety	59		◎
403-2	Hazard Identification, Risk Assessment, and Accident Investigation	4.4.1 Work Environment Safety	59		◎
403-3	Occupational health services (Maintenance of Information Related to Worker Health)	4.4.2 Healthy workplace	64	Establish health management data and tracking in accordance with the "Regulations Governing the Labor Health Protection," and save the relevant inspection results data in accordance with the Personal Data Protection Act in order to protect employee privacy.	◎
403-4	Worker participation, consultation, and communication on occupational health and safety	4.4.1 Work Environment Safety	59		◎
403-5	Worker training on occupational health and safety	4.4.1 Work Environment Safety	59		◎
403-6	Promotion of worker health	4.4.2 Healthy workplace	64		◎
403-7	Prevent and mitigate Occupational Health and Safety impacts directly related to business relationships	4.4.1 Work Environment Safety	59		◎
403-8	Workers covered by an occupational health and safety management system	4.4.1 Work Environment Safety	59		◎
403-9	Work-related injuries	4.4.2 Healthy workplace	59		◎

Index No.	Description	Corresponding chapters	Page No.	Note / Reasons for non-disclosure	External assurance
403-10	Work-related illnesses	4.4.2 Healthy workplace	59		◎
Training and Education (Major Topic - Employee Education & Training)					
103	Management Approach	4. LOHAS Workplace and Social Joint ProsperityMaterial Topic Strategy and Performance	53		◎
404-1	Average hours of training per year per employee	4.3 Education and Training	58		◎
404-2	Programs for upgrading employee skills and transition assistance programs	4.1 Talents Recruitment Human Resources 4.3 Education and Training	54 58		◎
404-3	Percentage of employees receiving regular performance and career development reviews	4.2 Salaries and Benefits 4.3 Education and Training	57 58		◎
Diversity and Equal Opportunity					
405-1	Diversity of governance bodies and employees	4.1 Talents Recruitment Human Resources	54	Undisclosed information about the board of directors	◎
405-2	Ratio of basic salary and remuneration of women to men	4.1 Talents Recruitment Human Resources	54	4.1 The first paragraph of the chapter explains that the salary, promotion, and rewards related decisions are not affected by gender; so the ratio should be 1:1.	◎
Customer Privacy					
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	2.3 Customer Confidential Information Protection	40	No complaints regarding customer privacy violation or customer data loss	◎
Socioeconomic Compliance (Major Topic - Legal Compliance)					
103	Management Approach	1. Governance and Operation Material Topic Strategy and Performance	21		◎
419-1	Non-compliance with laws and regulations in the social and economic area	1.1.4 Legal Compliance	28		◎

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Independent assurance statement

Scope and approach

Sino-American Silicon Products Inc. ("SAS" or the "Company") commissioned **DNV Business Assurance Taiwan** ("DNV") to undertake independent assurance of the 2020 Corporate Social Responsibility Report (the "Report") for the year ended 31 December 2020

We performed our work using DNV's assurance methodology VeriSustain™[1], which is based on our professional experience, international assurance best practice including International Standard on Assurance Engagements 3000 (ISAE 3000) and the Global Reporting Initiative (GRI) Sustainability Reporting Standards.

We understand that the reported financial data and information are based on data from SAS's Annual Report and Accounts, which are subject to a separate independent audit process. The review of financial data taken from the Annual Report and Accounts is not within the scope of our work.

We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance opinion. We are providing the evaluation of reporting principles and selected performance information with a Moderate level of assurance, according to the DNV VeriSustain™.

Responsibilities of the Directors of Sino-American Silicon Products Inc. and of the assurance providers

The Directors of SAS have sole responsibility for the preparation of the Report. In performing our assurance work, our responsibility is to the management of SAS; however, our statement represents our independent opinion and is intended to inform all of SAS stakeholders. DNV was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement.

We have no other contract with SAS and this is the 5th year that we have provided assurance. DNV's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

Basis of our opinion

A multi-disciplinary team of sustainability and assurance specialists performed work at headquarters and site level. We undertook the following activities:

- Review of the current corporate responsibility issues that could affect SAS and are of interest to stakeholders;
- Review of SAS approach to stakeholder engagement and recent outputs;
- Review of information provided to us by SAS on its reporting and management processes relating to the Principles;
- Interviews with selected Directors and senior managers responsible for management of corporate responsibility issues and review of selected evidence to support issues discussed;
- Site visited to the major production site at Chunan, and data checked from Ilan and include HQ to review process and systems for preparing site level corporate responsibility data and implementation of corporate responsibility strategy;
- Review of supporting evidence for key claims and 2020 data in the report. Past two years' data reported in the report are not within the scope of our work. Our checking processes were prioritised according to materiality and we based our prioritisation on the materiality of issues at a consolidated corporate level;
- Review of the processes for gathering and consolidating the specified performance data and, for a sample, checking the data consolidation.
- An independent assessment of SAS's reporting against the Global Reporting Initiative (GRI) Sustainability Reporting Standards (Core Option).
- The verification was conducted based only on the Chinese version Report.

Opinion

[1] The VeriSustain protocol is available on dnv.com

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On the basis of the work undertaken, nothing came to our attention to suggest that the Report does not properly describe SAS's adherence to the Principles. In terms of reliability of the performance data, in accordance with Moderate level assurance requirements, nothing came to our attention to suggest that these data have not been properly collated from information reported at operational level, nor that the assumptions used were inappropriate.

Observations

Without affecting our assurance opinion we also provide the following observations.

- Besides questionnaire surveys, analysing the data/information from stakeholder communication to understand the needs and expectations of stakeholders is encouraged.
- Strengthening the materiality assessment process by integrating the key issues raised from relevant management system, i.e., QMS, EMS and TIPS management system, etc.
- Standard process for collecting data/information from operation and conducting audit to verify the accuracy of the data/information to improve the data reliability and accuracy is suggested.

Stakeholder Inclusiveness
The Company has identified the expectations of stakeholders through internal mechanisms in dialogue with different groups of stakeholders. The stakeholder concerns are well identified and documented. The significant CSR issues identified through this process are reflected in the Report.

Sustainability Context
Corporate Social Responsibility Report provides an accurate and fair representation of the level of implementation of related Corporate Social Responsibility (CSR) policies, and meets the content requirements of the GRI Standards.

Materiality
The process developed internally has not missed out any significant, known material issues, and these issues are fairly covered in the Report. A methodology has been developed to evaluate the priority of these issues.

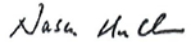
Completeness

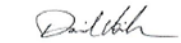
The Report covers performance data against the GRI Standards core indicators that are material within the Company's reporting boundary. The information in the Report includes the company's most significant initiatives or events that occurred in the reporting period.

Accuracy and Reliability

The Company has developed the data flow for capturing and reporting its CSR performance. In accordance with Moderate level assurance requirements, we conclude that no systematic errors were detected which causes us to believe that the specified CSR data and information presented in the Report is not reliable.

For and on behalf of DNV Taiwan
Date: 17 May, 2021





Nasa Chen
Lead Verifier
DNV – Business Assurance Taiwan

David Hsieh
Sustainability Service Manager,
Greater China

Statement Number: 10000447334-Assessment Services-DNV-TWN

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