
SAS
Sino-American Silicon Products Inc.
2016
CSR REPORT

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3 Environmental Sustainability

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About this report

Report structure

Sino-American Silicon Products Inc. (hereinafter referred to as “SAS”) manufactures high-quality solar wafers, cells, and modules as one of the main professional green energy suppliers in Taiwan. In response to global climate change and the latest developments in the field of corporate social responsibility, SAS started compiling CSR reports in 2017. In these reports SAS discloses information on material issues in the four dimensions of corporate governance, economy, environment, and society and the results of implemented improvements as well as the future vision and goals in the field of sustainable development based on long-term in-depth interactions with local communities and engagement with stakeholders.

Editing procedures and final version

SAS compiles and organizes relevant information and edits CSR reports by relying on the following organizations and procedures.

• CSR Task Force

The main members are the GM Office and the Health and Safety Management Department. The task force is in charge of preparation of reports, overall planning, information compilation and organization, communication integration, and editing and revisions.

•Editing procedures, review, and final version

The preliminary draft of the GM Office and the Health and Safety Management Department is submitted to the members of the Sustainable Development Committee in each department and the Audit Office for review. It is then forwarded to President (chairman of the Sustainable Development Committee) for final approval prior to publication.

Reporting standards

The contents and structure of this report are based on the G4 Sustainability Reporting Guidelines released by the Global Reporting Initiative (GRI). This report also conforms to the Guidelines Governing the Preparation and Release of Corporate Social Responsibility Reports by Listed Companies. Key issues of concern to stakeholders are disclosed and covered in relevant chapters based on materiality analysis results.

Report boundaries and reporting period

The reporting period and scope of this CSR report released by SAS is defined as follows:

Publication time: June 2017

Reporting period: January 1, 2016 – December 31, 2016

Reporting scope: Relevant activities of the SAS solar energy business group (including SAS HQ in Hsinchu, SAS branches in Zhunan and Yilan, and the SAS subsidiary Sunrise PV World Co. (hereinafter referred to as “SPW”). The financial data provided by SAS has been audited and attested by KPMG Taiwan in accordance with International Financial Reporting Standards (IFRS). To ensure consistency with the consolidated financial data disclosed in the Annual Report the economic performance data for the semiconductor business group (GlobalWafers Co., Ltd.) was also included and amounts are given in NT dollars. Environmental performance data is compiled and organized by SAS and SPW, while social performance data is provided by SAS internal units. The data is presented through internationally accepted indicators and calculation methods.

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

Report Assurance

The SAS Sustainable Development Committee passed a resolution to commission an independent third-party certification body to verify the report in order to ensure conformity to the GRI G4 and AA1000 assurance standards and enhance the transparency and credibility of sustainability related information provided by SAS. The report was verified by DNV GL and met the requirements of GRI G4 Core Option and moderate level assurance. For more details on the verification statement, please refer to the Appendix. Financial performance data was made public upon attestation by a CPA and is presented in a manner consistent with the Annual Report. GHG data is based on independent inventory results.

Liaison

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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2016 Sustainability Performance Overview

Dimension	Significant aspects	Goals in 2017	Goals in 2016	2016 Goal achievement status
Economic Dimension	Corporate governance	* Implementation of transparent governance * Revision of board self-evaluation guidelines * Disclosure of board performance assessment results on the corporate website * Disclosure of remuneration committee performance assessment results on the corporate website * Disclosure of audit committee performance assessment results on the corporate website * Maintenance of the ranking in the top 5% of listed companies in corporate governance evaluations * Adoption of an e-ballot system for shareholders' meetings * Strengthening of ethical conduct training * Perfection of sustainability framework and relevant operations * Maintenance of zero corruption	* Implementation of transparent governance * Disclosure of board performance assessment results on the corporate website * Maintenance of the ranking in the top 5% of listed companies in corporate governance evaluations * Adoption of an e-ballot system for shareholders' meetings * Strengthening of ethical conduct training * Perfection of sustainability framework and relevant operations * Zero corruption	V Goal achievement V Goal achievement V Goal achievement V Goal achievement V Goal achievement V Goal achievement V Goal achievement
	Economic performance	* Revenue growth * Profit growth * Maintenance of low debt ratios	* Revenue growth * Maintenance of low debt ratios	V Goal achievement V Goal achievement
	Market image	* Direct personnel recruitment and hiring rate >70%	* Indirect personnel recruitment and hiring rate > 75%	V Goal achievement
Social Dimension	Labor-management relations	* Continued employee interviews to show and concern and organization of various health promotion activities	* Employee interviews to show care and concern >10 employees per month	V Goal achievement
	Labor-management relations	* Zero labor-management conflicts	* Zero labor-management conflicts	V Goal achievement
	Occupational health and safety	* Increase of training hours for professional technicians in accordance with relevant laws (OHS personnel>12 hours/2 years, wellness nurse>12hours/3years *Increase of occupational injury cases ≦ 0 *At least 1 emergency response drill per quarter	* Occupational accident rate reduced by 50% *100% tracking of special groups and abnormal findings during health checks *100% implementation rate of educational training and emergency response drills	V Goal achievement V Goal achievement V Goal achievement
	Forced and compulsory labor	* 0 shortcomings detected in labor audits	* 0 shortcomings detected in labor audits	V Goal achievement
Environmental Dimension	Utilized raw materials	—	* Reduction of the use of lactic acid for pre-rinse operations by 50%	V Goal achievement
	Energy consumption	*Plant power conservation rate >1%(based on total power consumption of each plant) * Adoption of ISO 50001 energy management system and passing of certifications administered by third-party impartial units	* Plant power conservation rate >1%(based on total power consumption of each plant)	V Goal achievement
	Water consumption	*Process water recycling rate >85%(Amount of recycled process water /total intake water)	*Running water quantity of Wafer sorter =0	V Goal achievement

Corporate governance KPI

2016 Ranking in the top 5% of all listed OTC companies in the third corporate governance appraisal

2015 Ranking in the top 5% of all listed OTC companies in the second corporate governance appraisal

2014 Information disclosure and transparency rating A+
Ranking in the top 5% of all listed OTC companies in the first corporate governance appraisal

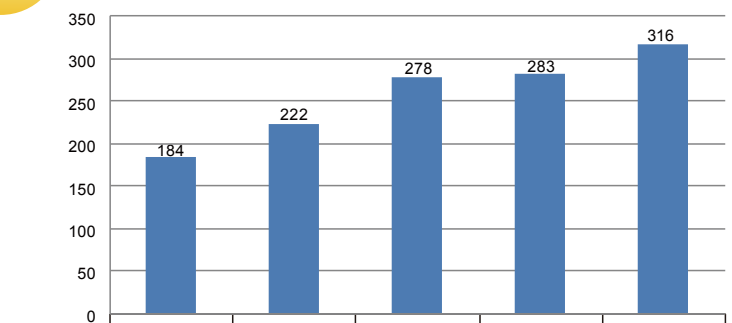
2013 Information disclosure and transparency rating A

2012 Information disclosure and transparency rating A

Business KPI

Operating revenue

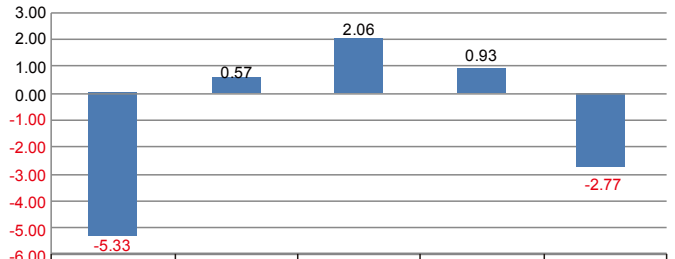
Unit:100 million NTD



	2012	2013	2014	2015	2016
Operating revenue	184	222	278	283	316

EPS

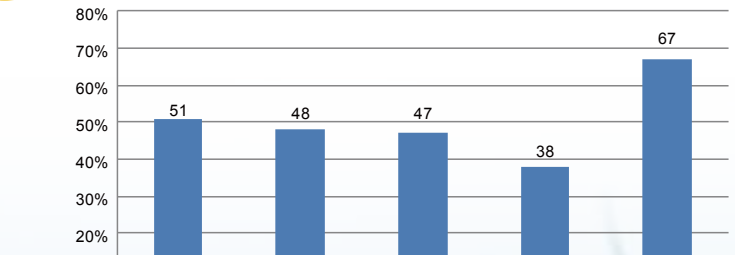
Unit: NTD



	2012	2013	2014	2015	2016
EPS	-5.33	0.57	2.06	0.93	-2.77

Debt-to-asset ratio

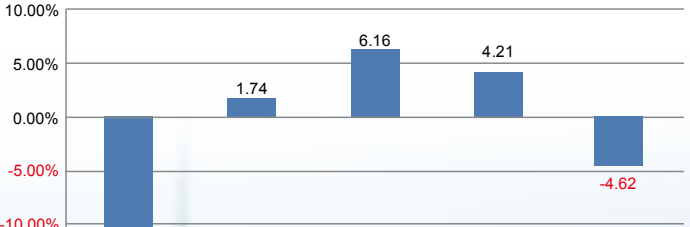
Unit: %



	2012	2013	2014	2015	2016
Debt-to-asset ratio	51%	48%	47%	38%	67%

Return on shareholders' equity

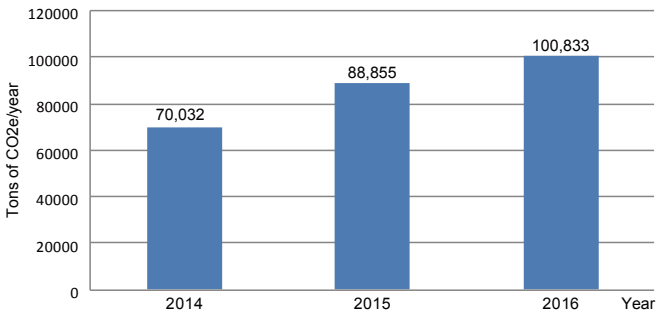
Unit: %



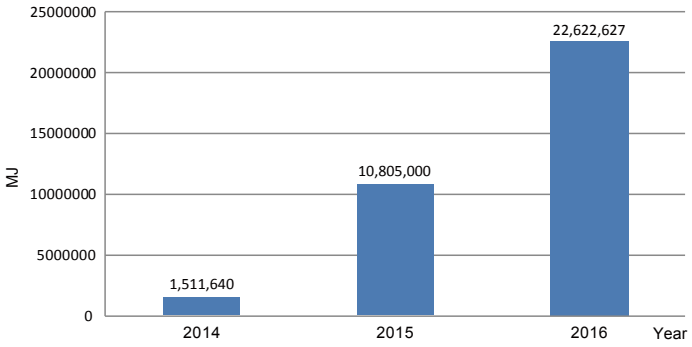
	2012	2013	2014	2015	2016
Return on shareholders' equity	-13.71%	1.74%	6.16%	4.21%	-4.62%

Environmental KPI

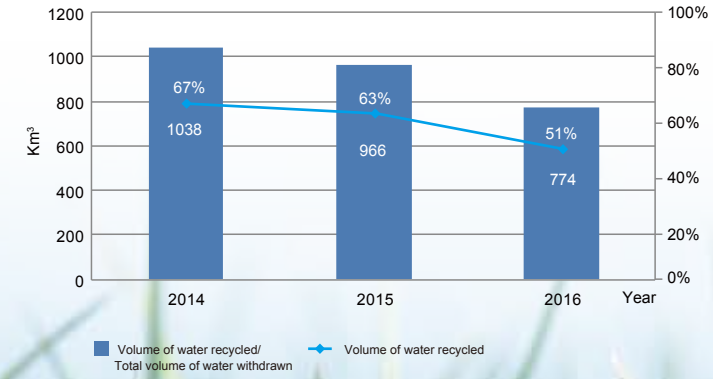
Carbon emission amount



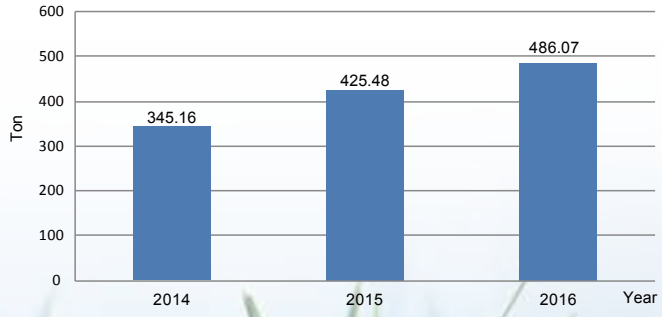
Power conservation effects



Recycled Water

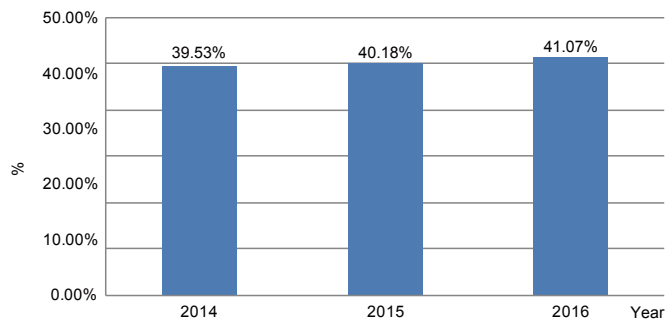


Recycled waste quantity

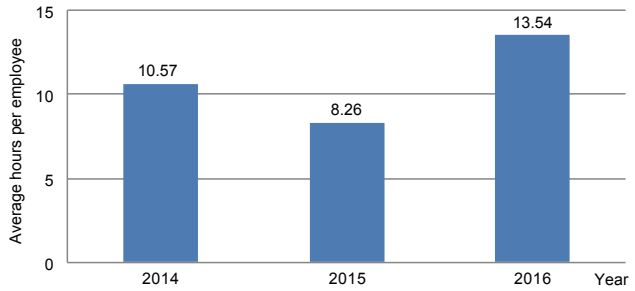


Social dimension

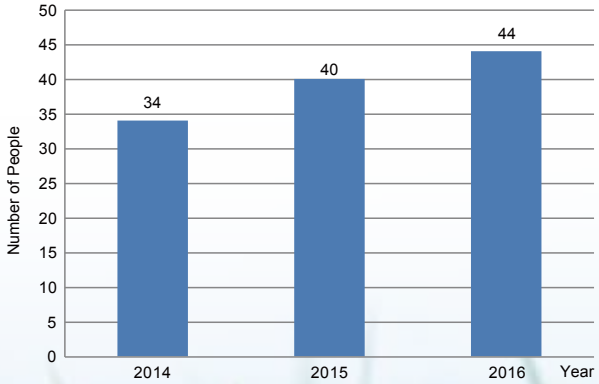
Employee turnover rate



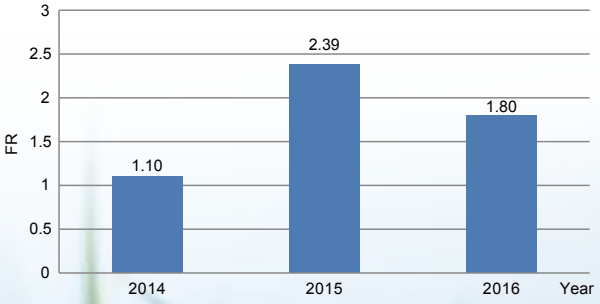
Average training hours per employee



Number of female executives



Disabling injury frequency rate



Message from the Chairman and President

Since its inception 36 years ago, Sino-American Silicon Products Inc. (SAS) has embraced a business philosophy of “Integrity, professionalism, innovation, and service”. The company is firmly committed to professional management and constant technological innovation. Mutual growth with customers, pursuit of excellence with our employees, and creation of value for our shareholders constitute the three pillars of our win-win-win vision. The company places equal emphasis on the pursuit of business growth and sustainable development. A sustainable development committee was formed to ensure fulfillment of corporate social responsibility in the company’s operations. Policies and development strategies are formulated, implementation results are reviewed on a regular basis, and constant improvements are carried out to ensure optimal policy implementation.

Outstanding corporate governance performance

SAS has made a long-term commitment to the active promotion of business integrity policies. After the company earned an A+ rating in the 12th information disclosure and transparency appraisal in 2015 and a ranking in the top 5% of all listed OTC companies in the first corporate governance appraisal, its efforts in the field of corporate governance were recognized and honored for three consecutive years with ranking in the top 5% of all listed OTC companies in corporate governance appraisals despite more and more rigorous selection criteria. In the future, SAS will continue to improve its corporate governance blueprint to effectively enhance information transparency, safeguard and respect shareholder and stakeholder rights and interests, and exhibit a determination to pursue sustainable operations and development.

Innovative technology leader

SAS has a powerful R&D team and invests around 3% of its annual revenue into R&D to boost the development of innovative technologies. In recent years, the company has successfully launched high-performance solar energy product series featuring cutting edge technologies and has formulated a global patent deployment strategy. A total of 338 patents have been deployed worldwide, 234 of which have already been approved. In addition, vertical integration of technologies extending to solar systems through acquisitions, mergers, and strategic alliances accelerates the adoption of key technologies. A supply chain integrating up-, mid-, and downstream businesses has been established to link R&D, production, and sales operations and allow a rapid grasp of the latest market

development trends. Comprehensive customer services ensure an effective expansion of the business scope and an enhancement of international competitiveness. The goal is to create value for customers and benefits for shareholders and stakeholders.

Green energy champion

In view of the worsening problem of global warming, SAS makes an all-out effort to promote energy conservation and carbon reduction as a member of the green energy industry. Over the last two years, has achieved excellent results through participation in the Energy Conservation Improvement Project sponsored by the Industrial Development Bureau. In 2016, conserved power amounted to 3,255,514 kWh. SAS also actively promotes the conversion of existing buildings into green buildings and plans to adopt the ISO 50001 energy management system. At the same time, SAS participated in the Environmental Footprint Program of the Industrial Development Bureau and the Carbon Footprint Inventory Program of the Environmental Protection Administration in 2016 to gain a firm grasp of GHG emission conditions and implement the energy conservation and carbon reduction plan. The company plans to utilize the results of these inventories to initiate a program of substantial reductions to control GHG emissions. SAS has also invested in the construction of a 50 MW solar power plant on Leyte Island in the Philippines which went into full operation in May 2016 in response to low carbon and green energy trends and the promotion of green energy by the government. In addition, Sunrise PV World Co. (hereinafter referred to as “SPW”), a subsidiary of SAS, is constantly engaged in investments, construction, and operation of domestic solar power stations in line with the 2-year 1.52GW PV Program of the Ministry of Economic Affairs. By the end of 2016, the total installed capacity had reached around 8MW, which is expected to generate annual CO2 emission reductions of around 48,061 tons. SAS strives to turn into a leading global provider of green energy solutions and thereby make a contribution to environmental protection and the development of clean energy for humanity.

Harmonious labor-management relations and public welfare

SAS provides a high-quality work environment, a complete compensation system, a fair and impartial promotion and reward system, and comprehensive training programs. The company provides its employees with a career stage which allows them to unlock their unlimited potential through pre-job training, advancement of professional skills, and self-improvement. The company also offers multiple benefits such as wedding and childbirth allowances and scholarships and grants for children of employees to ensure proper care for staff members and their families. An average of 68“SAS babies” have been born per year over the past five years. These harmonious labor-management interactions allow the company to pursue outstanding achievements with greater confidence in cooperation with its employees to achieve the ultimate goal of a blissful enterprise. SAS is also fully committed to the promotion of welfare activities. The company strongly encourages its employees to participate in various charitable activities such as care for disadvantaged groups, donation of books to secondary and primary schools, blood donation drives, dream fulfillment programs in remote areas, and financial support for underprivileged children and NPOs to make a humble contribution and spread love to every corner of society.

Sustainable development and social harmony

Looking ahead into the future, we will continue to embrace the principles of ethical corporate management in the face of fierce competition in the solar energy industry. We also aim to further business growth and boost profit momentum through more sophisticated technologies, product differentiation, and service enhancement. At the same time, we will implement green energy and low carbon policies to minimize environmental impacts generated by our business operations. The company will also increase its social engagement and invest more resources into a wider range of charitable activities with the goal of promoting sustainable development and social harmony and well-being. We strive to turn SAS into a benchmark enterprise for sustainability in the global solar energy industry and share the fruit of our efforts with our stakeholders.

President 盧明光

Chairman 徐秀蘭

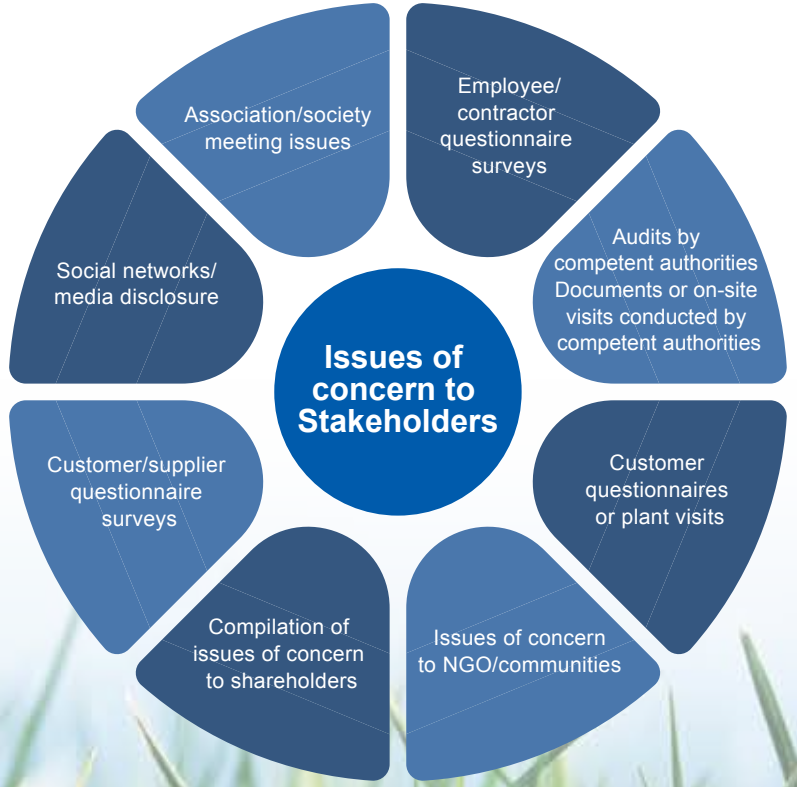
Stakeholder identification and communication

Stakeholder engagement and materiality analysis

Stakeholder identification and communication

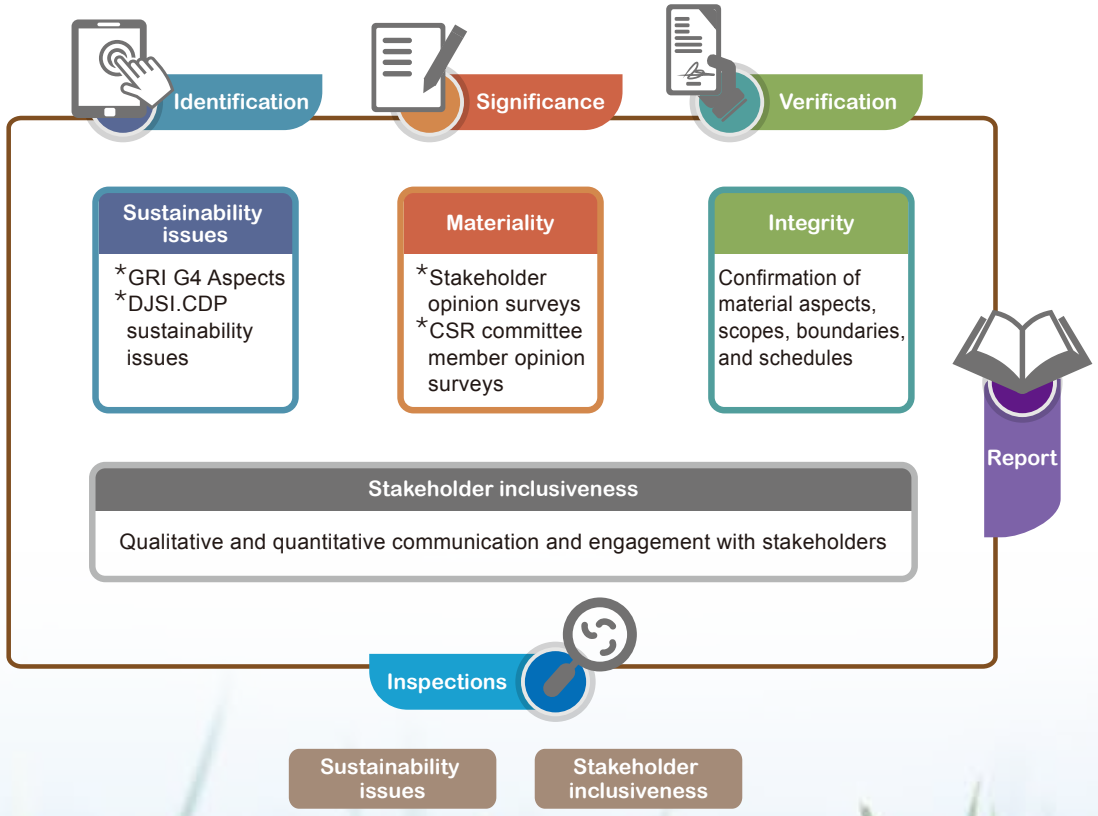
Stakeholder identification and communication represents the foundation of corporate social responsibility and serves as a key reference for sustainability progress. The main stakeholders of this company were identified in accordance with the operating characteristics of the company and the Stakeholder Engagement Standards (AA1000 SES: 2008) based on the six main principles of stakeholder responsibility, impact, affinity, dependency, representativeness, and policy/strategy. The following groups have been identified as stakeholders: employees, customers, shareholders (investors), suppliers, contractors, government agencies, communities/NPOs, social networks/media.

SAS has established various communication channels in its daily operations to maintain interactions with stakeholders. A mailbox for external communications has been set up on the website and a customer service hotline has been created. This enables the company to gain a clear understanding of the opinions of key stakeholders such as investors, customers, and media that are closely related to the company's business operations.



Main stakeholders	Importance for SAS	Communication channel	Communication frequency	Issues of concern
Customers	Main revenue source	Sales meetings	Non-scheduled	1. Price 2. Quality 3. Delivery time 4. Environmental responsibility
		Annual customer satisfaction surveys	Once a year	
		Customer audits	Non-scheduled	
		Grievances or complaints by phone or e-mail	Non-scheduled	
Employees	Employees are the most important asset of the company; mutual growth requires proper care for employees	Internal website or e-mail	Non-scheduled	1. Salary 2. Benefits 3. Work environment 4. Career development 5.Forced labor 6. Equal rights
		Bullet board	Non-scheduled	
		Labor-management meetings	Four times a year	
		Grievance mailboxes or hotlines	Non-scheduled	
		Performance evaluation interviews	Once a year	
		Organizational meetings	Non-scheduled	
Shareholders/ Investors	All shareholders are investors of the company; information disclosure is based on the principle of fairness	Shareholders' meetings, investor conferences, domestic institutional investor discussion forum, face-to-face communication meetings	Four investor conferences in 2016	1.Business performance 2. Corporate governance
		Annual reports	Once a year	
		Corporate website, information posted on the Market Observation Post System	Non-scheduled	
		Collection of information and feedback by phone and e-mail	Non-scheduled	
Suppliers/ Contractors	Partners of the company; shared beliefs are a key prerequisite for the provision of services that meet the requirements of the company	Sales meetings	Non-scheduled	1. Price 2.Supplier/Contractor management regulations
		On-site audits	Annually or biennially	
		Collection of information and feedback by phone and e-mail	Non-scheduled	
Government agencies	Open and positive communication must be maintained to express the determination of the company to observe legal requirements	Document exchanges, meetings（public hearings or information meetings）	Non-scheduled	1. Announcements on new laws/ amendments, permit review/ approval 2.Communication on laws and legal interpretation
		Communication via society/association meetings	Non-scheduled	
Media	Establishment of media liaison channels; provision of accurate and unbiased industry and corporate information on a non-scheduled basis	News release Non-scheduled media interviews and coverage and provisions of industry information	2-3 Press releases per quarter	1.Development direction 2. Business performance

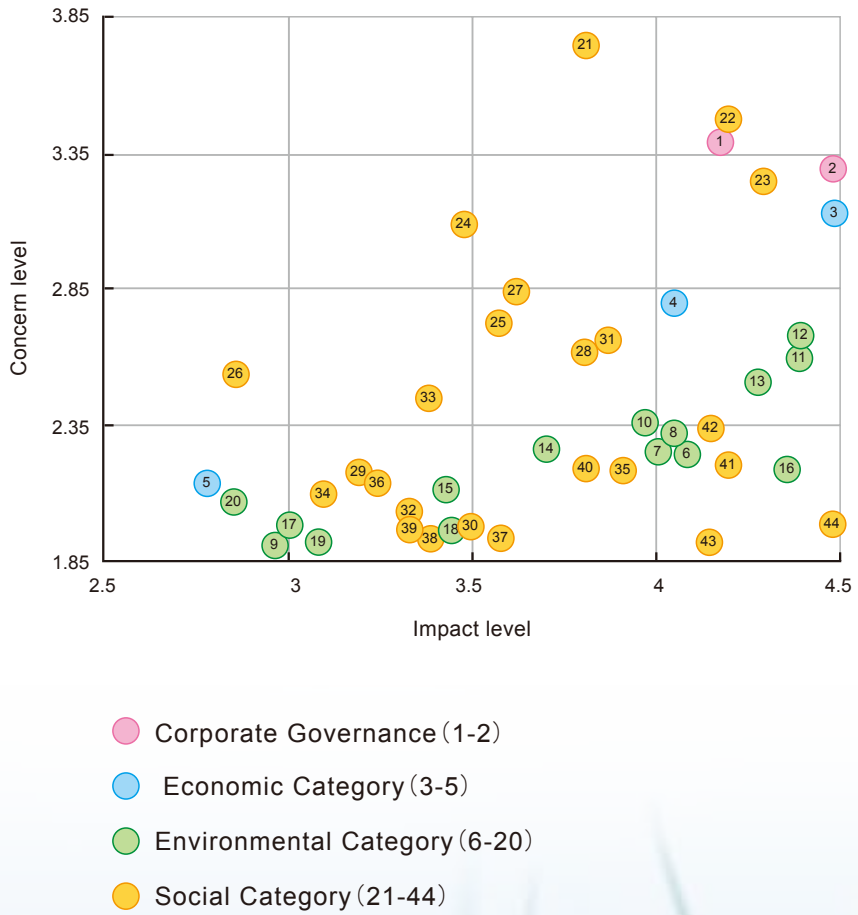
SAS has identified 44 issues of concern to stakeholders in the dimensions of corporate governance, economy, environment, and society in consideration of a wide range of opinions and in accordance with the GRI (Global Reporting Initiative) G4 Sustainability Reporting Guidelines and Implementation Manual and the KPMG survey report. The company also referred to internal and external environmental issues disclosed in the 2015 version, government agency audits or visits, customer questionnaires or visits, and resident petition records and searched for SAS related issues in the media and on social networking sites. Questionnaires featuring sustainability issues to determine the level of concern of main stakeholder categories (employees, contractors, suppliers, and customers etc.) for these issues (a total of 1096 valid questionnaires were returned). The goal of this survey was to gain a clear understanding of reasonable demands and expectations of stakeholders with regard to SAS sustainability issues. These demands and expectations served as a key reference for social responsibility management policies. The sustainable development committee then assessed the impact level of the 44 identified sustainability issues to determine the significance of each issue. SAS is committed to a full presentation of sustainability performance and all efforts in the fulfillment of CSR.



2016 Significant issues

SAS has identified a total of 44 sustainability issues (for each aspect of GRI G4): 5 issues in the economic dimension (including corporate governance), 15 issues in the environmental dimension, and 24 issues in the social dimension.

Results of significance analysis



	Serial No	Material
Corporate governance	1	V
Ethics and integrity	2	V
Business performance	3	V
Market presence	4	V
Local procurement	5	
Utilized materials	6	V
Energy consumption	7	V
Water consumption	8	V
Biodiversity	9	
GHG emissions	10	V
Air emissions	11	V
Waste water discharge	12	V
Waste disposal	13	V
Environmental impact of products	14	
Product and packing material recycling	15	
Compliance with environmental laws and regulations	16	V
Transport	17	
Environmental expenditures and investments	18	
Supplier environmental assessment	19	
Environmental grievance mechanisms	20	
Employment	21	V
Labor/management relations	22	V
Occupational health and safety	23	V
Diversity and equal opportunity	24	
Equal remuneration for women and men	25	
Supplier assessment for labor practices	26	
Labor practices grievance mechanisms	27	
Non-discrimination	28	
Freedom of association and collective bargaining	29	
Child labor	30	
Forced or compulsory labor	31	V
Supplier human rights assessment	32	
Human rights grievance mechanisms	33	
Community engagement	34	
Anti-corruption	35	V
Public policy	36	
Anti-competitive behavior	37	
Supplier assessment for impacts on society	38	
Grievance mechanisms for impacts on society	39	
Customer health and safety	40	
Product and service labeling	41	V
Customer satisfaction	42	V
Marketing controversies	43	V
Customer privacy	44	V

Determination of significant issues

A total of 21 significant issues of major impact were identified upon evaluation, 4 items in the economic dimension (including corporate governance), 8 items in the environmental dimension, and 9 items in the social dimension. Management policies pertaining to these items are disclosed in this report, while summarized disclosure or disclosure in future reports is adopted for the remaining issues of major impact.

significant issue scope and boundaries

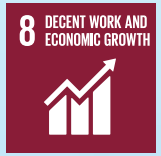
Internal substantive boundaries and external impact boundaries have been defined upon review of the boundaries of 21 significant issues in accordance with business scope and issue impact.

Boundaries / Issues of concern to Stakeholders	Internal boundaries						External boundaries
	SAS			Subsidiaries			
	HQ	Chunan branch	Yilan branch	GlobalWafers	Aleo	Sunrise PV World Co.	
Governance							
Corporate governance	○	○	○				
Ethics and integrity	○	○	○				
Economic							
Economic performance	○	○	○	○	○	○	
Market presence	○	○	○				
Environmental							
Utilized materials		○	○				
Energy consumption		○	○				
Water consumption		○	○				
GHG emissions		○	○			○	
Air emissions		○	○				
Waste water discharge		○	○				
Waste disposal		○	○				
Compliance with environmental laws and regulations		○	○				
Social							
Employment	○	○	○				
Labor-management relations	○	○	○				
Occupational health and safety	○	○	○				
Forced or compulsory labor		○	○				
Anti-corruption	○	○	○	○			
Product and service labeling		○	○				
Customer satisfaction		○	○				
Marketing controversies		○	○				
Customer privacy	○	○	○	○			

SAS 2016 Significant issues

Management policies for significant issues in 2016, corresponding GRI indicators, and corresponding chapters in this report are shown below:

Significant issues	Management policies	Corresponding GRI G4 indicators	Corresponding chapters	Corresponding UN Sustainable Development Goals (SDGs)
Governance	The board of directors has established and authorized an Audit and Remuneration Committee to assist the board in executing its supervisory duties. The organizational charters of each committee are approved by the board. Each committee is required to report its activities and resolutions to the board on a regular basis.	G4-34~38、41、42、48、52	Chapter 1 Corporate governance-DMA 1.2 Corporate governance	
Ethics and integrity Anti-corruption	The IPR and Confidentiality Agreement signed with employees and the Ethical Corporate Management Best Practice Principles clearly stipulate that company personnel shall not directly or indirectly offer, promise to offer, request or accept any improper benefits while engaged in business activities. They shall also not commit unethical acts including breach of ethics, illegal acts, or breach of fiduciary duty for purposes of acquiring or maintaining benefits	G4-56~58 G4-SO3~SO5	Chapter 1 Corporate governance-DMA 1.3Ethics and integrity	
Economic performance	1. Revenue growth and profit maximization 2. Breakthroughs in solar silicon wafer and cell technologies ahead of schedule and accelerated launch of next-generation solar silicon wafers with high conversion efficiency and cell products 3. Resource integration, cost reduction, and creation of solid competitive advantages through technology and product differentiation strategies.	G4-EC1~EC4	Chapter 1 Corporate governance-DMA 1.4 Business performance	
Market presence	Provision of salaries above statutory and market levels; hiring of a certain percentage of local residents as employees and managers	G4-EC5~EC6	Chapter 4 Social care and concern-DMA 4.1 Staff policy	
Utilized raw materials	Adoption of product life cycle concepts and real reduction of raw material use at the source through improvements during the process and product design stage	G4-EN1~EN2	Chapter 3 Sustainable environment-DMA 3.1 Clean production	
Energy consumption	Formulation of annual energy conservation goals to reduce energy consumption in line with the promotion of the environmental management system	G4-EN3~EN7	Chapter 3 Sustainable environment-DMA 3.3 Energy management	
Water consumption	Formulation of annual water conservation goals to reduce water consumption in line with the promotion of the environmental management system	G4-EN8~EN10	Chapter 3 Sustainable environment-DMA 3.4 Water resource management	

Significant issues	Management policies	Corresponding GRI G4 indicators	Corresponding chapters	Corresponding UN Sustainable Development Goals (SDGs)
GHG emissions	Formulation of annual energy and water conservation, waste reduction, and resource conservation goals to reduce energy and resource consumption and achieve a simultaneous decrease of GHG emissions in line with the promotion of the environmental management system	G4-EN15~EN19	Chapter 3 Sustainable environment-DMA 3.2 Response to climate change and global warming	
Air pollution	Formulation of annual air pollutant emission reduction goals and reduction of energy and resource consumption and achieve a simultaneous decrease of GHG emissions in line with the promotion of the environmental management system	G4-EN20~EN21	Chapter 3 Sustainable environment-DMA 3.5 Emissions	
Waste water discharge	Formulation of annual waste water discharge reduction goals and implementation of improvements in line with the promotion of the environmental management system	G4-EN22	Chapter 3 Sustainable environment— DMA 3.5 Emissions	
Waste disposal	Traditional disposal methods are converted into effective resource management concepts to achieve a reduction of waste generation; audits and management of waste disposal businesses are strengthened to ensure proper waste treatment	G4-EN23~EN26	Chapter 3 Sustainable environment— DMA 3.6 Waste management	
Compliance with environmental laws and regulations	Insistence on lawful operations and carrying out of conformity assessments for internal and external environmental issues. If legal risks are detected, preventive improvement measures are adopted immediately. Policy implementation is ensured through comprehensive management and actual operations	G4-EN29	Chapter 3 Sustainable environment-DMA 3.7 Sustainable management and legal compliance	
Labor-employer relations including benefits	1.Provision of salaries above statutory and market levels 2.Provision of meals, health care, unpaid child care leaves, and insurance packages	G4-LA1~LA3	Chapter 4 Social care and concern-DMA 4.1Staff policy 4.3Salary and benefits	
Labor-management relations	1.Regular convening of labor-management meetings 2.Provision of various communication and grievance channels to gain a better understanding of employee opinions and ensure an effective handling of employee problems	G4-LA4	Chapter 4 Social care and concern-DMA 4.4 Labor-management communication	

Significant issues	Management policies	Corresponding GRI G4 indicators	Corresponding chapters	Corresponding UN Sustainable Development Goals (SDGs)
Occupational health and safety	Promotion of work safety and safe cultural activities to raise the safety awareness of employees and strengthen employee refinement and discipline and thereby decrease accident rates and safeguard workplace safety	G4-LA5~LA8	Chapter 4 Social care and concern-DMA 4.4 Friendly workplace 4.8 Occupational health and safety	
Forced and compulsory labor	Provision of a complete leave system and management mechanism in conformity to Labor Standards Act regulations and signing of labor contracts with employees without any instances of forced and compulsory labor	G4-HR6	Chapter 4 Social care and concern-DMA 4.1 Staff policy	
Product and service labeling	Attachment of product labels to outer packaging, specification of product ingredients, and country of origin information	G4-PR3~PR4	Chapter 2 Innovative services and R&D-DMA 2.4Product liability and marketing communication	
Customer satisfaction	Regular customer satisfaction surveys and collection of customer feedback on costs, sales, technologies, quality, and services to gain a better understanding of customer needs. This information serves as a key reference for continued improvements with the ultimate goal of sustainable development in cooperation with customers.	G4-PR5	Chapter 2 Innovative services and R&D-DMA 2.2 Customer and product services	
Marketing controversie	Marketing and promotion (including advertising, sales promotion, and sponsorship) is carried out pursuant to relevant laws and regulations to prevent the violation of voluntary guidelines governing marketing and promotion and avoid misleading advertisements	G4-PR6~PR7	Chapter 2 Innovative services and R&D-DMA 2.4Product liability and marketing communication	
Customer privacy	Protection of customer privacy and confidentiality and signing of confidentiality agreements with customers to protect business secrets. Staff members are required to strictly abide by privacy policies and ensure rigorous protection of customer confidential information during business dealings	G4-PR8	Chapter 2 Innovative services and R&D-DMA 2.3 Protection of confidential customer information	

Note 1: Governance and ethics & integrity are standard disclosure categories without any corresponding significant aspects
Note 2: For more details on the importance of significant issues for SAS please refer to the respective chapters

1 Corporate Governance

Significant aspects

Corporate governance, ethics & integrity, operating performance, anti-corruption.

Significance for SAS

SAS embraces the principles of integrity and transparency in all its business activities. The company actively promotes transparent governance, implements risk control, and constantly adds growth momentum through technological advances, market segmentation and positioning. SAS is also firmly committed to stable revenue and profit growth and pursues maximization of business profits while making steady progress toward the ultimate goal of sustainable operations and development. The company also strives to create benefits for all shareholders and stakeholders.

Management mechanism

- Revenue growth and profit maximization.
- New breakthroughs in silicon wafer and cell technologies ahead of schedule and accelerated launch of next-generation silicon wafers with high conversion efficiency and cell products.
- Resource integration, cost reduction, and creation of solid competitive advantages through technology and product differentiation strategies.
- Involvement in the solar power plant industry and active global deployment of solar power plants to achieve continued expansion and gain a solid foothold in domestic and international markets through power plant installation services.

- Establishment of a fully integrated supply chain encompassing up-, mid-, and downstream operations to strengthen global solar power plant operations and strategic alliances; operational risks are spread out through vertical integration and diversified business strategies in an effort to turn into a world-leading provider of green energy solutions.

- Short-term goals: Continued commitment to the development of innovative technologies and quality enhancement, full satisfaction of customer demands, provision of comprehensive services, maintenance of stable growth, and sharing of operating results with shareholders, customers and employees.

Mid- and long-term goals:

1. Active search for up- and downstream cooperation opportunities and business models to expand the business scope and ensure sound development in the long run.
2. Involvement in the solar power plant industry and accelerated expansion of the strategic global deployment of solar power plants to expand downstream export sales and ensure long-term stable returns, cash revenue, and stable growth of operating revenues
3. Maintenance of the company's leadership position in PERC mono cells efficiency, increase of production capacity and quality of highly efficient PERC multi cells, and vertically integrated customer services to increase the willingness of customers to use different products.
4. Establishment of a corporate culture characterized by business integrity and implementation of a sound corporate governance system to achieve the goal of sustainable growth.

- External system: Company Act, Securities and Exchange Act, Enterprises Mergers and Acquisitions Act, Guidelines for Online Filing of Public Information by Public Companies, Fair Trade Act, Labor Standards Act.
- Internal System: Internal control system, Articles of Incorporation, Procedures Governing the Acquisition and Disposal of Assets, Management Guidelines for Endorsements and Guarantees, Operating Procedures for Lending Funds to Other Parties, Procedures for Derivatives Transactions, Corporate Governance Best Practice Principles, Ethical Corporate Management Best Practice Principles, Procedures for Ethical Management and Guidelines for Conduct, Risk Management Best-Practice Principles, Code of Ethical Conduct, Guidelines for the Handling of Reported Cases of Illegal and Unethical Conduct, Rules Governing the Exercise of Rights and Participation in Resolutions by Juristic Person Shareholders With Controlling Power, Operating Procedures for the Handling of Material Internal Information, Management Procedures for the Prevention of Insider Trading, Guidelines for the Reporting of Public Information, Management Guidelines for Liability Commitments and Contingencies, Operating Procedures for Transactions between Conglomerates, Specific Companies, and Related Parties, Rules Governing Supervision and Management of Financial and Business Matters Between Affiliated Enterprises, Management Guidelines for Long- and Short-Term Investments.

Resources

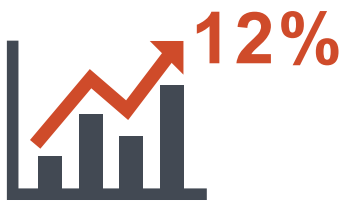
- R&D investments of NT$ 976,091,000 in 2016 account for 3.09% of total revenue.
- Strong R&D team comprised of 87 R&D engineers.

Concrete actions

- Initiation of Annual Operation Plans and formulation of KPIs for each department to strengthen internal operational management and control.
- Regular convening of business and production & marketing meetings to review goal achievement status and propose improvement strategies.
- Establishment of an improved incentive system to boost process research and product quality improvements.
- Formulation of appropriate measurement methods upon identification of potential risk factors by each department (risk measurement includes risk analysis and assessment).
- Implementation of a legal affairs mechanism and internal audits to realize sustainable development.

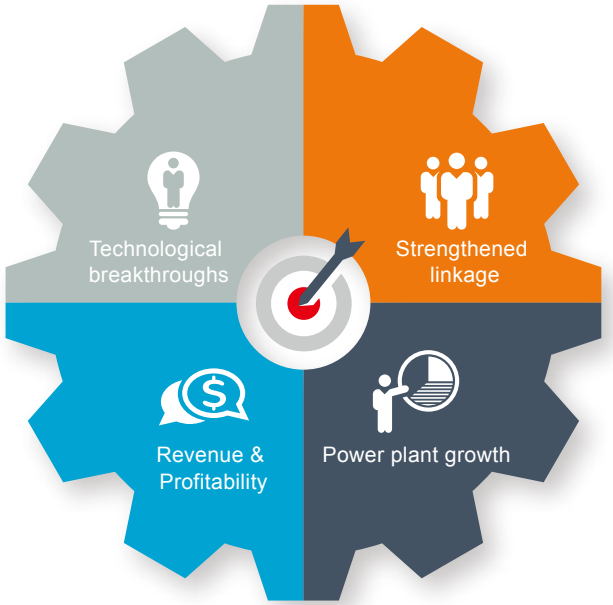
2016 Key results

2016 saw dramatic changes in the global solar energy industry. Due to the disappearing benefits of antidumping and countervailing duties against China, the end of the rush of new installations in China, and the rapidly decreasing global demand for solar cells, product prices dropped unreasonably and domestic manufacturers again faced losses. However, all SAS staff members are still fully committed to achieving the following business results by upholding the company's business philosophy.



- Consolidated revenue of NT$ 31.6 billion, annual growth rate of 12% (all-time high).
- Consolidated revenue of NT$ 13.2 billion derived from SAS solar energy products, annual growth rate of 2%.
- Sound individual financial structure and maintenance of low debt ratio.
- Maintenance of the company's competitive edge in the field of multi crystalline wafer and mono cell conversion efficiency; industry leader in technology development capabilities.
- Acquisition of 34 patents.
- Construction of a 50MW solar farm in Palo on Leyte Island in the Philippines. This will be one of the largest solar farms of the Philippines.
- The company's key subsidiary GlobalWafers Co., Ltd. (hereinafter referred to as "GlobalWafers") successfully acquired the Danish semiconductor materials company Topsil and the US company SunEdison SEMI, achieving a global market share of 17.6% in December.
- Maintenance of the ranking in the top 5% of OTC listed companies in three consecutive corporate governance appraisals.

Future goals



- Revenue and profit growth.
- Active reduction of operating costs to ensure more competitive product prices.
- Enhancement of customer service quality, new breakthroughs in multi crystalline wafer and mono cell technologies to maximize the distance to competitors.
- Accelerated launch of high-performance Diamond Wire cut Multi Black Wafer and R Wafer.
- Rapid increase of the output of the German cell production line for US customers.
- Continued expansion of terminal power stations to strengthen the linkage with export sales as an outlet for upstream solar wafer, cell, and module production capacities. Integrated capabilities of after-sale operation maintenance of power plants are accumulated and overseas deployment is further expanded through large-scale investments in Taiwanese solar power plants by the group.
- Strengthening of the professional skills of the solar power generation system team and increase of construction of domestic power plants by 500-800%.
- Ranking in the top 5% of OTC listed companies in corporate governance evaluations.
- Acceleration of the integration of the GlobalWafers team to turn the semiconductor group into an efficient organization with the goal of enhancing the operational performance upon the merger.

1.1Company Overview

1.1.1Company Profile

Sino-American Silicon Products Inc.（hereinafter referred to as “SAS”） was established on January 21, 1981 is a professional wafer manufacturer. The company’s major product lines include semiconductor, solar energy, and sapphire applications. A major reorganization was completed on October 1, 2011 to maximize the growth momentum and ensure a professional division of labor of the three major business units of the group. The semiconductor and sapphire business units were spun off and transferred to GlobalWafers Co., Ltd. (hereinafter referred to as “GlobalWafers”), which is 100% owned by SAS, and Sino-American Sapphire Co., Ltd., respectively，SAS has made a long-term commitment to develop advanced technologies and constantly releases new-generation solar energy products with high conversion efficiency in an effort to provide comprehensive services for customers. In addition, SAS accelerates the integration of downstream systems and actively promotes strategic alliances to accomplish its mission of developing clean energy sources and creating value for human society. The company strives to play a key role in the field of solar energy and green solutions.

On August 1, 2014, the company merged with Sunrise Global Solar Energy, a manufacturer of high-performance solar cells. The company also owns the German solar energy module plant Aleo Solar GmbH in Prenzlau which was acquired by Sunrise Global Solar Energy on May 16, 2014.

In 2015, the company actively engaged in investments in global solar power plants. A 50 MW solar power plant which went into full operation in May 2016 was built by the subsidiary SAS Sunrise Inc.in Palo on Leyte Island in the Philippines. In addition, the total installed capacity in Taiwan reached 8MW in 2016.

By relying on vertical integration and strategic alliances SAS has expanded its solar energy product lines to include solar ingots, wafers, cells, modules, and power generation systems. The company has achieved synergistic effects and an expanded global deployment of solar energy systems through a full integration of up-, mid-, and downstream operations.

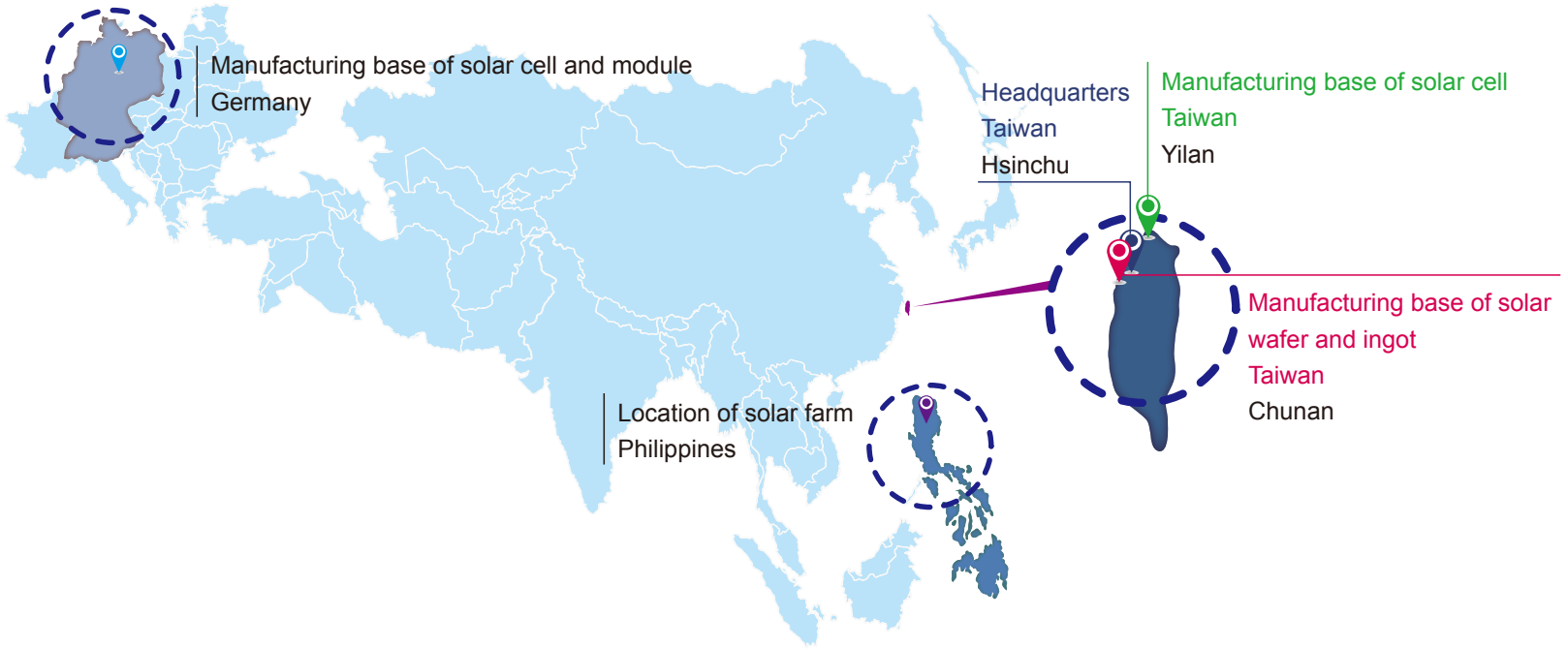
GlobalWafers, the main subsidiary of SAS, is the largest professional supplier of 3 to 12 inch wafers in Taiwan. This subsidiary is engaged in the production of high added-value niche products including epitaxial wafers, polished wafers, etched wafers, ultra-thin wafers, and deep diffusion wafers. Product applications span the fields of power management components, automotive power components, information and communication components, and MEMS components. The consolidated revenue of Global Wafers accounts for over 50% of the total revenue of the SAS Group. Upon the acquisition and merger of the Danish semiconductor materials company Topsil and the US semiconductor company SunEdison (SEMI) in 2016, GlobalWafers moved up from the sixth largest to the third largest silicon wafer supplier in the world.

SAS basic information

Full company name	Sino-American Silicon Products Inc.
Foundation date	January 21, 1981
Capital	NT$ 5.8 billion
Min products and technologies	Solar ingots / Solar wafers / Solar cells / Solar modules / Solar power generation system services
Workforce	Taiwan: 1,583 employees; Overseas: 236 employees
Chairman & CEO	M.K. Lu
Vice Chairman & Deputy CEO	Tom Yao
President	Doris Hsu
HQ	4F, No. 8. Industrial East Road 2, Hsinchu Science Park, Hsinchu City, Taiwan, R.O.C
Operating bases	HQ: 4F, No. 8. Industrial East Road 2, Hsinchu Science Park, Hsinchu City, Taiwan, R.O.C Chunan Plant 1: No. 21, Kejung Rd., Chunan Science Park, Chunan, Miaoli County, Taiwan, R.O.C. Chunan Plant 2: No. 6, Kejung Rd., Chunan Science Park, Chunan, Miaoli County, Taiwan, R.O.C Yilan Branch: No.1, Sec. 2, Ligong 1st Rd., Wujie Township, Yilan County, Taiwan, R.O.C

Operating bases

SAS HQ is located in Hsinchu City, Taiwan and SAS bases are situated in Taiwan, Germany, Italy, and the Philippines. The main markets for the company's products are Asia, Europe, and America. SAS is also firmly committed to making contributions to environmental protection and strives to turn into a cutting-edge global provider of green energy solutions.

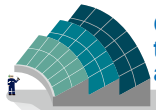


- The company's operating and manufacturing bases in Taiwan (Hsinchu HQ, Chunan Branch, Yilan Branch, and the subsidiary Sunrise PV World Co. mainly manufacture solar ingots, wafers, and cells and provide solar power generation system services.
- The German subsidiaries Aleo Solar GmbH and Aleo Sunrise GmbH mainly manufacture solar modules and cells.
- The Italian sub-subsidiary Aleo Solar distribuzione Italia S.r.l is responsible for the sale of solar cells and modules.
- Sulu Electric Power and Lights Inc. in the Philippines mainly provides solar power generation system services.

1.1.2 Business philosophy

Promotion of transparent corporate governance

Due to the active promotion of business integrity policies, SAS has achieved a ranking in the top 5% of all listed OTC companies in three consecutive corporate governance evaluations. SAS continues to strengthen its corporate governance roadmap with the goal of enhancing information transparency and safeguarding the rights and interests of shareholders and stakeholders.



Commitment to technological innovation and leadership

The company has formed a strong R&D team. Over 3% of the total revenue is invested in R&D to ensure the constant in-depth research of cutting-edge technologies and the successful launch of next-generation products with high conversion efficiency. The company's global patent deployment strategy increases international competitiveness and enhances market response capabilities.

Contribution to green energy and environmental protection

SAS is fully committed to the promotion of energy conservation and carbon reduction. SAS not only participates in the Energy Conservation Improvement Project sponsored by the Industrial Development Bureau, but also actively promote the Green Building Label and plan to adopt the ISO 50001energy management system in the future. At the same time, SAS participates in the Environmental Footprint Program of the Industrial Development Bureau and the Carbon Footprint Inventory Program of the Environmental Protection Administration with the ultimate goal of developing clean energy sources for humanity and making a contribution to the protection of the global environment.

All-out efforts in the field of employee care and charitable activities

SAS provides a complete compensation system, a fair and impartial promotion and reward system, welfare measures, and comprehensive training programs to care for its employees. The company offers its employees with a career stage which allows them to unlock their unlimited potential. At the same time, SAS strongly encourages its employees to participate in various charitable activities such as care for disadvantaged groups, donation of books to secondary and primary schools, blood donation drives, dream fulfillment programs in remote areas, and financial support for underprivileged children and NPOs.

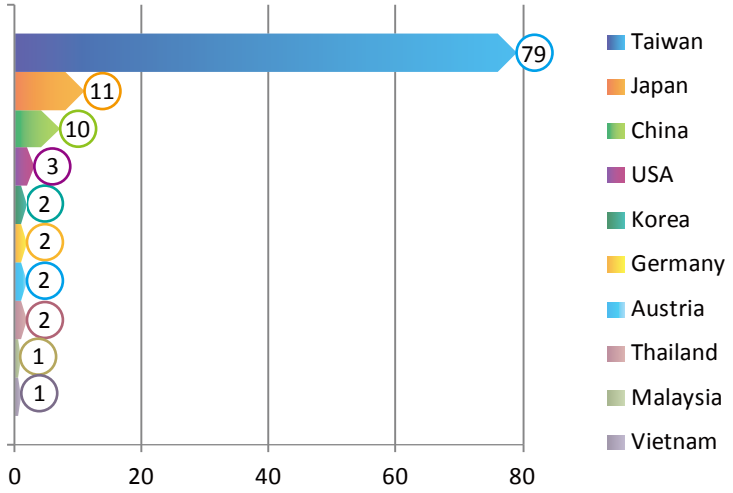
1.1.3 Establishment of a complete solar energy supply chain with integrated up-, mid-, and downstream operations

Following the rising demand for environmental protection and solar energy, the cost per kWh is gradually decreasing. Once solar power reaches grid parity, it turns into one of the most competitive choices on the energy market. The market will also continue to expand and the environmental benefits of solar energy will be maximized. Based on the ultimate goal of grid parity, the development goal of the whole solar energy industry chain is high efficiency and low cost.

Localized supply chain

The main SAS manufacturing bases are located in Taiwan and therefore rely on close cooperation with Taiwanese suppliers to realize the goal of supply chain localization. The company currently has 114 suppliers. The 79 Taiwanese suppliers account for 70% of all suppliers.

Localization of the supply chain serves the purpose of reducing production costs through the shortening of transportation routes and the reduction of running stock to strengthen cost competitiveness.



SAS embraces green procurement concepts in all relevant operations from localized purchases to raw material use and management. Localized procurement helps enhance national competitiveness, job growth, and economic activities. It also reduces the negative impact of long-distance transportation of raw materials on the environment and ensures timely delivery. To fulfill its responsibility as a global citizen, SAS also ensures that all procurement activities conform to RoHS and WEEE regulations and indicators and do not involve any conflict minerals in consideration of the fact that (as EICC points out) certain metallic minerals represent a main revenue source of the Democratic Republic of Congo and various rebel groups. Raw material suppliers are required to provide Declarations of Non-Use of Conflict Minerals to ensure that no conflict minerals from Congo or neighboring countries are utilized. All metals are provided by independently certified smelters and forges. No conflict minerals have been detected in the SAS supply chain.

In the future, SAS plans to integrate supplier evaluations. Environmental and ethical requirements as well as social issues in the labor and human rights dimension will be incorporated into supplier management and suppliers will be required to sign relevant letters of commitment. SAS aims to utilize its influence in the industry to promote the fulfillment of CSR in the entire supply chain.

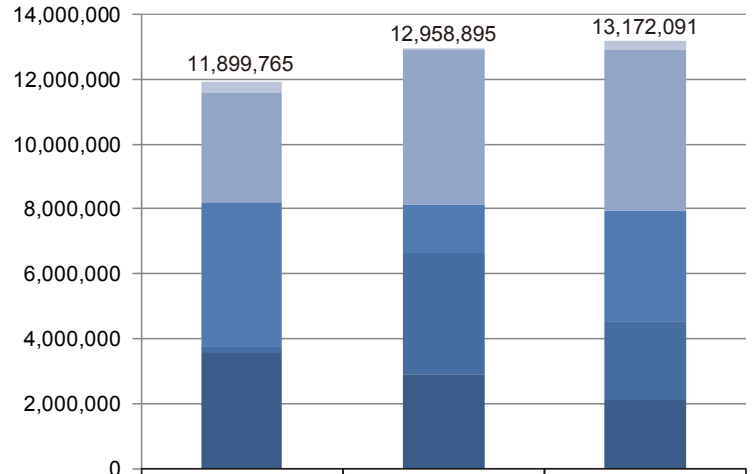
1.1.4 Market and product services Solar energy industry

Product sales

The main reason for the increased revenue ratio of solar wafers in 2016 lies in the gradually rising demand for high-performance solar wafers over the past three years. Solar cell revenue growth and declining module sales in 2016 are a direct result of changing market demands.

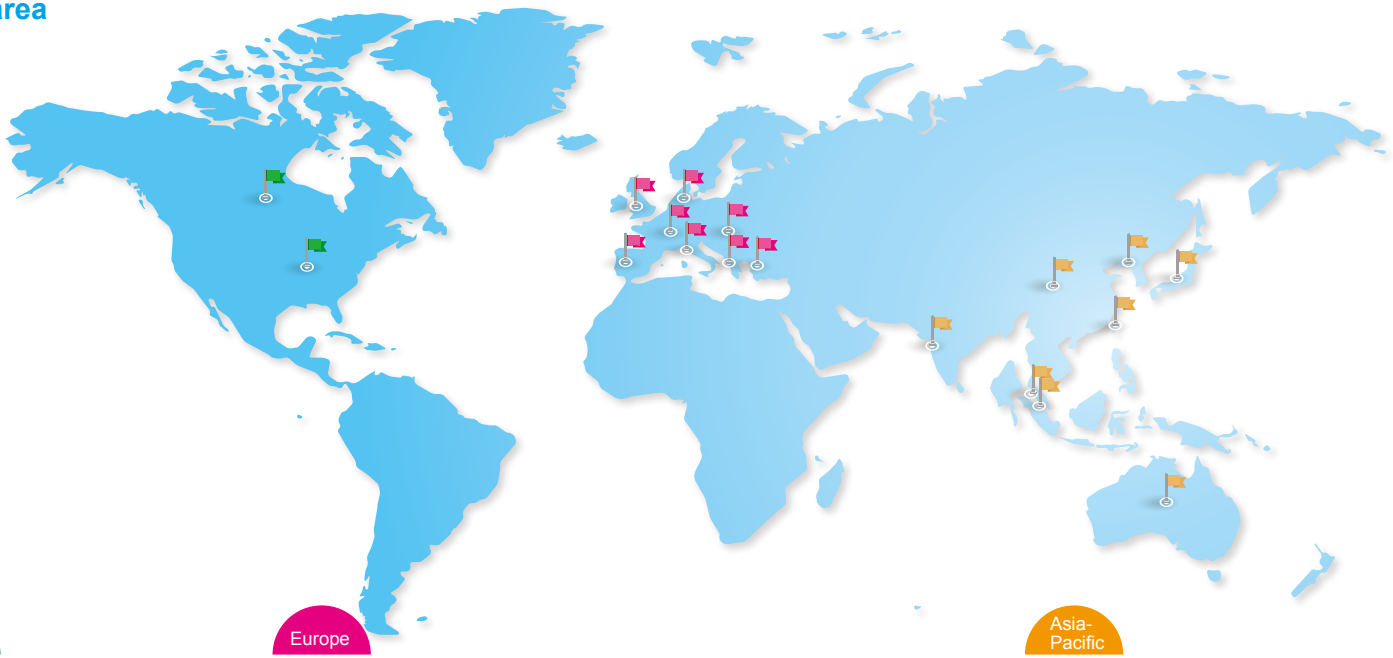
Sales volume

Unit: 1000 NTD



	2014	2015	2016
Other	3,542,983	2,891,396	2,104,081
Solar module	195,918	3,771,114	2,437,016
Solar cell	4,458,456	1,485,793	3,390,511
Solar wafer	3,400,513	4,741,481	4,982,969
Solar ingot	301,895	69,111	257,514

Sales area



Americas

Canada / USA

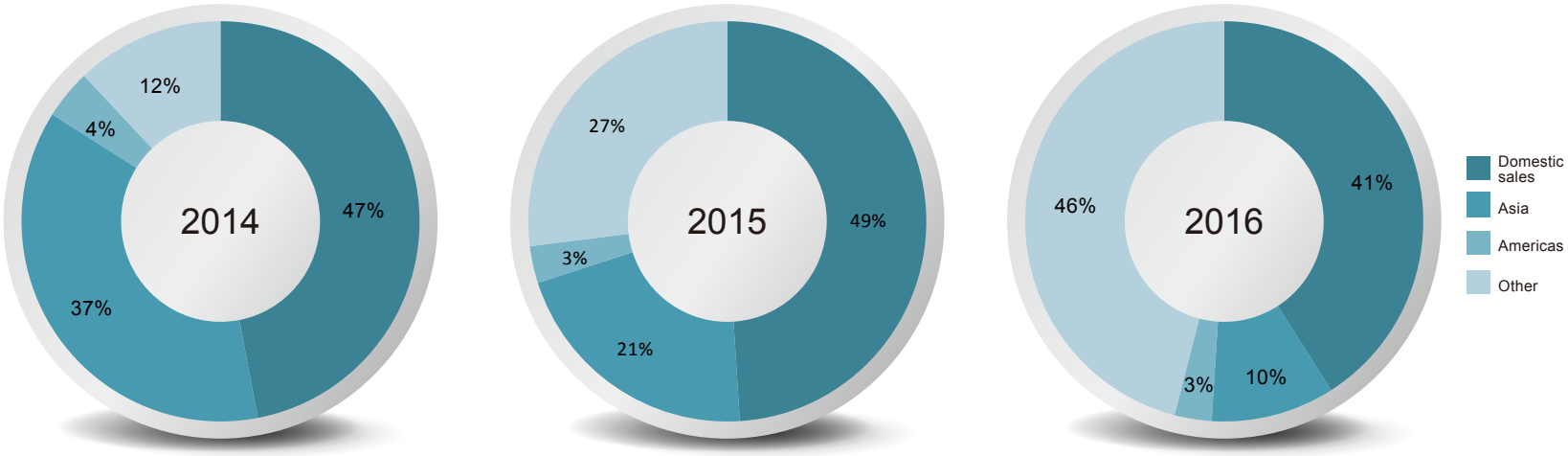
Europe

Denmark / Lithuania / UK / Germany / Poland / Czech Republic / Belgium / Switzerland / Austria / France / Slovenia / Italy / Spain / Turkey

Asia-Pacific

China / Korea / Japan / Taiwan / Malaysia / Singapore / India / Australia

Sales area ratios



Sales in Asia decreased from 37% in 2014 to 10% in 2016 mainly due to the expansion and contraction of individual markets and shifting manufacturing locations as a result of module plant changes. The sales ratio of other regions increased from 12% in 2014 to 46% in 2016. SAS sells high-performance diversified products with corresponding adjustments of sales areas.

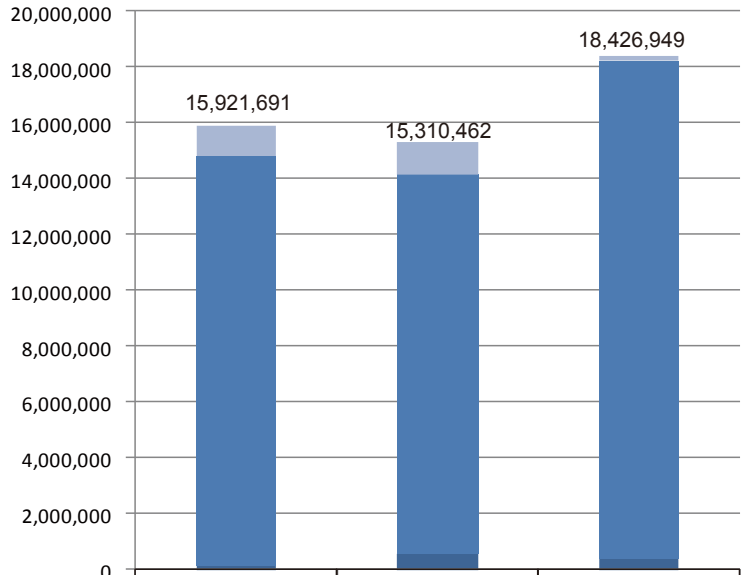
Semiconductor industry

Product sales

Declining sales in 2015 were mainly a result of the fact that the whole semiconductor industry was mired in a slump. GlobalWafers' drop in sales was not as significant as that of its competitors. Revenue growth in 2016 was mainly caused by the acquisition of Topsil in July and SEMI in December.

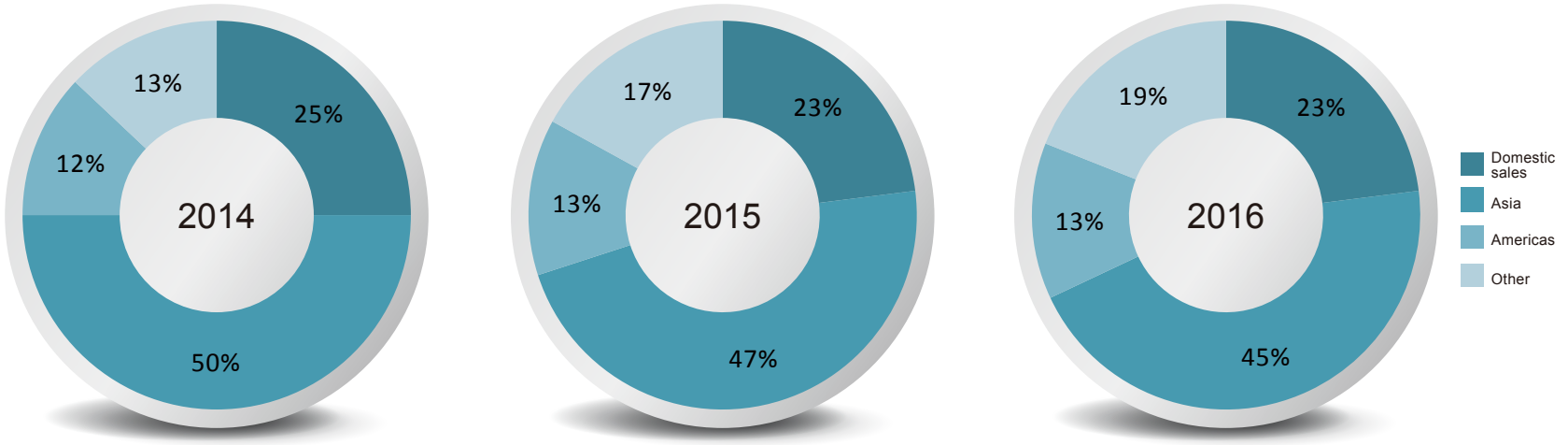
Sales volume

Unit: 1000 NTD



	2014	2015	2016
Other	160,802	518,399	408,912
Semiconductor wafer	14,675,962	13,614,573	17,850,125
Semiconductor ingot	1,084,927	1,177,490	167,912

Sales area ratios



Domestic sales declined in 2015 mainly due to the consolidation and merger of several domestic clients and relocation of plants to Mainland China. These factors resulted in a slight decrease of domestic sales. In 2015, the Asian sales ratio decreased and the ratios of the Americas and other regions increased mainly due to the addition of new customers in Europe and America and rising shipping volumes. Due to the acquisition of Topsil and SEMI (a European and US company) in 2016, the ratio of American and European customers increased.

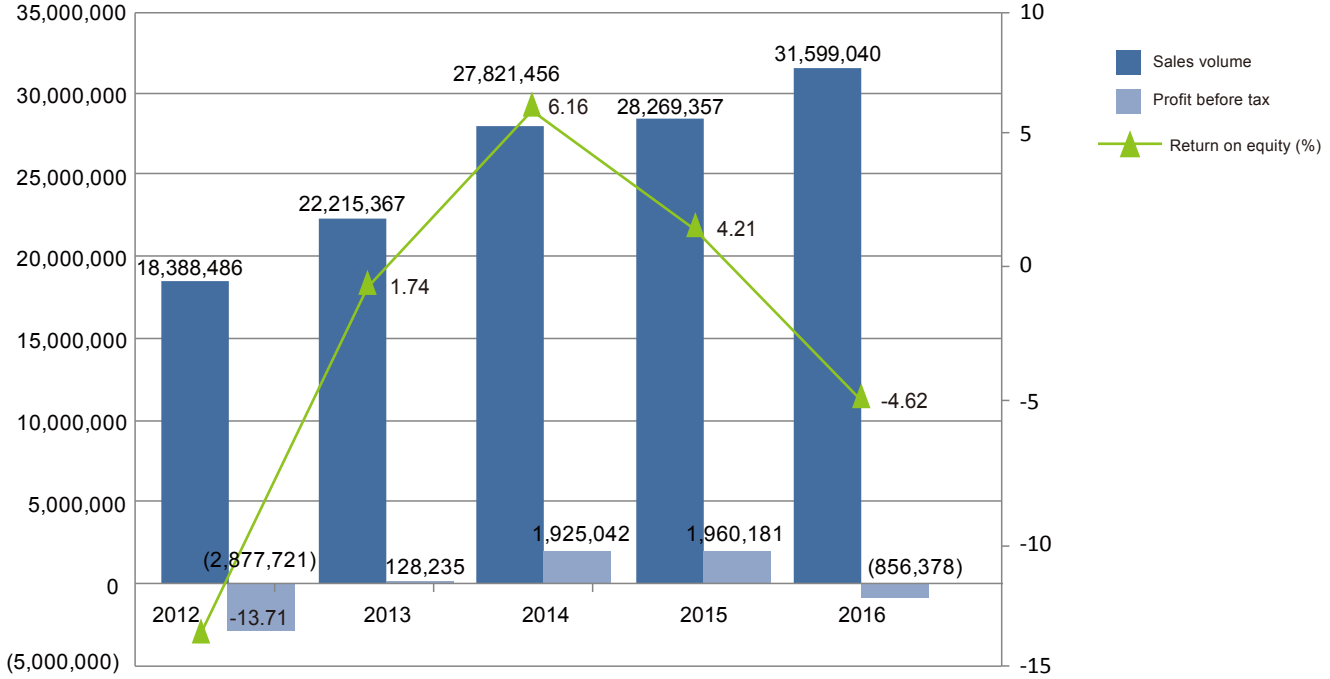
1.1.5 Operating performance

SAS embraces ethical corporate management principles and views the creation of value for shareholders, customers, and employees as its primary goal. The company relies on its leading technologies to consolidate its position in the market for high-performance solar energy products. Stable revenue growth is maintained through production and marketing strategies characterized by product differentiation. In 2016, the costs of solar energy products exceeded the quoted prices due to excessive price reductions to clear out inventories in the third quarter. The added impact of the adoption of the equity method which requires the listing of investment and exchange rate losses made it impossible for the company to reach its goal of profitability. The maintenance of continued growth and minimization of losses requires the adoption of countermeasures such as selective order acceptance, production cuts and inventory adjustment, thorough cost reduction, and effective control of expenditures. In 2016, the consolidated revenue of SAS amounted to NT$ 31.6 billion and the annual growth rate hit a record high of 12%. Net losses reached NT$ 1.289 billion and cash dividends per share equaled NT$ 1.5.

For more details on the company's operating performance and financial data please refer to the 2016 Consolidated Financial Statement.

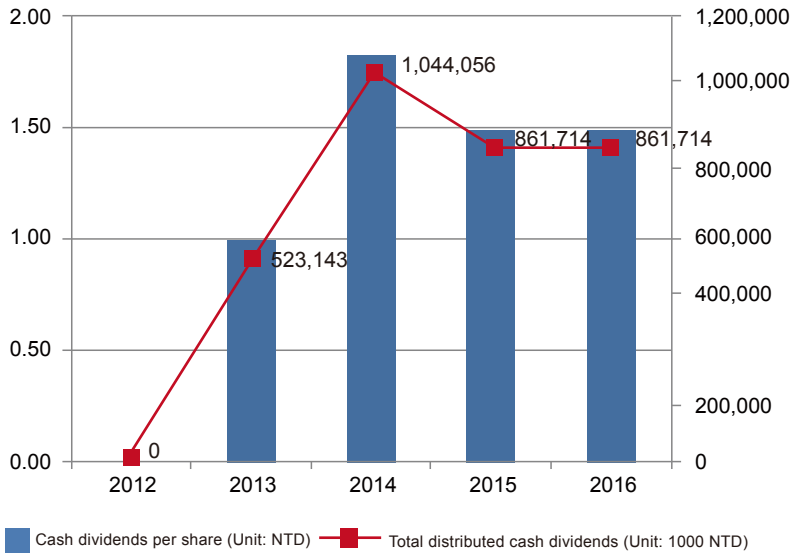
Financial performance (consolidated)

Unit: 1000 NTD



Cash dividends

Unit: 1000 NTD



Analysis of 2016 economic value

Unit: 1000NTD

Direct economic value	Reported annual revenue	31,599,040
Distributed economic value	Operating costs	28,164,027
	Employee salaries and benefits	5,724,926
	Payments to investors	861,714
	Payments to the government	1,472,727

Overall economic environment and industry trends

2016 saw dramatic changes in the Taiwanese solar energy industry. In the first half of the year, demand exceeded supply due to the strong domestic demand in China. The second half saw a rapid reversal of this trend. Product prices dropped unreasonably (sometimes below production costs) and domestic manufacturers again faced losses due to the the end of the rush of new installations in China and excessive price reductions to clear out inventories. Looking ahead to 2017, the global solar energy market will exhibit sluggish growth due to the combined impact of declining installed capacity, a situation of supply exceeding demand, and rapid political and economic changes. For Taiwanese solar manufacturers, this will be a year full of uncertainty and arduous challenges. Based on statistics released by the Market Intelligence & Consulting Institute (MIC), it is expected that supply will increase 90GW and demand will reach 76.9GW. This situation of supply exceeding demand is predicted to lead to price pressure on solar cells and a squeeze on manufacturer profits. In the face of these dramatic changes, the primary goals of the company are cost reduction and the accelerated launch of new-generation highly efficient products to maintain its competitive edge. SAS has a complete blueprint for vertical integration from mid/upstream high-performance wafers to mid/downstream cell and high-performance PERC mono module. This blueprint has been coupled with system deployment to ensure an industry-leading product strategy with full vertical integration. In line with the active promotion of renewable energy policies by the government, SAS will continue to expand its deployment of solar power generation systems and the installation of domestic power plants. Vertical integration of the group's resources serves the purpose of strengthening downstream export sales and ensuring long-term stable returns and sound expansion of business scope and thereby maximize shareholder benefits and achieve sustainable corporate development.

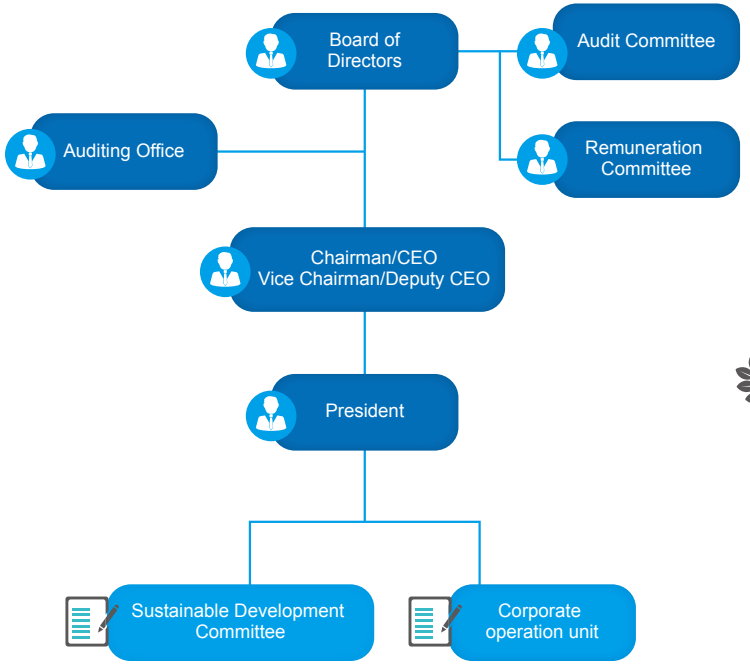
1.1.6 Sustainability organization

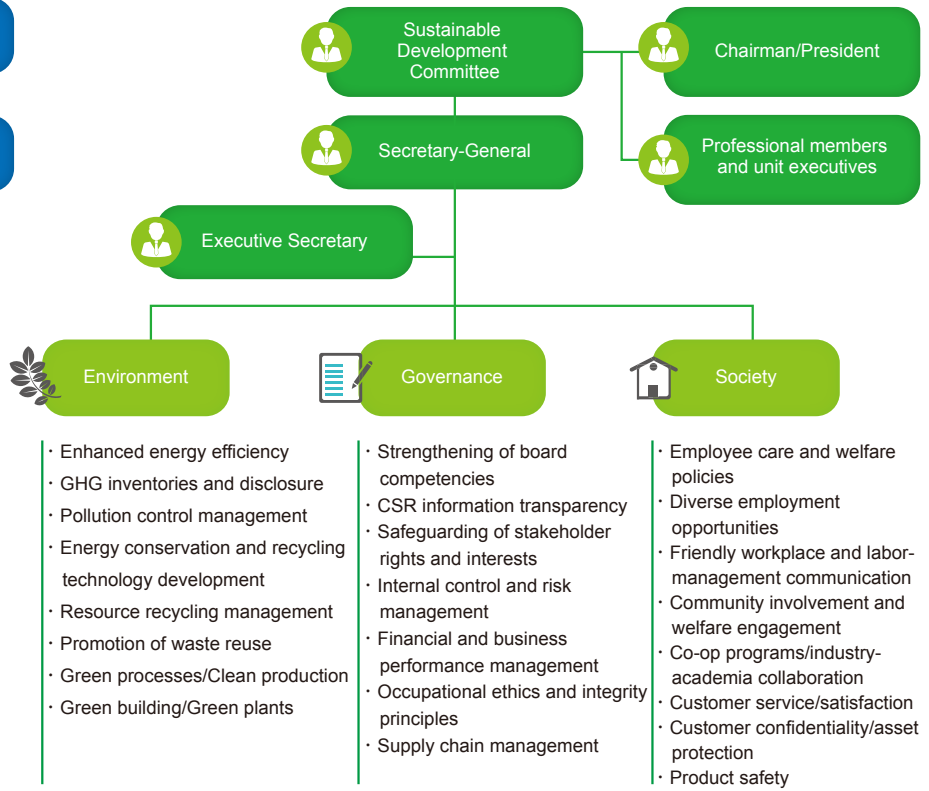
The SAS sustainability framework is centered around the board. The corporate operation unit and the Sustainable Development Committee are led by the President. An Auditing Office has been established to implement monitoring and supervision and an Audit Committee and Remuneration Committee have been formed to enhance board competencies and corporate governance. The board has ratified the CSR Best Practice Principles to demonstrate the determination of the highest governance level to promote sustainable corporate development to stakeholders with the ultimate goal of utilizing the company's influence to expand industry participation and awareness and increase the joint commitment to sustainability.

The SAS Sustainable Development Committee was officially established in April 2016 to serve as the highest CSR unit inside the company. The President serves as the Chairman of this committee which plans and formulates ESG (environmental, social, and governance dimensions) and sustainable development directions and goals for the whole company in a unified manner.

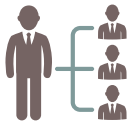
The committee is further divided into three task forces (environmental, governance, and social) to ensure implementation of ESG activities. The task forces consist of professional members and unit executives and are in charge of the formulation of strategies and management policies as well as cross-departmental integration, execution, and promotion of relevant issues. The task forces also aim to gain a clear understanding of the concerns and expectations of corresponding stakeholders with regard to the corporate governance, environmental, and social dimensions through different communication and engagement channels. Discussions are initiated and resolutions are reached in committee meetings. Upon review of committee performance and goal achievement, the chairman delivers annual reports in board meetings.

Sino-American Silicon Products Inc.





Sustainable development policy



Implementation of corporate governance

- 1.Formulation of a corporate vision and management policy.
  2.Incorporation of CSR into corporate development direction and approval of concrete implementation plans.
  3.Guarantee of the timeliness and accuracy of CSR information diclosure
- Respect for shareholder rights and interests; better understanding of demands and expectations through communication and engagement and appropriate response to issues of concern
- Planned integration of CSR into employee performance appraisal systems and establishment of a clear incentive and penalty system
- Regular organization of CSR training

Sustainable environment

- Enhancement of resource usage efficiency and use of renewable materials with low environmental impact.
- Establishment of an environmental management system that conforms to industry characteristics:
  1.Collection and assessment of data on the environmental impact of operating activities.
  2.Formulation of measurable environmental sustainability goals and regular reviews.
  3.Formulation of action plans and regular reviews.
- The following factors must be considered for operating activities:
  1.Reduction of resource and energy consumption.
  2.Reduction of pollutant emissions and waste discharge and proper waste treatment.
  3.Enhancement of raw material recyclability and reuse.
  4.Maximum sustainable use of renewable resources.
  5.Improved product durability.
  6.Enhanced product performance

Safeguarding of employee rights and interests

- Compliance with labor laws and regulations and international human rights conventions and guarantee of gender equality, right to work, and anti-discrimination; creation of a safe and healthy work environment, provision of necessary health and first-aid measures to alleviate health and safety hazards and prevent occupational accidents.
- Provision of information for employees to give them a better understanding of labor laws and regulations of countries where operating bases are located and safeguard labor rights and interests bestowed by law.
- Business performance results should be reflected in employee compensations in a timely manner to facilitate manpower resource recruitment, retention, and motivation; creation of a positive environment for employee career development and formulation of effective career skill development and training programs.
- Creation of regular communication channels for employees to give them an opportunity to gain a better understanding and express their opinions about business management.

Maintenance of social welfare

- Assessment and management of various risks that may disrupt operations.
- Planned assessment of environmental and social impacts of procurement behavior on communities where supply sources are located; fulfillment of CSR in cooperation with the supply chain.
- Planning of inclusion of jointly observed CSR policies and termination and rescission provisions in case of violations causing environmental and social impacts on communities where supply sources are located in contracts signed with major suppliers.
- Planned assessment of the impact of operating activities on local communities; appropriate hiring of local talent to increase community approval.
- Active participation in community development via multiple channels.

CSR

Strengthening of CSR information disclosure

- Planned disclosure:

1.CSR management policy ratified by board resolution.
2.Risks and impacts on operating activities and company finances in the dimensions of corporate governance, sustainable environment, employee rights and interests, and social welfare.
3.Formulation and execution of CSR goals and measures and implementation performance.
4.Main stakeholders and their issues of concern.
5.Management and disclosure of performance information by major suppliers with regard to material environmental and social issues.

Sustainable Development Committee member roles and responsibilities

Committee members	Range of responsibilities
President Office	Corporate governance, occupational ethics, integrity principles, anti-corruption, stakeholder engagement, report compilation/release
Auditing Office	Corporate governance, occupational ethics, integrity principles, anti-corruption, internal control and management
Legal Affairs	Corporate governance, occupational ethics, integrity principles, anti-corruption, legal compliance
Administrative Division	HR structure, welfare policies, talent training, career planning, friendly environment, labor-management communication
Procurement Division	Supply chain management
R&D Division	Product innovation and R&D, cutting edge technologies, future outlook, green products
Marketing Division	Operational strategy, production and marketing
Finance & Accounting Division	Business performance, financial information, dividend policy
Health & Safety Management Department	Environmental sustainability management, pollution control management, occupational health and safety management, stakeholder engagement, report compilation/release, ESH risk management
Plant Affairs Department	Provision/management of energy consumption information, energy/power/water conservation improvements and effects, air/water pollution control management
Quality Assurance Division	Product quality, customer service, customer satisfaction
General Affairs	Energy/power/water/raw material conservation improvements and effects, community engagement and concern
IT Department	Protection of confidential customer information
Manufacturing Division	Energy/power/water/raw material conservation improvements and effects, occupational health and safety implementation improvements and effects
Employee Welfare Committee	Labor-management communication, welfare policy, community engagement and concern

1.1.7 Participation in external associations

Association/organization	Participant	Member	Member
Taiwan Photovoltaic Industry Association	● Note	●	Standing director
SEMI Taiwan	●	●	Member
Chinese Professional Management Association	●	●	Supervisor
Taiwan Mergers & Acquisitions and Private Equity Council	●	●	Vice President
International Technology Roadmap for Photovoltaic (ITRPV)	●	●	Co-chairman
Chinese Professional Management Association of Hsinchu		●	
Allied Association for Science Park Industries		●	
Institute of Internal Auditors (IIA)-Taiwan Chapter		●	
Computer Audit Association		●	

Note : Joint proposal of a plan for the determination of a VOC emission coefficient for photovoltaic industry wafer slicing processes in the context of participation in the Environmental Safety Commission of the Association (2015 until now)

1.1.8 Milestones

Company history

- Jan 1981 Establishment
- Aug 1982 Successful pilot production of silicon ingots and wafers
- Oct 1995 Acquisition of ISO-9002 Quality Assurance Certificate
- Jun 1999 Acquisition of QS-9000 Quality Assurance Certificate
- Oct 1999 Establishment of the SAS subsidiary Kunshan Sino Silicon Technology Company in Shanghai
- Mar 2001 Successful IPO
- Sep 2004 Acquisition of ISO 14001 certificate
- Jun 2005 Establishment of Chunan Branch
- Jul 2005 Acquisition of TS16949: 2002 Quality Assurance certificate
- Apr 2008 Acquisition of GlobiTech Incorporated
- Jun 2010 Completion of Chunan Plant II
- Feb 2011 Passing of basic certification administered by Taiwan Intellectual Property Management System (TIPS)
- Oct 2011 Completion of the spin-off of three major business divisions; Sino-American Silicon retains the solar energy business division and establishes GlobalWafers (semiconductor spinoff) and Sino Sapphire (sapphire spinoff)
- Apr 2012 The SAS subsidiary GlobalWafersCo., Ltd. acquires the semiconductor and silicon wafer business divisions of Covalent
  Materials Corporation
- Nov 2012 Passing of the advanced certification administered by Taiwan Intellectual Property Management System (TIPS)
- Jan 2013 The SAS subsidiary Sino Sapphire Co., Ltd. merges with Crystalwide Technology Inc
- Aug 2014 Acquisition and merger with Sunrise Global Solar Energy
- Apr 2015 Acquisition of the Occupational Health and Safety Management System (OHSAS 18001) certificate
- Mar 2016 Chunan plant acquires ISO 9001: 2015 certificate
- Mar 2016 Chunan and Yilan plants acquire ISO 14001: 2015 certificate
- May 2016 50MW solar farm in Palo on Leyte Island in the Philippines goes into full operation

Awards and recognitions

2004

Oct 2004
Honored with an Excellence Award at the 12th Industrial Technology Advancement Awards

2008

Oct 2008
Honored with the Outstanding Innovative Enterprise Award at the 16th Industrial Technology Advancement Awards

2010

Sep 2010
Honored with the Outstanding Contribution Award in the execution of Industrial Technology Programs presented by the Ministry of Economic Affairs

Nov 2010
Honored with the Employment Contribution Award of the Executive Yuan

2011

Nov 2011
Honored with the TPEx Golden Laurel Award in recognition of outstanding market value and revenue

Dec 2011
Honored with the R&D Achievement Award presented by the Hsinchu Science Park Administration

2012

Sep 2012
SAS Aegis® Wafer is honored with the Silicon Innovation Award at the 2012 Solar Industry Awards

Sep 2012
The merger project of Sino-American Silicon and the Japanese company Covalent is recognized with the gold award for most representative merger & acquisition in 2012 by the Taiwan Mergers & Acquisitions and Private Equity Council

2013

Sep 2013
Listed as one of the TOP 50 public Taiwanese companies in US patent value

2014

Apr 2014
Recognized with an “A” rating in the 12th Information Disclosure Evaluation for Listed Companies

Nov 2014
Honored with the Golden Laurel Award for market value contributions presented by Taipei Exchange

Nov 2014
Honored with the Golden Laurel Award for employment promotion presented by Taipei Exchange

2015

Apr 2015
Recognized with an “A+” rating in the 12th Information Disclosure Evaluation for Listed Companies

Apr 2015
Ranked in the top 5% of all listed OTC companies in the 1st Corporate Governance Appraisal

2016

Apr 2016
Ranked in the top 5% of all listed OTC companies in the 2nd Corporate Governance Appraisal

Aug 2016
Dr. Chun-wen Lan, chief high-tech consultant of SAS, is recognized with the prestigious Laudise Prize by the International Organization of Crystal Growth (IOCG) in 2016– the award-winning high-performance polycrystalline crystal growth technology was jointly developed by Dr. Lan and the SAS R&D team

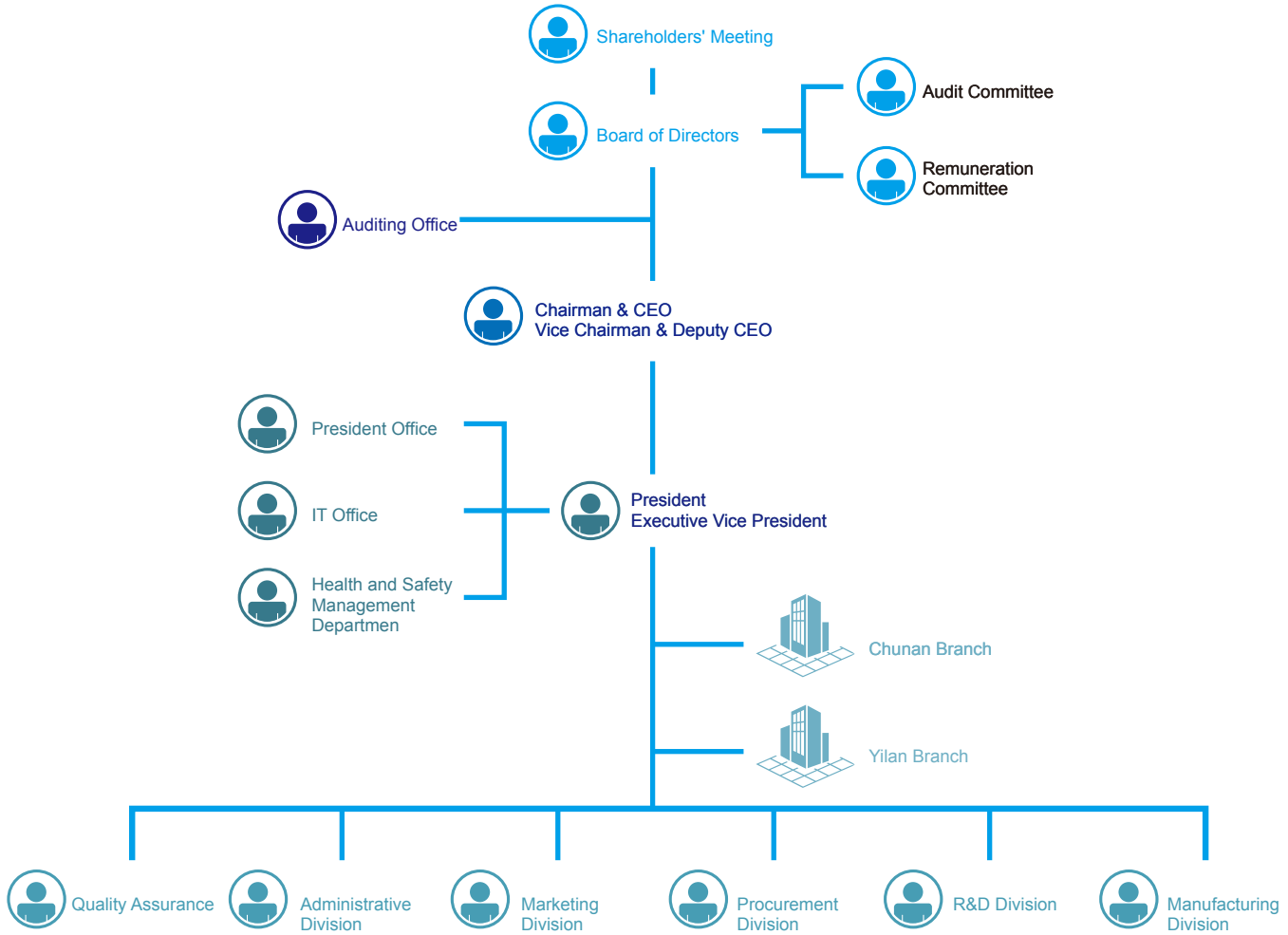
Dec 2016
Honored with the Golden Energy Award for outstanding photovoltaic products presented by the Bureau of Energy, MOEA

1.2 Corporate Governance

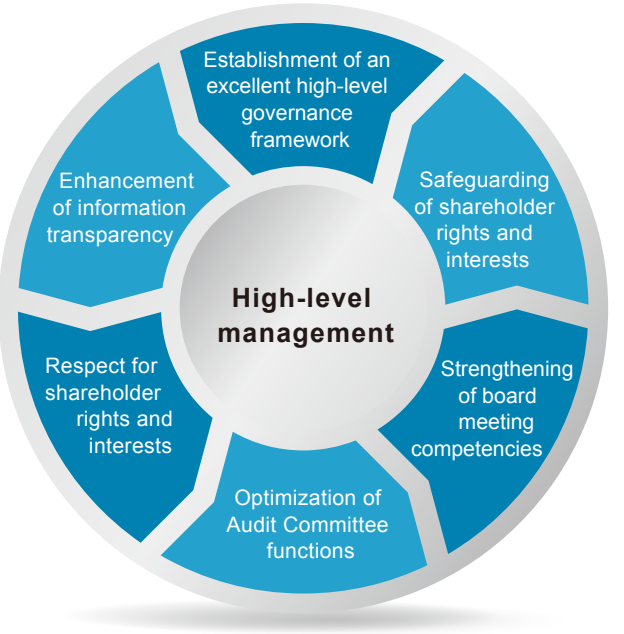
SAS has made a long-term commitment to promote business integrity policies to form a corporate culture characterized by ethical corporate management. The company also strengthens information disclosure transparency and has been ranked in the top 5% of all listed OTC companies in three consecutive corporate governance appraisals. The company aims to demonstrate its determination to pursue sustainable operations.

1.2.1 Corporate governance framework

SAS Organizational Chart



1.2.2 High-level management



SAS firmly embraces integrity principles and places high emphasis on shareholder rights and interests. The company is firmly convinced that an efficient board of directors is the main foundation for excellent corporate governance. SAS has established an effective and sound corporate governance framework. The Audit Committee and Remuneration Committee, which are directly subordinate to the board, are authorized to assist in the performance of the supervisory duties of the board. The organizational charter of every committee must be approved by the board and relevant activities and resolution must be reported to the board on a regular basis. The Audit and Remuneration Committee are solely comprised of independent directors.

The SAS corporate governance framework is constantly improved and refined through internal audits and controls to make SAS stand out from its competitors. The ranking in the top 5% of OTC listed companies in three consecutive corporate governance appraisals is an outstanding achievement resulting from a thorough implementation of corporate governance and sets a paragon of corporate governance. Looking ahead into the future, SAS will continue to embrace integrity principles and further refine its corporate governance blueprint to strengthen the corporate structure with the ultimate goal of enhancing business performance, practicing CSR, and turning SAS into a benchmark enterprise.

Key points of the corporate governance organization

* Three of thirteen board members are independent directors
* Three of thirteen board members are female directors
* The Audit and Remuneration Committees are solely comprised of independent directors
* The organizational charter of each committee is publicly disclosed on the corporate website
* All committees conduct annual self-performance appraisals
* The board conducts annual self-performance appraisals and discloses the results on the corporate website

1.2.2.1 Board of directors

The SAS board of directors is comprised of 13 directors with profound knowledge in their areas of expertise to ensure an excellent corporate governance system and sound supervisory and management functions. They possess professional skills and expertise in the areas of professional technology, business management, legal and financial affairs, and strategy management. Board members are elected for a term of three years and may be reelected for consecutive terms. Board meetings are held at least once per quarter. A total of 10 board meetings were held in 2016 with an average attendance rate of 81%.

Board responsibilities include supervision and monitoring of legal compliance, provision of strategic guidance for management teams, and assessment of management team performance to spur the achievement of operational goals and enhance business performance.

Board meeting attendance in 2016 (total of 10 meetings)

Title	Name	Professional and economic background	Personal attendance	Attendance by proxy	Personal attendance rate (%)	Note
Chairman	M.K. Lu	Honorary Doctorship in Engineering from National Chiao Tung University /Successful completion of the advanced MBA Training Program for Entrepreneurs offered by National Chengchi University President of Lite-On Semiconductor Corp. and Lite-On Power Semi and Vice President of Silitek Corp.	10	0	100%	
Vice Chairman	Tom Yao	MA Degree from the Graduate Institute of Management at Tamkang University Assistant Vice President of the Manufacturing Division of Lite-On Power Semi and President of Sino-American Silicon Products Inc.	10	0	100%	
Director	Doris Hsu	MA in Computer Science from University of Illinois Executive Vice President of Sino-American Silicon Products Inc.	10	0	100%	
Director	Kang-Hsin Liu	Department of Shipping & Transportation Management, National Taiwan College of Marine Science and Technology Assistant Vice President of the General Administration Division of Formosa Plastics, Director of Formosa Chemicals & Fibre Corporation	5	5	50%	
Director	Chin-Lung Chang	MA in Chemical Engineering from Yokohama National University Associate Professor at Feng Chia University and Taipei Tech, Manager of the Business and Foreign Sales Department and Supervisor of Nan Ya Plastics, and Formosa Plastics Supervisor	5	5	50%	
Director	Wen-Hai Tsai	Accounting Department, National Chengchi University Director of Actherm Inc. and ENE Technology Inc.	9	1	90%	
Director	Kui-Chang Hsu	MA in Human Resource Management from Texas A&M University,C.S. MA in Thermal and Fluid Science, Graduate Institute of Mechanics, Yuan Ze University Chairman and President of Sunrise Global Solar Energy Co., Ltd. Assistant Research Scholar at the Energy and Resources Laboratories of the Industrial Technology Research Institute	9	1	90%	
Director	MaoYang Corporation Representative:Tie-Chih Sun	MA from the Graduate Institute of Law, National Chengchi University Chairman of Tycoon Securities Co., Ltd.	8	2	80%	
Director	Kai-Chiang Company Representative: Hao Fang	MA in International Business Management from National Chengchi University Vice President of TUM Inc.	0	1	0%	Director Hao Fang resigned on February 19, 2016
Director	Kai-Chiang Company Representative: Chih-Yao Sun	University of California, Santa Cruz Vermont Law School	7	2	78%	Kai-Chiang Company appointed Director Chih-Yao Sun as Company Representative on February 19, 2016
Director	Kun Chang Investment Co., Ltd Representative: Mei-Yuan Chang	MA in Industrial and Systems Engineering from Ohio State University Investment Manager of China Investment and Development Co., Ltd., Manager in the Investment Department of Guanghua Investment Co., President of Shengyang Management Consulting Co., Ltd.	4	1	80%	Director Mei-Yuan Chang resigned on August 3, 2016
Director	Kun Chang Investment Co., Ltd Representative: Yu-Ta Chang	MA from the NTU Graduate Institute of Finance Vice President of Weilian Technology Co., Ltd.	4	1	80%	Kun Chang Investment Co., Ltd. appointed Director Yu-Ta Chang as Company Representative on August 3, 2016
Director	Pan Asia Solar Energy Taiwan Enterprise Co., Ltd. representative: SZPITALAK TED	Physics Institute of University of New South Wales, Australia Co-founder of JA Solar Holdings Co., Ltd (JASO), Co-founder of China Sunergy Co., Ltd (CSUN), Co-founder of Suntech Power Holdings Co., Ltd (STP), Equipment and Technology Specialist at the Photovoltaic Center (ARC) of the University of New South Wales, Australia, Faculty of University of New SouthWales, Australia, Gold Certificate Winner, Senior Equipment Engineer of Pacific Solar Co., Ltd.	1	2	33%	Director SZPITALAK TED of Pan Asia Solar Energy Taiwan Enterprise Co., Ltd. resigned on May 27, 2016
Independent Director	Ting-Kuo Chen	PhD in Business Administration from University of Michigan Ruentex Group Consultant, President of Charoen Phokphand New York, Vice President of Formosa Plastics JM Eagle USA, Chairman of Sinofac Securities Co., Ltd., Professor/Director/Dean at the NTU College of Management, Dean/Chair Professor of the College of Management, Tamkang University	10	0	100%	
Independent Director	Hsing-Hsien Lin	Master of Commerce, Tulane University, USA BA from the Department of Electrophysics, National Chiao Tung University President and CEO of Lite-On Technology Corporation, Vice Chairman of Lite-On Group, President of Silitek Corp., President of Texas Instruments Taiwan	7	3	70%	
Independent Director	Meng-Hua Huang	Master of Commerce, Tulane University, USA President of Leotek Electronics Corporation, Manager and Senior Accounting Officer of Texas Instruments Taiwan, President Office Director (Vice President) of Silitek Corp., Chief Auditor of Lite-On Group, Senior Vice President of Lite-On Technology Corporation	9	1	90%	

For concurrent positions of SAS directors in other companies please refer to the second Paragraph "Information on Directors, Supervisors, President, Vice Presidents, and Executives of Various Departments and Branches – (1) Directors and Supervisors" of Chapter 3 (Governance Report) of the 2017 Annual Report posted in the Investor Section of the corporate website

The Rules of Procedure for Board of Directors Meetings contain the following provision: If a director or a juristic person that the director represents is an interested party in relation 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. Said director may also not exercise voting rights as proxy for another director.

Recusal by directors from proposals involving conflicts of interests:

1. On May 5, 2016, the board discussed a proposal to allow the lessor (Mingyang Co., Ltd.) of the new Generator Room and Security Room of Plant III of the Yilan Branch to use these facilities as collateral and guarantee for a bank loan. Due to the fact that SAS Director Kui-Chang Hsu is an interested party, he recused himself from the discussions and voting process related to this proposal.
2. On August 9, 2016, the board discussed a proposal to revoke the right of the lessor (Mingyang Co., Ltd.) of the new Generator Room and Security Room of Plant III of the Yilan Branch to use these facilities as collateral and guarantee for a bank loan. Due to the fact that SAS Director Kui-Chang Hsu is an interested party, he recused himself from the discussions and voting process related to this proposal.
3. On September 20, 2016, the board discussed a proposal to subscribe to privately placed unsecured corporate bonds of Crystalwise Technology Inc. Due to the fact that SAS Vice Chairman Tom Yao is an interested party, he recused himself from the discussions and voting process related to this proposal.

For director emolument data please refer to the second Paragraph "Information on Directors, Supervisors, President, Vice Presidents, and Executives of Various Departments and Branches – (3) Director, Supervisor, President, Vice President Remuneration (a) Director (incl. Independent Director) Compensation" of Chapter 3 (Governance Report) of the 2017 Annual Report posted in the Investor Section of the corporate website.

1.2.2.2 Remuneration Committee

SAS established a Remuneration Committee on December 20, 2011 to ensure a sound compensation system for the company's directors (including independent directors) and managers. The committee is comprised of three independent directors and a minimum of two meetings are convened per year. A total of 2 committee meetings were held in 2016 with an average attendance rate of 100%.

The committee members assist the board in the execution and assessment of remuneration and benefit policies and compensation for directors and managers.

The directors and managers of the company have continued their efforts in the fields of corporate governance, ethics & integrity, business performance, enhanced customer satisfaction, improved energy and resource consumption rates, pursuit of a sustainable environment, and promotion of labor health, safety, and well-being to ensure constant progress toward the ultimate goal of sustainable development. The Remuneration Committee plans to fuse compensation policies with sustainability related corporate governance, economic, environmental, and social dimensions to enable SAS to make an all-out effort for society based on its role as a corporate citizen under the joint leadership of its directors and managers.

Pursuant to the regulations set forth in the Remuneration Committee organizational charter, the committee members are authorized to hire lawyers, accountants, and other consultants to assist them in their assessment duties.

The organizational charter of the Remuneration Committee is posted on the SAS website.

Regular assessment of corporate governance and operational performance of directors and managers by the Remuneration Committee

Guarantee of a reasonable ratio of director and manager performance to personal emoluments

Proposal of revision suggestions and assistance in the execution and assessment of remuneration and benefit policies and compensation for managers and directors

Future incorporation of sustainability performance assessment and review into the scope of compensation evaluations

Remuneration committee meeting attendance in 2016 (total of 2 meetings)

Title	Name	Personal attendance	Attendance by proxy	Personal attendance rate	Note
Convener	Ting-Kuo Chen	2	0	100%	-
Member	Hsing-Hsien Lin	2	0	100%	-
Member	Meng-Hua Huang	2	0	100%	-

1.2.2.3 Audit committee

SAS established an Audit Committee on June 26, 2014 to strengthen the internal monitoring mechanism in the field of corporate governance. The committee is comprised of three independent directors and meetings are held at least once per quarter. A total of 9 committee meetings were held in 2016 with an average attendance rate of 93%.

The Audit Committee assists the board in the monitoring of the following tasks

*Appropriate presentation of financial statements
*Appointment and dismissal of CPAs and verification of their skills, qualifications, independence, and performance
*Effective implementation of the internal control system
*Compliance with relevant laws and regulations
*Management and control of existing or potential risks

The Audit Committee is authorized to conduct appropriate reviews and inspections within its scope of responsibility in accordance with the regulations set forth in its organizational charter. The committee also has direct communication channels with internal auditors, CPAs, and relevant personnel and is authorized to hire lawyers, accountants, and other consultants to assist them in the performance of their duties.
The organizational charter of the Audit Committee is posted on the SAS website.

Audit committee meeting attendance in 2016 (total of 9 meetings)

Title	Name	Personal attendance	Attendance by proxy	Personal attendance rate	Note
Independent director	Ting-Kuo Chen	9	0	100%	-
Independent director	Hsing-Hsien Lin	8	1	89%	-
Independent director	Meng-Hua Huang	8	1	89%	-

1.3 Ethics and integrity

SAS implements ethical corporate management and formulates integrity related internal regulations to be observed by all staff members.

1.3.1 Core values and occupational ethics

Integrity is the core value of the company. Relevant norms and rules have been formulated and a communication mechanism has been established to create an environment conducive to ethical corporate management. These rules must be observed by all directors, managers, and staff members. Integrity risks are minimized through a rigorous management mechanism and effective controls to realize the vision to create value and benefits for customers, shareholders, and stakeholders.

The SAS board of directors has ratified relevant internal regulations such as Ethical Corporate Management Best Practice Principles, Code of Ethical Conduct, Procedures for Ethical Management and Guidelines for Conduct, and Risk Management Best-Practice Principles". All these regulations have been made public on the corporate website and internal website to allow queries by employees at any time. Employees are provided with a full understanding of these regulations through training and education on ethical management policies. All regulations are implemented in daily operations to enhance the quality of conduct and occupational ethics of all staff members.

- When engaging in commercial activities, staff members shall not directly or indirectly offer, promise to offer, request or accept any improper benefits, nor commit unethical acts.
- All ROC laws regarding corporate governance shall be strictly observed and serve as the foundation for the implementation of ethical corporate management.
- Identification of operating activities that are associated with a relatively high risk of unethical conduct within the business scope and strengthening of measures to prevent the following types of conduct:
  1.Offering and acceptance of bribes / 2.Illegal political donations / 3.Improper charitable donations or sponsorship / 4.Offering or acceptance of unreasonable presents or hospitality, or other improper benefits / 5.Misappropriation of trade secrets and infringement of intellectual property rights / 6.Engagement in unfair competitive practices / 7.Direct or indirect damage to the rights or interests of stakeholders in the course of research and development, procurement, manufacture, provision, or sale of products and services.
- Prior to initiation of business dealings, it shall be verified that suppliers, customers, or other trading partners have no record of unethical conduct to prevent transactions with such parties.
- Contracts signed with trading partners shall contain provisions requiring compliance with ethical management policies and termination and rescission provisions in case of unethical conduct.
- Formulation of conflict of interest policies and provision of appropriate channels for statement of potential conflicts of interest with the company by stakeholders.
- Regular organization of staff training, incorporation of ethical corporate management policies into employee performance appraisals, and establishment of a clear and effective reward and penalty system.
- Planning of a reporting system, initiation of follow-up investigations by dedicated personnel, and confidentiality of the identity of whistle-blowers.

- Employees shall not take advantage of their positions to gain improper benefits for individuals or companies they have a personal interest or stake in.
- Employees shall not utilize company assets or information for personal gain.
- Classified information that employees become aware of in the performance of their duties shall be kept strictly confidential.
- Employees shall not request, agree on, offer, or accept any form of improper benefits for themselves, third parties, or other companies in the performance of their duties.
- Violations of relevant laws or this code shall be reported to the Audit Committee, managers, and internal audit executives and sufficient information shall be provided to facilitate appropriate handling and follow-up investigations by the company.

SAS is firmly committed to anti-corruption and active prevention of unethical conduct. In addition to the signing of IPR and Confidentiality Agreements with employees, the Ethical Corporate Management Best Practice Principles clearly stipulate that staff members shall not directly or indirectly offer, promise to offer, request or accept any improper benefits or commit unethical acts including breach of ethics, illegal acts, or breach of fiduciary duty for purposes of acquiring or maintaining benefits when engaging in commercial activities.

1.3.2 Reporting channels and protection of informants

SAS has established an effective accounting and internal control system to ensure the implementation of ethical corporate management. Internal audit units inspect the compliance status on a scheduled and non-scheduled basis and submit regular reports of the inspection results to the Audit Committee and the Board of Directors. The company has also formulated Guidelines for the Handling of Reported Cases of Illegal and Unethical Conduct and established a well-defined disciplinary and appeal system for handling violations of the ethical corporate management rules. An employee suggestion box, email box, and grievance hotline are available on the internal website to encourage internal and external personnel to report unethical or improper behavior. The identity of the informant and the reported contents are kept strictly confidential. HR units are in charge of verification and follow-up handling. Disciplinary measures are imposed based on the severity of the offense if infractions of ethical management regulations are verified. The President Office is in charge of the implementation of ethical corporate management policies and the formulation of prevention plans as well as monitoring of plan execution. The implementation status is reported to the board on an annual basis. No instances of corruption were reported in 2016, which bears testimony to the firm commitment of SAS to the active implementation of corporate ethical management policies.

- Formulation of Guidelines for the Handling of Reported Cases of Illegal and Unethical Conduct.
- Establishment of a well-defined disciplinary and appeal system for handling violations of the ethical corporate management rules and provision and public announcement of an employee suggestion box, email box, and grievance hotline on the internal website.

- Provision and public announcement of an employee suggestion box, email box, and grievance hotline on the internal website to encourage internal and external personnel to report unethical or improper behavior.
- The identity of the informant and the reported contents are kept strictly confidential. HR units are in charge of verification and follow-up handling. Disciplinary measures are imposed based on the severity of the offense if infractions of ethical management regulations are verified.

- The President Office is in charge of the implementation of ethical corporate management policies and the formulation of prevention plans as well as monitoring of plan execution. The implementation status is reported to the board on an annual basis.
- No instances of corruption were reported in 2016.

1.3.3 Implementation of internal audits

The Auditing Office assists managers in the design of an adequate internal control mechanism for various operational processes of daily business activities and operations associated with potential corruption risks. The Risk Management Committee, HR Department, and Auditing Office are responsible for the identification of corruption risks, provision of training, and verification of the implementation status of relevant mechanisms, respectively. The goal is to reduce the incidence of corruption and nip it in the bud. The audit units assess the implementation status and effects of the internal control mechanism on a regular basis. They also solicit suggestions regarding potential risks (including embezzlement and corruption) from top executives of various departments. Adequate audit plans are formulated for the execution of relevant audit operations. Results are reported to the Audit Committee and board on a regular basis to give the management level a better understanding of the current status of corporate governance and thereby achieve management goals.

Internal control risk assessments and actual audits are carried out for the three operating bases in Taiwan (Taiwan HQ, Chunan Branch, Yilan Branch). Audits and reviews cover procurement operations, sales operations, and financial reporting as well as material issues identified in the SAS Corporate Ethical Management Best Practice Principles and Code of Ethical Conduct including offering and acceptance of bribes, illegal political donations, improper charitable donations or sponsorship, offering or acceptance of unreasonable presents or hospitality, or other improper benefits, misappropriation of trade secrets and infringement of intellectual property rights, engagement in unfair competitive practices, direct or indirect damage to the rights or interests of stakeholders in the course of research and development, procurement, manufacture, provision, or sale of products and services. No major corruption risks and incidents were reported in 2016 and the anti-corruption review rate in the three operating bases in Taiwan was 100%.

In 2016, the anti-corruption review rate in the three operating bases in Taiwan was 100%

Definition of unethical conduct
Unethical conduct shall include the following: Offering and acceptance of bribes, illegal political donations, improper charitable donations or sponsorship, offering or acceptance of unreasonable presents or hospitality, or other improper benefits, misappropriation of trade secrets and infringement of intellectual property rights, engagement in unfair competitive practices, direct or indirect damage to the rights or interests of stakeholders in the course of research and development, procurement, manufacture, provision, or sale of products and services.

Audits are carried out for the three operating bases in Taiwan (Taiwan HQ, Chunan Branch, Yilan Branch)

Anti-corruption review rate in the context of audits of the three operating bases in 2016: 100%。

1.3.4 Prevention of conflicts of interests

SAS stipulates the following in its Procedures for Ethical Management and Guidelines for Conduct: Where a proposal at a given board of directors meeting concerns the personal interest of, or the interest of the juristic person represented by, any of the directors, supervisors, managers, and other stakeholders attending or present at board meetings, the concerned person shall state the important aspects of the relationship of interest at the given board meeting. If his or her participation is likely to prejudice the interest of the company, the concerned person may not participate in discussion of or voting on the proposal and shall recuse himself or herself from the discussion or the voting, and may not exercise voting rights as proxy for another director. The directors shall practice self-discipline and must not support one another in improper dealings. Where SAS employees detect conflicts with their personal interests or the interest of the juristic person represented by them or the performance of their duties results in improper benefits for themselves, their spouses, parents, children, or related parties, they shall report the details of such conflicts of interest to their immediate supervisors and SAS dedicated units. Immediate supervisors shall provide proper guidance.

1.4 Risk management

SAS has formulated Risk Management Best-Practice Principles in 2014 in response to a rapidly changing business environment to ensure stable business operations and sustainable development. The three major goals of the risk management system are as follows:

Active engagement in various operations and services under the premise of acceptable risk levels to increase the quality and quantity of revenue.

Increased scope of risk control and negative listing of routine operations and important principles if deemed necessary.

Institutionalization, computerization, and increasing discipline to ensure compliance with risk controls.

The SAS risk management process is composed of the following five tasks: Risk identification, risk measurement, risk monitoring and control, risk reporting and disclosure, and risk response. Risk management strategies are implemented through the effective execution of this risk management process:

SAS has developed a measurement method as a key reference for risk management. For quantifiable risks, we adopt rigorous statistical analysis techniques to conduct analyses and management. An incremental approach is adopted for the management of quantification processes. Risks which are hard to quantify are measured through qualitative methods. The probability and impact of risk occurrence is expressed through verbal description. Risk management-related information is disclosed in annual reports and on the corporate website.

SAS has established an effective risk management mechanism to assess and monitor risk tolerance capabilities, current state of sustained risks, determination of risk response strategies, and compliance with risk management procedures. SAS has identified the following ESG risks and opportunities:

Identified risks strategy of turning risks into opportunities

Economic dimension

Management and investment risks

- Creation of a supply chain with fully integrated up-, mid- and downstream operations to expand the scope of operations and spread out operational risks through diversified business strategies.
- Continued in-depth development of advanced technologies to accelerate the launch of new-generation niche products with high conversion efficiency.
- Introduction of key technologies through strategic alliances to accelerate the development of new products and shorten product development times with the goal of reducing production costs and thereby increasing competitiveness.
- Continued commitment to the global deployment of downstream systems to expand export sales and ensure stable returns and cash flows over the long run.

Corporate governance risks

- Continued refinement of corporate governance blueprints to implement SAS corporate governance policies and fulfill CSR to demonstrate the commitment and determination of SAS to pursue sustainable operations.

Environmental dimension

Climate change risk

Management through the two dimensions of alleviation and adjustment Alleviation

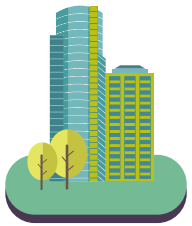
- Enhancement of energy efficiency.
- Development of clean energy sources.
- Promotion of energy conservation improvement initiatives.
- Development of new green business models and carbon reduction through national and international cooperation.

Adjustment

- Strengthening of the endurance capacity of the company in the face of extreme weather patterns (droughts, floods).
- Energy management and enhanced energy efficiency in response to energy cost hikes (e.g., electricity fee increases, carbon taxes, and energy taxes).

Environmental protection risks

- Commitment to the reduction of air pollutant emissions and wastewater discharge to enhance water conservation and wastewater recycling.
- Strengthening of risk control through waste reclamation and reuse and execution of waste reduction.



Social dimension

Challenge of maintaining relationships and communication with internal and external stakeholders

- Improvement of the stakeholder section of the corporate website and creation of stakeholder communication channels to gain a better understanding and ability to respond to issues of concern to stakeholders.

Occupational health and safety risks

- Hazard identification and risk assessment, adoption of risk minimization measures and formulation of relevant management procedures and operational guidelines as well as regular organization of emergency response drills.
- Promotion of autonomous work safety concern and inspections to generate a climate of joint responsibility for work safety.
- Regular organization of health and safety training to prevent occupational accidents and guarantee labor health and safety.

Labor health risks

- Carrying out of special physical examinations for newly hired or transferred employees who are engaged in operations with special health hazards as identified in the Labor Health and Safety Rules. Special health checks are also administered on an annual basis and monitoring of operational environments is implemented.
- Organization of employee health management and promotion activities on a non-scheduled basis to raise health awareness and share information related to critical illnesses or health with the goal of giving employees a comprehensive understanding of health-related information.

Labor-management relation risks

- Labor-management communication: The company places great value on employee rights and interests. Prior to the implementation of major policies and changes, employees are notified of impacts through labor-management meetings, newsletters, and HR announcements to safeguard employee rights and interests.
- Interviews of incoming employees: By showing concern through interviews we gain a clear understanding of employee work conditions, shorten the adaptation periods of new employees, and reduce labor risks.
- Employee grievance channels: Assignment of dedicated personnel for the processing of employee opinions and problems reported by employees to reduce labor-management conflicts.

2 Innovative R&D and Services

Significant aspects

Product and service labeling, customer satisfaction, customer privacy, marketing controversies.

Significance for SAS

SAS views the provision of services and high-quality products that satisfy customers as its core mission. SAS has professional product development, cost control, manufacturing, quality control, and customer service teams. When customers report problems and offer feedback, services are provided in a professional, rapid, and active manner. These teams assist the customers in the handling and resolution of problems to raise customer satisfaction levels. In addition, SAS places even greater emphasis on the protection of customer confidentiality and privacy. Confidential customer information must be rigorously protected during business dealings.

In the field of product labeling, marketing, and promotion (including advertising, sales promotion, and sponsorship), SAS complies with relevant laws and regulations and publicly discloses product specifications and performance data on its corporate website to prevent the incidence of false or misleading advertisements and marketing controversies.

Management mechanism

1.SAS conducts customer satisfaction surveys on a regular basis and collects customer opinions about costs, sales, technology, quality, and service. The goal is to gain a better understanding of customers as a reference for constant improvements to ensure sustainable operations and development in cooperation with customers.

2.SAS places great emphasis on the protection of customer privacy and confidentiality and signs confidentiality agreements with customers to protect their classified information. All SAS staff members are required to strictly abide by SAS privacy policies and protect confidential information of customers in all business dealings in a rigorous manner.

3.Despite the fact that SAS does not manufacture end products, the company attaches product labels specifying product names, contents, and specifications on the outer packaging in accordance with relevant regulations.

4.In the field of marketing and promotion (including advertising, sales promotion, and sponsorship), SAS strictly abides by relevant laws and regulations to prevent violations of voluntary guidelines governing marketing and promotion and avoid false or misleading advertisements.

2016 Key achievements

2.1 Innovation management

Current state and development trends of the solar energy industry

Power generation methods of the green energy industry gradually become more ubiquitous. Statistics released by the World Energy Outlook in 2015 indicate that roughly 50% of all newly constructed power plants in 2014 were renewable energy plants. It is also evident that a global transformation of the energy sector is currently in progress. Solar power development was initiated in 2005. Statistics on the proportion of green power generation in 2014 reveal that by 2014 the total installed capacity of solar energy and other types of energy conversion had surpassed the capacity of traditional forms of power generation. The main applications include power plants, commercial and residential needs, and power generation demands of various off-grid environments. Following the gradual spread of solar power generation, ratios have gradually increased since 2014 and the levelized cost of electricity of large-scale solar power systems is now equivalent to that of traditional forms of power generation. In many countries, the power generation costs of distributed solar power systems equal electricity prices. Further reductions of power generation costs are expected as a result of solar power subsidy policies adopted all over the world and the rising wattage of solar cells and modules due to technological advances.

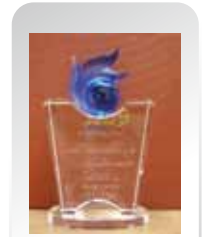
Continued innovation and development of cutting-edge products and technologies

The powerful R&D team of the SAS Group has turned the company into the top manufacturer of mono-crystalline PERC products. In 2016, the conversion efficiency of Celco monocrystalline products on the third, fourth, and fifth gate line has been improved to 21% to maximize the usage of sunlight. In the field of cell technologies, the company actively assesses and develops various novel process technologies and facilities. SAS is in close contact with its upstream raw material suppliers and provides comprehensive technical services and support for downstream customers. Conversion efficiencies are therefore expected to rise to 22%. In addition to constant improvements of cell conversion efficiency and reliability, intensive cooperation is maintained with up- and downstream customers to gain the ability to provide products that can satisfy customer and ecological demands. The technologies and applications of the outstanding technology team of SAS include solar cell upstream operations such as solar crystal growth technologies, manufacturing technologies for high-performance solar cells, and downstream module packaging and system application categories. The power generation wattage of the highly efficient SAS solar energy module can reach 310W under conditions of full-day sunlight exposure. Close cooperation is maintained in the field of modules and the company has acquired the “Solar Park” solar power plant project in the Philippines.

In addition, SAS actively cooperates with domestic and international research organizations including the University of New South Wales in Australia and National Taiwan University in the joint publication of research articles. SAS is also active in the acquisition of R&D patents. Between 2014 and 2016, a total of 47, 29, and 34 patents were acquired, respectively. By 2016, SAS had been granted key patents in the field of PID control for its cell products. Certifications have been acquired successively from patent bureaus in Taiwan, Singapore, Japan, and China.

Past R&D awards

2008 Outstanding Innovative Enterprise Award presented by the Department of Industrial Technology, MOEA



2010 Outstanding Contribution Award in the Execution of Industrial Technology Programs presented by the Department of Industrial Technology, MOEA

2011 R&D Achievement Award presented by the Hsinchu Science Park Administration

2012 Solar Industrial Silicon Innovation Award

2013 PVSEC Award for Outstanding Contributions in the Field of Technology Research and Development

2015 First place in the Highlight Program organized by the Bureau of Energy IOCG Laudise Prize

2016
- IOCG Laudise Prize
- Taiwan Excellent PV Award

Record of R&D awards

Continued product innovation

SAS provides customers with high performance solar cells that possess outstanding light induced degradation (LID) and potential induced degradation (PID) suppression characteristics. Celco Mono, Standard Mono, Standard Multi products have outstanding LID suppression performance. Constant improvements and differentiation of SAS products from those of competitors have been achieved under the leadership of the R&D team. In 2016, the conversion efficiency of the third, fourth, and fifth gate line can reach 21%. SAS also acquired a certification from the German Fraunhofer ISE. Product weight reduction, raw material reduction, and decrease of carbon emissions are combined with enhanced power generation of modules. A standard 60-piece module can achieve a power generation of 310W.

SAS product specifications and properties

Product name	Specs	Appearance	Properties
Celco Mono	Monocrystalline Solar Cell		1.Excellent PID suppression capability 2.Excellent LID suppression capability 3.Cell efficiency of up to 21% 4.Low power loss 5.Even colors 6.Suitable for different power generation systems (including roof and surface-type systems)
Standard mono	Monocrystalline Solar Cell		1.Excellent PID suppression capability 2.Low power loss 3.Even colors 4.Suitable for different power generation systems (including roof and surface-type systems)
Standard multi	Multicrystalline Solar Cell		1.Excellent PID suppression capability 2.Low power loss 3.Even colors 4.Suitable for different power generation systems (including roof and surface-type systems)

2.2 Customer and product services

Customer services

SAS is firmly committed to providing its customers with the best services and is deeply convinced that an excellent service quality is the key to improved customer satisfaction and consolidated customer loyalty. SAS embraces a philosophy of sustainable operations. In addition to the maintenance of business performance, the company also places high emphasis on listening to customer voices and opinions and satisfaction of customer demands to earn their long-term support and achieve the goal of sustainable operations.

SAS is a professional manufacturer of solar wafers and cells. The company provides cutting-edge process technologies and product services to satisfy customer demands. It emphasizes customer orientation and professionalism and adopts a customer perspective with customer demands as the main reference. It also aims to provide customers with comprehensive services to achieve the goals of customer satisfaction and sustainability.

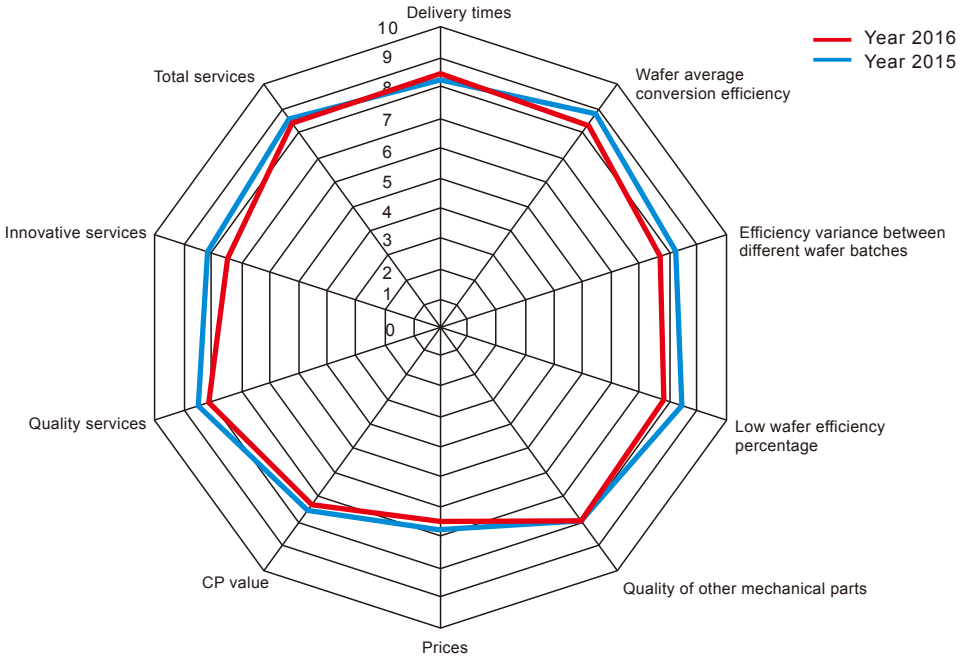
Customer satisfaction

The provision of high-quality services and products to satisfy customers represents the core philosophy of SAS. Professional teams are in 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 earn customer 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 its 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 products, technologies, and services.

Customer satisfaction surveys measure satisfaction levels in the following 10 major areas: delivery times, wafer average conversion efficiency, efficiency variance between different wafer batches, low wafer efficiency percentage, quality of other mechanical parts, prices, CP value, quality services, innovative services, and total services. The maximum score for every item is 10 points. If scores fall below 6 points, internal improvements are required. Customers score each item on a semi-annual basis and identify shortcomings or directions for required improvements as a strategic reference for follow-up internal improvements. Satisfaction scores for the three items of wafer conversion efficiency, delivery times, and quality services exceed 8 points, which clearly indicates that product and service quality meet customer expectations.

In 2016, the overall satisfaction scores exceeded 80 in accordance with the survey results (the full score is 100). It was not necessary to implement improvement strategies for scores below 60. This clearly indicates the positive assessment by the customers of the quality and services provided by SAS, but SAS does not rest on its laurels. 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 give customers a sense of the determination of SAS to implement improvements and thereby achieve constant improvements in the field of service quality and competitiveness.



Customer satisfaction survey dimensions

In addition to meetings and technical discussions, SAS actively listens to customer voices and aims to gain a clear understanding of customer demands from the perspective of the customer and enhance customer relationships through on-site visits, phone communication, and e-mails. At the same time, SAS also conducts customer satisfaction surveys on a regular basis. These surveys are carried out on a semi-annual basis. Upon collection and organization of customer voices and opinions, dedicated teams convene meetings to formulate improvement strategies and directions based on customer opinions. With regard to items with relatively low or too low satisfaction levels, the company conducts follow-up interviews with customers to clarify issues. Analyses are carried out and improvement measures are formulated for shortcomings to turn customer satisfaction concepts into concrete action and earn the trust and praise of even more customers. The goal is turn into an ideal partner of customers and ensures sustainable operations and development together with customers.

Customer satisfaction levels in 2016 strongly relied on the efforts of the sales department and colleagues involved in the production process. Customers showed higher satisfaction with conversion efficiency and quality services than in the previous year. The company plans to invest in relevant equipment to enhance product quality and performance and thereby improve customer satisfaction.

Product services

SAS insists on the production of cells with high conversion efficiency and constantly innovates and develops highly efficient products. SAS quickly integrates up- and downstream technology development capabilities through supply chain integration and technology exchange. Product launch times are shortened, product reliability is enhanced, and quality confidence levels are increased to bring products closer to end user demands. In the field of quality, rigorous procedures, processes, and controls are implemented in the collection of customer information, product design and development, and manufacturing processes. Outstanding and stable product quality is ensured through systematic management at each stage. SAS also convenes daily, weekly, and monthly meetings, management review meetings, and annual review meetings on a regular basis to ensure constant product improvements. PDCA is constantly carried out to enhance products and services, reduce costs and expenditures, and gain the ability to give back to society.

2.3 Protection of confidential customer information

Customer privacy

SAS is not only committed to providing excellent customer services but places even higher emphasis on protection of customer privacy and confidentiality. Relevant agreements are signed with customers to protect their classified information. At the same time, all staff members are required to strictly abide by SAS privacy policies and protect confidential information of customers 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 proper protection of customer data. Scheduled and non-scheduled 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 privacy policies and protect confidential information of customers in business dealings in a rigorous manner. Relevant employee training is administered on an annual basis to emphasize the importance of confidentiality. Customer privacy is guaranteed and losses caused by information leakage are prevented through promotion of confidentiality concepts. In 2016, no relevant customer complaints were received and competent authorities did not impose any fines.

Protection of intellectual propert

In 2010, SAS adopted the Taiwan intellectual property management system (TIPS). The company successively passed the basic certification (2010-2011) and advanced certification (2012-2015). In 2016, the company's efforts in this area were recognized with an AA rating. Over the past 7 years, we have reinforced our confidentiality controls and have gradually established an information ranking system to define confidentiality levels for internal and external documents and create corresponding labels and circulation control methods. At the same time, the company has formulated usage regulations for electric equipment and has adopted virtual desktop cloud services, and an e-mail inspection system to limit the use of electronic storage devices and thereby prevent information security issues. Even more importantly, the company organizes regular intellectual property related training to reinforce the understanding and awareness of the importance of confidentiality management on the part of employees and integrate relevant concepts into the company's corporate culture. The goal is to safeguard the rights and interests of the company and its customers, improve customer trust, and increase the benefits of product market share through excellent intellectual property management.

TIPS certificates acquired by SAS from 2010-2016

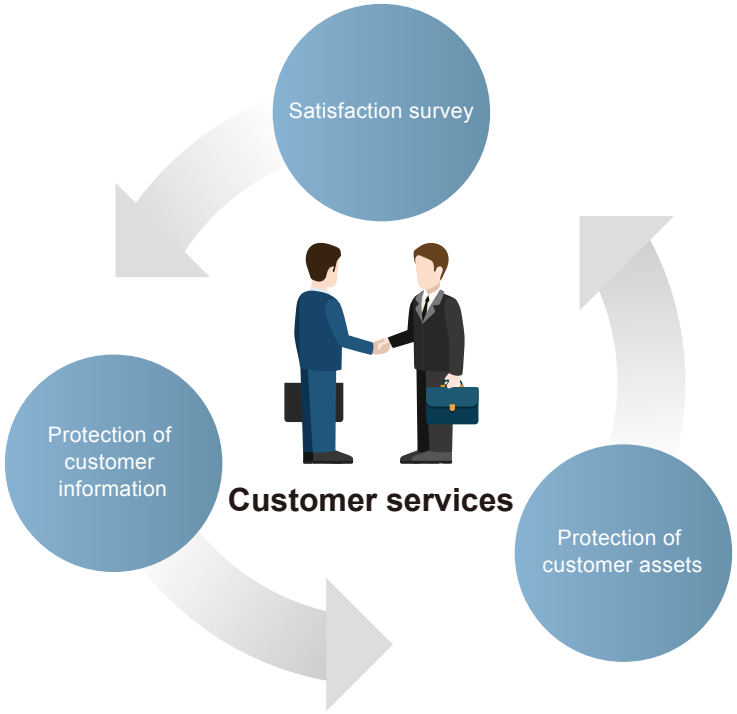
TIPS certificates acquired by SAS from 2010-2016

2.4 Product liability and marketing communication

Product safety and liability

SAS requires its raw material and packing material suppliers to submit reports on laboratory testing of hazardous substance contents certified by third-party impartial units to ensure conformity to the EU RoHS directive (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) and implement product safety and non-toxic requirements.

In addition, SAS is fully aware of the risks associated with solar cells and back-end modules such as environmental impacts 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. Despite the fact that no international laws and norms exist for solar cell product labeling, SAS still insists on complete labeling and indication of product ingredients, harmful substances, and usage safety after careful consideration to ensure safe and worry-free use by customers. In the field of marketing, SAS provides a detailed description of potential product risks in media such as specification sheets and ensures conformity to legal, environmental, and customer requirements in all sales areas.



SAS customer service principles

Marketing communication

SAS is one of the world leading solar energy businesses. Based on corporate social responsibility principles, the company conducts marketing and promotion (including advertising, sales promotion, and sponsorship) pursuant to relevant laws and regulations. Product specifications and performance information are publicly disclosed on its official website.

3 Environmental Sustainability

Significant aspects

Utilized Raw materials, energy consumption, water consumption, GHG emissions, air pollutants emissions, waste water discharge, waste disposal, compliance with environmental laws and regulations.

Significance for SAS

As a member of the green energy industry, SAS is fully aware of the limited capability of our planet to sustain damage. Every individual and enterprise must therefore shoulder part of the responsibility for environmental impacts. SAS embraces the fulfillment of corporate social responsibility as a key aspect of its philosophy to ensure an effective management of environmental issues and realize the vision of environmental sustainability. Pollution control technologies and capabilities are constantly enhanced and self-regulation is practiced to achieve the goal of environmental sustainability.

Management mechanism

Through the implementation of the ISO 14001 environmental management system (2015 version) and the adoption of product life cycle concepts, SAS aims to achieve a genuine reduction of raw materials at the source by relying on improvements in the process and product design stages. In the field of air and water pollution control, the company formulates annual goals for energy, water, and resource conservation and waste reduction to reduce GHG emissions and the consumption of energy resources in line with the implementation of the environmental management system. In the field of waste management, traditional waste disposal concepts have been replaced with effective resource management concepts with the goal of reducing waste generation. Audits and management of waste disposal businesses have also been strengthened to ensure proper waste treatment. SAS insists on strict compliance with all relevant laws and regulations in its operations and conducts conformity assessments for all issues related to the internal and external environment. If legal risks are detected, preventive and improvement measures are adopted in a prompt manner and policy implementation is ensured through comprehensive management and actual operations.

Key achievements in 2016

Reduction of raw material usage

- Reduction of propylene glycol usage (main material of Chunan Plant 2) by 2.77 %
- Reduction of lactate by 50.6 %
- Reduction of packing material usage by 10,136 kg

Future goals

Power conservation rate of each plant >1% (based on total power consumption of each plant)	Process water recycling rate> 85%(Quantity of recycled process water/Total quantity of water withdrawn)	Waste reduction of 10%	Adoption of ISO 50001 energy management system and passing of relevant certifications carried out by impartial third-party units	Establishment of an environmental footprint (including carbon and water footprint) inventory system (annual inventories)

3.1 Clean production

40%
Percentage of recycled silicon material

The main raw materials used by SAS in its production processes are silicon and silicon wafers. Although it is impossible to use recycled wafers for solar cell production processes, the company uses discarded or broken silicon wafers which are recycled in the plants for the crystal growth stage if possible. The company also uses a certain proportion of externally purchased recycled materials. This helps save material costs and reduce the generation of waste.

Silicon material categories- Virgin poly (left), foundry returns (center), by-product (right)

Note:1.SAS silicon materials can be divided into the following three categories (as shown in the images below): virgin poly, foundry returns, and by-product. by-product and foundry returns are recycled materials.
2.The percentage of recycled materials is equivalent to the ratio of by-product and foundry returns to the total amount of materials in 2016.

Despite the fact that SAS does not manufacture end products, it has implemented the ISO 14001 Environmental Management System (2015 version), has adopted product life cycle concepts, carries out process design and development based on ecological considerations and concepts, implements cleaner production concepts, and enhances its process design and technologies to reduce raw material consumption. This not only enables the company to decrease pollution and emissions through source reduction but also helps reduce operating costs, resource consumption, and environmental impacts. Based on the concepts of sustainable operations and compliance with legal requirements, SAS selects primary targets for reduction in accordance with the main waste categories in the past. Various initiatives such as reduction of chemicals (propylene glycol and lactate) and packing materials are implemented in line with the environmental management system of the company. R&D teams of relevant departments assess feasible technologies and carry out advance simulation tests. Upon verification of feasibility, such initiatives are implemented simultaneously in relevant units to reduce operating costs, excessive resource consumption, and waste generation and achieve the ultimate goal of sustainability and eco-friendliness.

As for cutting oil, the company started out by using non-recyclable oil products which were later replaced with propylene glycol. Waste oil was originally pressed, filtered, and recycled by external businesses until the whole recycling process was moved into the company's plants. SAS constantly improves and enhances relevant technologies to reduce raw material purchase, waste generation, and environmental impacts caused by transportation.

Lactate discharge causes difficulties in biological treatment inside plants and generates acid waste liquid. SAS achieves source reduction through process adjustments and improvements. This leads to a reduction of material purchases and solid waste and waste water generation.

As for packing materials, plants independently recycle and reuse cushioning materials and the company utilizes recycled packing materials upon communication and approval by customers. This helps reduce material purchases and waste generation.

76.3%
Propylene glycol (cutting oil) recycling rate

Secondary benefits
Usage of new propylene glycol materials decreased by **2.77%**

50.6%
Lactate reduction

Secondary benefits
Reduction of waste water by **13.24** tons
Waste reduction by **49.38** tons

6,672 kg
Reduction of outer packaging by

Secondary benefits
Reduction of packing materials and waste by **10,136** kg

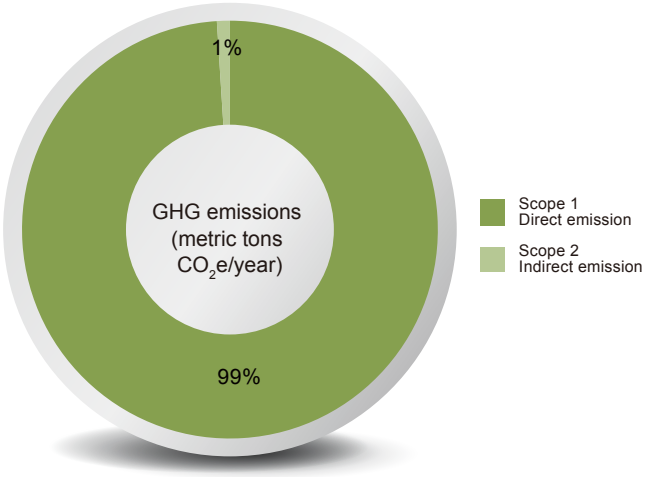
3.2 Response to climate change and global warming

In recent years, the issue of global warming has received growing attention. SAS embraces GHG emission reductions as a necessary measure in response to climate change and global warming with GHG inventories as the main task. Inventory results provide a better understanding of the current status of the company and serve as a reference for opportunities and directions for reductions, setting of goals, and implementation of improvements.

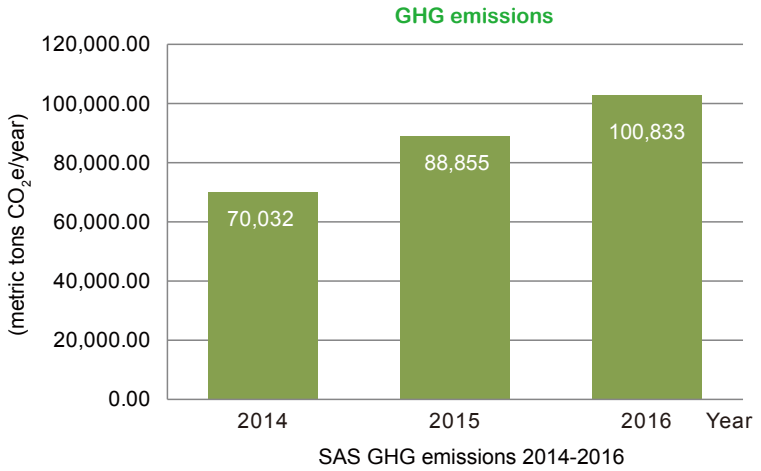
Prior to the incorporation of the SAS Yilan plant into the Sino-American group in 2013, the plant commissioned an external company to conduct a product carbon footprint inventory, which was verified and attested by a third-party certification company. Chunan Plant 1 conducted an organizational inventory in coordination with the Taiwan Photovoltaic Industry Association in 2010. This inventory was also verified and attested by a third-party certification body. In 2016, the company commissioned the Industrial Technology Research Institute to provide guidance and carry out another product carbon footprint and organizational inventory with a view to integrating relevant information and facilitate management. A pilot environmental footprint inventory was carried out in the Chunan Plant. In 2017, the company will continue to commission the Industrial Technology Research Institute to provide assistance in the creation of a database. In the future, all plants of the Sino-American Group will be able to conduct carbon and water footprint inventories and collect environmental footprint information independently on an annual basis. At the same time, they can conduct carbon and water footprint inspections in accordance with the demands and requirements of customers and government agencies.

SAS GHG emission sources can be divided into the following three categories: Scope 1 are direct emissions of each plant including GHG used for processes and GHG generated during fuel combustion (such as natural gas, gasoline, and Diesel) as well as fugitive emissions of septic tanks and fire equipment. Scope 2 are indirect emissions generated by externally purchased energy sources including electricity and steam. Scope 2 emissions of SAS plants exclusively stem from externally purchased electricity. Scope 3 encompasses indirect emissions generated by business trips, product and material transportation, production of materials by suppliers, and waste recycling and treatment. The results of a GHG emission inventory carried out by SAS indicate that electricity and other indirect emissions account for 99% and 1% of all emissions, respectively. The main focus of the efforts of the company in the field of GHG emission reductions lies on a decrease of power consumption. SAS GHG emission ratios and emission amounts for the most recent three years are shown in the chart below.

The results of the Chunan plant environmental footprint inventory indicate that the main contributions come from accumulated results of ingot manufacturing processes followed by the use of silicon carbide and cutting oil (propylene glycol) in accordance with emission hot spot analysis.



SAS GHG emission ratios in 2016



SAS GHG emissions 2014-2016

Note:1.Calculations until the end of 2016 based on Taipower electricity bills.

2.The Chunan Branch has two plant areas which were established in 2006 and 2010, respectively.

3.The Yilan Branch has three plant areas, plant 1 has the longest history, plant 2 and plant 3 started operations in April 2015 and March 2016, respectively.

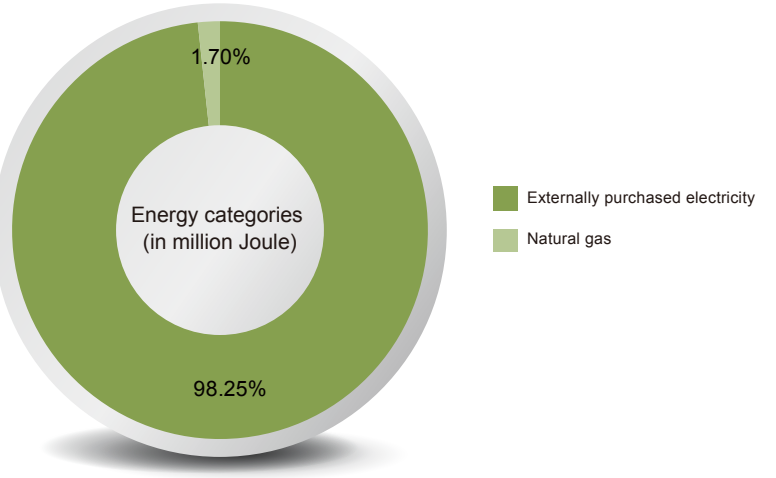
4.Inventories are conducted based on the GHG Coefficient Management Chart (Version 6.0.1) announced by the Environmental Protection Administration.

5.Power/GHG emission coefficients are 0.521(kg CO_2 e/ kWh), 0.528(kg CO_2 e/ kWh), Diesel: 2.606(kg CO_2/L), Gasoline: 2.2631(kg CO_2/L) as per public notice of the Bureau of Energy, MoE in 2014 and 2015.

3.3 Energy management

As indicated by the results of GHG emission inventories, electricity is the main GHG emission source of the company. The reduction of power consumption and enhancement of energy efficiency therefore represent the company's key tasks. SAS implements various energy conservation improvement measures to achieve the goal of energy conservation and carbon reduction through the adoption of an environmental management system based on the company's core philosophy. The company also strives to build innovation momentum and lower the ecological footprint through improvements in the fields of environmental protection and sustainability with the ultimate goal of enhancing the corporate image and competitiveness.

In the field of energy consumption, SAS, a manufacturer of solar cells, constantly reviews internal energy consumption conditions to reduce energy waste. The company also actively promotes renewable energy sources. The Chunan and Yilan branches have installed solar panels on the rooftops of plant buildings for power generation. The self-generated power can be used inside plants or sold to Taipower (for more details on the amount of generated power please refer to energy conservation achievements and effects). The solar panels also provide shade for roof plates, thereby reducing temperatures and air conditioning loads with the goal of decreasing power consumption. However, the usable area is small and the company still mainly relies on externally purchased electricity. Annually consumed power accounts for 98% of total energy consumption. Natural gas is the second most important energy source.



Ratios of the two main energy categories in 2016

SAS energy consumption 2014-2016

Unit: Million Joule

Energy categories

Item	2014	2015	2016
Externally purchased electricity	639,533,520	767,054,261	885,406,896
Renewable energy	111,852	120,654	98,258
Natural gas	29,635,056	18,924,450	15,280,838
Diesel	409,812	264,802	360,004

Notes: 1.Calculations until the end of 2016 based on Taipower electricity bills.

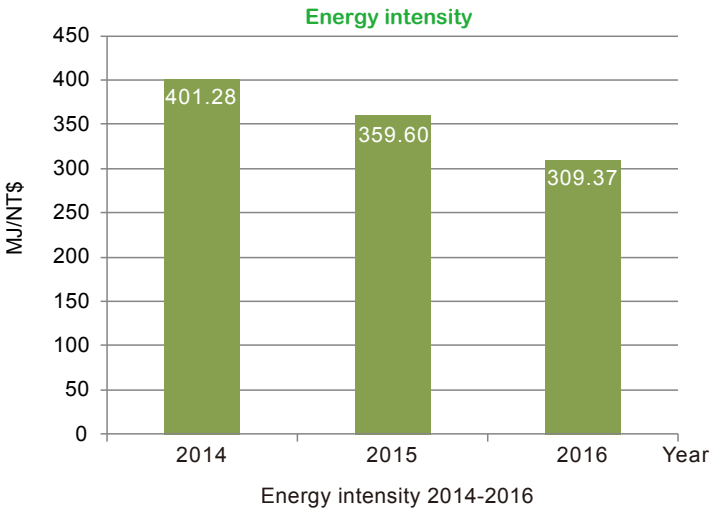
2.The Chunan Branch has two plant areas which were established in 2006 and 2010, respectively.

3.The Yilan Branch has three plant areas, plant 1 has the longest history, plant 2 and plant 3 started operations in April 2015 and March 2016, respectively.

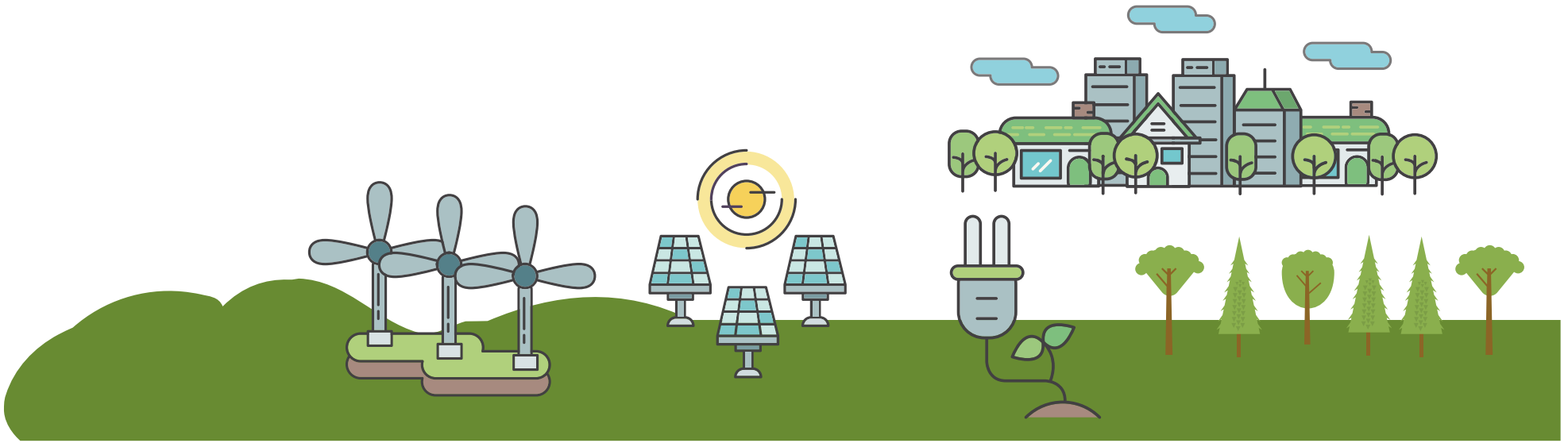
4.Energy resource conversion coefficients are as follows: Electricity, renewable energy, natural gas, gas.

5.SAS annual power consumption is derived by adding up monthly amounts as indicated on monthly electricity bills (excluding gas plants), the conversion formula is 1 kWH=3.6 million Joule; natural gas consumption is derived by adding up monthly amounts as indicated on monthly gas bills, the conversion formulas are 1 cubic meter of natural gas = 47.7 million Joule and 1 liter of Diesel=31.524 million Joule.

6.Total Diesel and renewable energy consumption accounts for less than 0.05% of total energy consumption (not shown in the chart above) .



Note: Energy intensity is defined as consumed energy per unit of sales.



Power conservation measures

The Chunan plant adopted various large-scale energy conservation improvement projects such as variable frequency control for plant air conditioning and cooling water, improvements of the air conditioning system, installation of power-saving lighting sources in cooperation with BENQ ESCO Corp. in 2015. All energy conservation measures and relevant achievements are shown in the table below:

SAS energy conservation measures and achievements

Type	Measures	Total power savings (kWh/year)	Converted GHG reductions ($kgCO_2e$)
Lighting sources	1.Full conversion to T5 tubes except for lighting devices in office areas. 2.CCFL power-saving lighting devices or LED tubes in other plant areas. 3.Installation of LED lighting in plant areas. 4.Individual control switches are installed for each lighting device to make it more convenient for co-workers to turn off lighting when they leave their work stations. 5.Installation of energy-saving projection lighting with timers in areas surrounding plant buildings. 6.Lighting circuit control area diagram to make it more convenient for co-workers to set temperatures and install switches in appropriate areas.	126,276	66,674
Air conditioning system	1.Purchase of new chiller unit models 2.Installation of a variable frequency temperature difference control system for the AC chilled water system. 3.Installation of an inverter and seasonal control system for the AHU fans 4.Installation of frequency conversion equipment for the cooling tower fans 5.Replacement of air-consuming dryers with energy-saving thermal dryers 6.Purchase of VFD air compressors 7.Regular cleaning of condensation and cooling containers and pipes 8.Installation of internal and external interlock door control systems to reduce the loss of low-temperature air in plant buildings. 9.The outlet water temperature of chiller units has been increased by 2.0℃ to reduce the load of these units. 10.Proper management and control of AC operations in the plant clean rooms to reduce energy consumption.	600,132	316,870
Renewable energy resources	Installation of solar panels on the rooftops of plant buildings for power generation; the solar panels also provide shade for roof plates, thereby reducing temperatures and air conditioning loads with the goal of decreasing total power consumption. Note: Power generated by solar panels of the Yilan Branch was sold to Taipower and is therefore not included in the calculations of results of energy conservation measures.	27,294	14,411
Production equipment	1.Installation of a chilled water circulators for processes. 2.Process equipment improvements and design adjustments.	2,501,812	1,320,957
Total		3,255,514	1,718,911

SAS energy conservation results

AC system improvements
(Chiller system-Cooling tower frequency conversion equipment)

AC system improvements
(Installation of VFD air compressors)

AC system improvements
(Installation of a Make-up Air Unit to reduce chiller unit load)

Renewable energy improvements (Installation of solar panels)

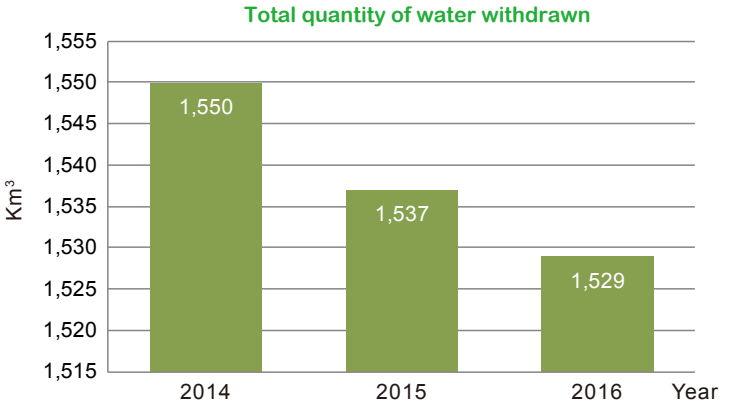
Lighting equipment improvements
(Installation of LED lighting devices)

Production equipment improvements
(Air compressor and thermal recycling
energy conservation improvements)

3.4 Water resource management

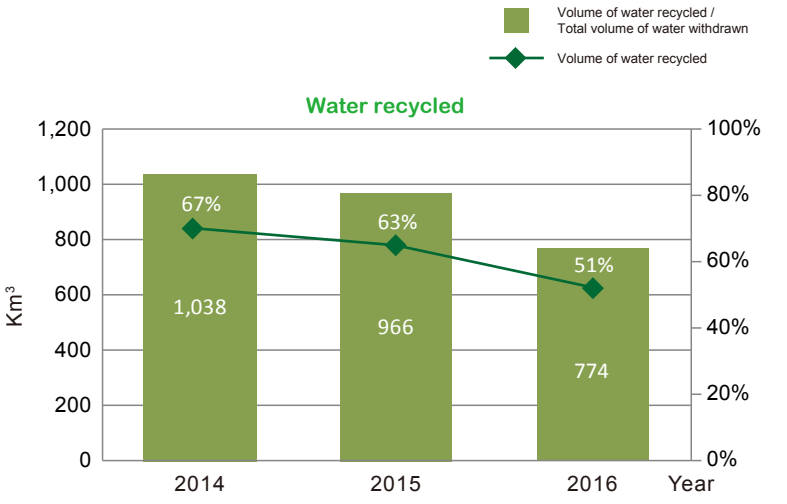
In recent years, global climate change has caused extreme precipitation patterns in Taiwan which underscores the importance of water resource management. SAS plants mainly uses running water supplied by the Taiwan Water Corporation (total water withdrawn is shown below). Rain water and AC condensed water represent another (albeit minor) water source. The company does not use ground water and therefore does not cause damage to ecosystems through excessive pumping and resulting ground subsidence. The water supply and raw water sources of the Chunan Plant and Yilan Plant are Dongxing Water Purification Plant /Yongheshan Reservoir and Longde Water Purification Plant/Xincheng River, respectively. The raw water source areas have not been designated national or international natural reserves or sensitive water bodies (related areas, special functions, rare, threatened, or endangered systems, or habitats of endangered species as determined by experts). 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.

Due to dropping production capacities between 2014 and 2016, water consumption and recycled water amounts have decreased accordingly.



SAS total quantity of water withdrawn 2014-2016

Note:
1.Calculations until the end of 2016 based on Taipower electricity bills.
2.The Chunan Branch has two plant areas which were established in 2006 and 2010, respectively.
3.The Yilan Branch has three plant areas, plant 1 has the longest history, plant 2 and plant 3 started operations in April 2015 and March 2016, respectively.



SAS Recycled water amounts 2014-2016

Note: Water recycling rate=Amount of water recycled/Total quantity of water withdrawn; the Chunan and Yilan plants strictly comply with local regulations (the Chunan plant also abides by the regulations of the Hsinchu Science and Industrial Park Administration). The recycling rate exceeded 85%.

Water conservation measures

The management of the water conservation measures of SAS plants is divided into plant affairs system and process equipment management. The company successively replaces old machinery that consumes large quantities of water with new water-saving equipment and machinery. Internal discussion meetings on water conservation improvement measures are convened on a regular basis and staff members are educated on the importance of water saving to build a consensus regarding water conservation among all employees. The following water conservation measures are currently implemented:

Results of plant water conservation measures

Type	Measures	Water savings (tons/year)
Plant affairs system	1.Use of alternative water sources (rainwater collection, OAC condensed water recycling) 2.Replacement of water-saving equipment 3.Reduction of unit water use (extended regenerative cycle of water purification systems)	1,139,687
Process equipment	1.Reduction of equipment water consumption 2.Improved water recycling rate ・Installation of a water recycling system ・Installation of treatment facilities to increase the number of water cycles ・Step-by-step discharge 3.Reduction of pure water consumption by process equipment 4.Modification of the water discharge pipeline system; upon prior filtering water is channeled to a temporary storage tank for reuse	530,710
Total		1,670,397

Results of SAS water conservation measures

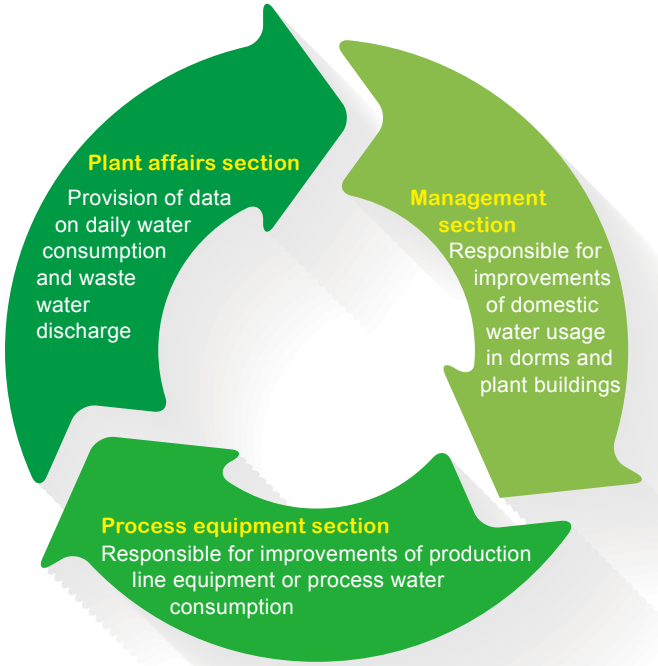
Replacement of water-saving equipment
(Installation of aerators)

Installation of treatment facilities to increase the number of water cycles (Backflush-type rinsing tanks reduce water consumption and increase wafer cleanliness, supplied water can be recycled and reused)

Step-by-step discharge
(Reuse of process waste water)

Installation of a water recycling system
(Modular water tank recycling system)

3.5 Pollution and emissions



Management concepts and processes for water conservation measures of SAS plants

SAS installs adequate pollution control equipment with corresponding treatment capabilities to maintain the efficiency of treatment operations. Every piece of equipment is maintained and inspected on a regular basis. Relevant operations are conducted by dedicated professional personnel 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.

Air pollution control

Process exhaust emitted by the Chunan and Yilan plants are divided into the following categories based on different production processes and properties: acid exhaust, alkali exhaust, VOC exhaust, and particulate exhaust and acid exhaust, alkali exhaust, and VOC exhaust. Acid and alkali exhaust is treated in central waste gas scrubbers, while VOC exhaust is treated in waste gas scrubbers and activated carbon adsorption towers. Particulate exhaust is treated with bag-type dust collectors.

The functions of SAS air pollution control equipment conform to relevant requirements set forth in environmental laws and regulations. A legally registered testing organization is commissioned to conduct an inspection in order to determine the emission concentration of controlled substances. The goal is to ensure that the pollutant content which is emitted into the atmosphere meets or exceeds government regulations. Since 2015, the SAS Chunan plant has cooperated with the Industrial Technology Research Institute and other businesses of the solar photovoltaic industry to formulate a VOC factory coefficient exclusively for the solar energy industry. Relevant processes and results are actively discussed with the Environmental Protection Administration and local environmental protection bureaus to ensure that the coefficient for the solar wafer industry conforms to relevant requirements set forth in air pollution laws and regulations. The project was approved by the Environmental Protection Administration of the Executive Yuan on November 11, 2016.

Results of air quality monitoring in each plant

Unit: (ton/yr)

Chunan plant

Inspection items	
Particulate pollutant (Par)	4.668
Nitric acid (HNO3)	0.036
Hydrofluoric acid (HF)	0.038
Hydrogen chloride (HCl)	0.006
Volatile organic compounds (VOCs)	2.135

Unit: (ton/yr)

Yilan plant

Inspection items	
Particulate pollutant (Par)	-
Nitric acid (HNO3)	-
Hydrofluoric acid (HF)	-
Hydrogen chloride (HCl)	-
Volatile organic compounds (VOCs)	0.91

Notes:

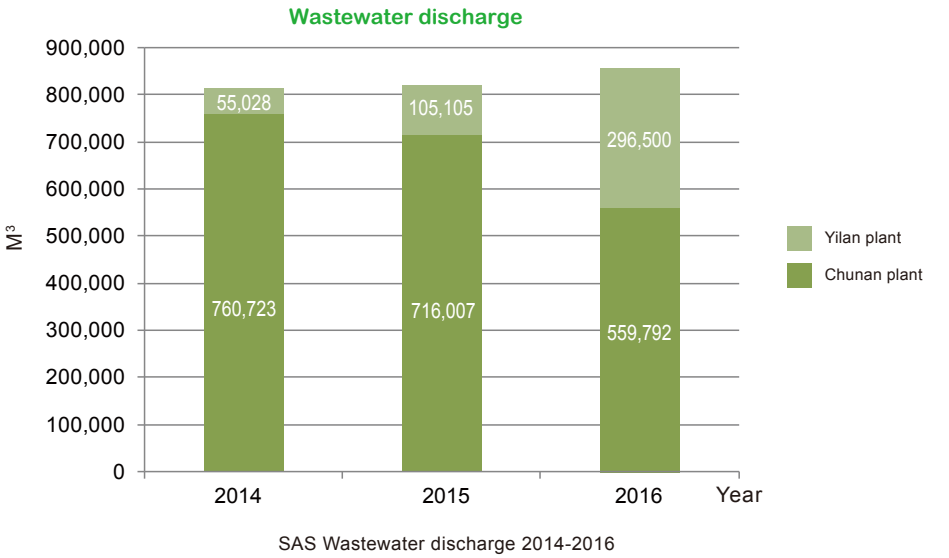
1.Emission estimates are based on the following formula: Data provided in test reports composed by qualified third-party laboratories x usage amounts of target materials in the respective year.

2.The Chunan plant conducts tests for five different pollutants in accordance with the regulations of the Hsinchu Science and Industrial Park Administration; the Yilan plant is only required to conduct VOC testing in accordance with the regulations of the Long Te (with Letzer) Industrial Park Service Center attached to the Industrial Development Bureau, MOEA.

Water pollution control

Due to the different locations of the plants, waste water is discharged and treated in the Wastewater Treatment Plants of the Hsinchu Science and Industrial Park Administration in Chunan and Li Ze Industrial Zone. Pre-discharge water quantity and quality monitoring facilities (tracking of PH values and fluoride concentrations) have been established to facilitate real-time monitoring, control, and response. Furthermore, wastewater testing reports are submitted on a regular basis in accordance with relevant laws and the quality of the discharged water meets or exceeds relevant regulations. Industrial Zone Administrations also dispatch personnel to conduct spot checks at the discharge outlets on a non-scheduled basis which ensures two tiers of water quality control. No major instances of leakage or overflow were reported in 2016.

The primary focus of SAS in the field of water pollution control strategy is source reduction, waste liquid segregation, and sorting and treatment principles. Upon sorting in accordance with individual properties, waste water is treated by plant treatment facilities. Chunan Plant 2 features chemical and biological treatment facilities (treatment by aerobes and anaerobes) ensuring optimal wastewater treatment results. In 2016, the pH values of wastewater discharged by plants ranged from 6 to 9 (the required standard for both areas is 5-9), while SS concentrations were maintained below 250mg/l (the required standards of the Hsinchu Science and Industrial Park Administration and Li Ze Industrial Zone Service Center are < 300mg／l and < 320mg/l, respectively）COD was maintained below 250mg/l (the required standards of the Hsinchu Science and Industrial Park Administration and Li Ze Industrial Zone Service Center are < 500mg／l and < 480mg/l, respectively), and fluoride concentrations were kept below 11mg/l（the required standard for both areas is <15 mg／l）. This clearly indicates that the SAS wastewater treatment facilities are characterized by high stability.



SAS Wastewater discharge 2014-2016

Notes:

1.Based on Taiwan Water Corporation statistics until the end of 2016.

2.The Chunan Branch has two plant areas which were established in 2006 and 2010, respectively.

3.The Yilan Branch has three plant areas, plant 1 has the longest history, plant 2 and plant 3 started operations in April 2015 and March 2016, respectively.

4.Tests and inspections are conducted in accordance with the regulations of the Hsinchu Science and Industrial Park Administration and the Long Te (with Letzer) Industrial Park Service Center attached to the Industrial Development Bureau, MOEA.

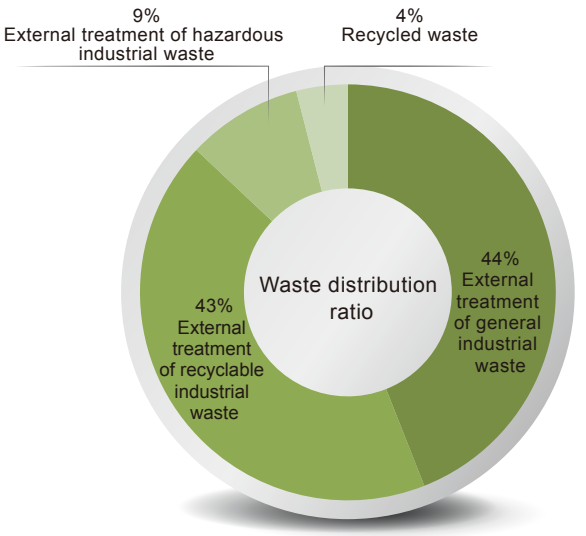
3.6 Waste management

SAS waste management strategies mainly focus on source reduction from process design improvements and reduced use of materials to recycling and reuse to decrease the amount of new material purchases and thereby minimize waste generation. Furthermore, the recycling and reuse of external resources helps increase the salvage value of waste. Finally, external waste treatment businesses are commissioned to incinerate, bury, or treat waste with physical or chemical methods. All generated waste is currently processed domestically and overseas treatment is not employed.

The basic requirement of waste treatment by commissioned businesses is legal compliance. Prior to external waste treatment, generated waste must be sorted, collected, stored, and managed inside the plant. This is followed by the selection and conclusion of contracts with suitable legally registered waste disposal and treatment businesses in accordance with waste properties. Upon completion of this process, waste disposal businesses dispose of generated waste and report final destinations in accordance with relevant laws and regulations, while treatment plants treat waste in a proper manner. Annual audits of waste treatment businesses are scheduled on an annual basis in accordance with their individual characteristics (disposal/treatment/reuse). In-plant management and control represents the main focus for waste disposal businesses. Audits of storage, treatment, and waste treatment facilities, treatment capabilities, pollution control facility operating conditions, on-site safety, health, and fire prevention management, and the business status of the company are carried out for treatment and reuse operations. Audit results are rated as a key reference for continued cooperation and increased audit frequency. Audit results in 2016 did not reveal any major violations by waste disposal/treatment businesses and no serious leakages or spills occurred in the plant areas.

SAS Waste quantities 2014-2016

Note:Data reports are submitted via the Industrial Waste Report and Management System of the Environmental Protection Administration.



SAS 2016 Waste distribution

Note:Waste data reporting is handled in accordance with relevant regulations of the Industrial Waste Report and Management System of the Environmental Protection Administration.

3.7 Sustainable environmental management and legal compliance

SAS has always embraced Strict Fulfillment of its Responsibility in the field of Environmental Protection and Green Operations as key corporate goals. The company is firmly committed to constant environmental improvements to realize these goals. The following tasks have been accomplished:

SAS strictly complies with environmental laws and regulations, proposes various targets for eco-friendly improvements, and adopts various environmental management measures and initiatives such as carbon and environmental footprint inventories, recycling and reuse of packing materials, wastewater recycling and reuse, and power conservation initiatives through the implementation of an environmental management system. The company also pursues reinforced and enhanced air pollution management, wastewater pollution management, and adequate and efficient use of resources in accordance with the environmental management system framework. Waste is recycled and reused to reduce waste generation, pollution, and emissions and achieve the goal of eco-friendliness. SAS acquired the ISO 14001:2015 certificate in March 2016 and plans to adopt the ISO 50001 energy management system in 2017 to make further progress toward the green industry goal, synchronize corporate development and environmental protection, and realize corporate sustainability.

SAS ISO14001Environmental Management System Framework

The company formulates management norms in accordance with the environmental management system, has set up a legal regulation inspection system and platform, and carries out legal compliance reviews to ensure that all SAS operating activities fully conform to environmental laws and regulations. The inspection results are publicized among all staff members. In 2016, the Chunan plant didn't commit any violations of air pollution, wastewater, and waste related laws and did not incur any fines as a result of such violations. The Yilan plant incurred two fines of NT$ 100,000 each for violations of the Air Pollution Control Act (the total fine amounted to NT$ 200,000 in 2016). The first violation which occurred in 2015 was the delayed payment of air pollution fees for the newly constructed plant buildings. The fine was imposed in 2015 and all outstanding fees have been paid in full. The second violation resulted from the fact that the air pollution control equipment operating parameters did not conform to the specifications in the permit. Follow-up improvements were made in form of constant monitoring equipment to adjust the active carbon replacement frequency.

4 Social care and concern

Significant aspects

Market presence, employment, labor-management relations, occupational health and safety, forced and compulsory labor.

Significance for SAS

SAS has always viewed its employees as its key asset. The company therefore provides a competitive compensation and complete benefit system to attract outstanding talent, fulfill corporate responsibility, and create and offer job opportunities for local residents. It also listens to the voice and suggestions of its employees and aims to establish positive labor-management interactions and communications. Various work systems and management norms are defined in strict compliance with labor laws and regulations. The willingness of employees to provide labor services is fully respected and forced or compulsory labor is strictly prohibited. The company also offers a friendly work environment and places strong emphasis on the career development of its employees to guarantee workplace safety and work-life balance.

Management mechanism

The company offers a benefit system characterized by salaries that exceed legal and market standards, provision of meals, health care, unpaid child care laves, and various insurance schemes to attract and retain talent. It also hires a certain percentage of local residents to fill staff and managerial positions.

In addition to regularly convened labor-management meetings, the company also provides various communication and grievance channels to gain a deeper understanding of employee opinions and ensure a more effective handling of employee issues.

Work safety and safety culture related activities are promoted to raise employee safety awareness and strengthen employee refinement and discipline and thereby decrease accident rates and safeguard workplace safety.

The company has established a sound leave system and management mechanism in accordance with relevant regulations set forth in the Labor Standards Act and signs labor contracts with its employees to safeguard labor rights and interests. The company does not require foreign workers to pay deposits or hand over ID documents to ensure their personal freedom. All forms of forced or compulsory labor are strictly prohibited and regular humanitarian concern is provided in foreign labor villages.

2016 Key achievements

- Personal interviews to show concern >10 employees/month.
- 100% Tracking of abnormal health check findings and groups with special needs.
- Organization of four emergency response drills and four plant evacuation drills.
- 0 deficiencies detected in labor audits.

Future goals

Direct personnel recruitment and hiring rate >70%	Increase of training hours for professional and technical personnel (OHS personnel >12 hours/ 2 years, wellness nurse >12 hours/3 years)	Constant interviews to show concern for employees and organization of various health promotion activities	Additional cases of work-related injuries and accidents ≦ 0	Minimum of 1 emergency response drill per quarter	Maintenance of 0 deficiencies detected in labor audit

4.1 Staff policies

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 background, veteran status, protected gene information, or marital status. The company also provides fair, equal, and safe employment opportunities and environments and widely recruits professional talent of different gender, age, experience, and expertise with the goal of stimulating creativity and increasing competitiveness.

Based on social concern principles, SAS supports employment of the mentally and physically disabled. In 2016, the company employed a total of mentally and physically handicapped employees, accounting for 1.4% of the total workforce. The hiring of child labor is strictly forbidden and regulations are in place prohibiting the assignment of dangerous tasks, overtime work, and night shifts for employees aged 16 to 18.

In addition, risk identification results indicate that the management of foreign workers is currently the main area associated with potential risks of forced or compulsory labor. The SAS Chunan and Yilan branches still employ a certain number of foreign workers. The company treats local and foreign workers equally and strictly abides by national laws and regulations. Various work systems and management norms have been defined pursuant to labor laws and regulations and it is ensured that workers get at least one of rest per seven days of work. The company also signs contracts with its employees and respects the willingness of employees to provide labor services. Workers are not coerced or forced to provide labor services through illegal means such as forced payment of deposits or withholding of ID documents. In addition, the HR Department provides co-workers with attendance and remaining leave day records to safeguard working time and leave related rights and interests of employees.

4.2 Human Resources

Total Number of Employees

In 2016, SAS employed a total of 1,567 full-time employees.

Broken down by gender

The majority of the company's employees (52.52%) work in the Yilan Branch, followed by Chunan (44.67%) and Hsinchu (2.81%).

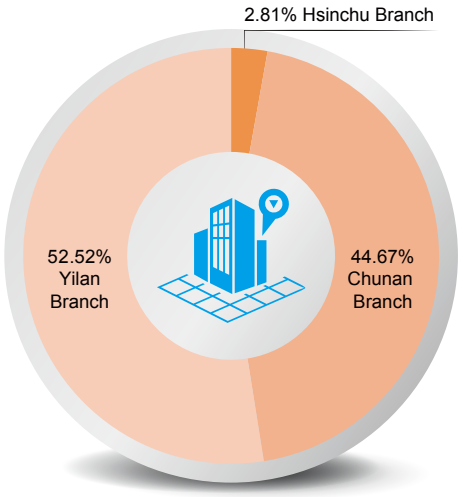
Broken down by work location

Male and female employees accounted for 74.86% and 25.14% of the total workforce, respectively. Employees under 30, between 30 and 50, and over 50 made up 33.63%, 64.14%, and 2.23% of the total workforce, respectively. The average age of employees was 34-35.

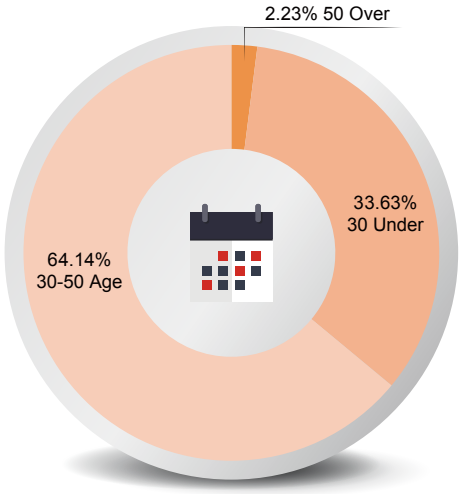
Based on work characteristics

Based on work characteristics, employees can be further divided into direct personnel (73.89%) and indirect personnel (26.10%). SAS solely employs full-time personnel. The company does not hire any part-time or temporary workers. Employees on fixed-term contracts and non-fixed term contracts account for 8.74% and 91.26% of the total workforce, respectively. 62.4% of all employees had a junior college or higher degree.

Broken down by work location



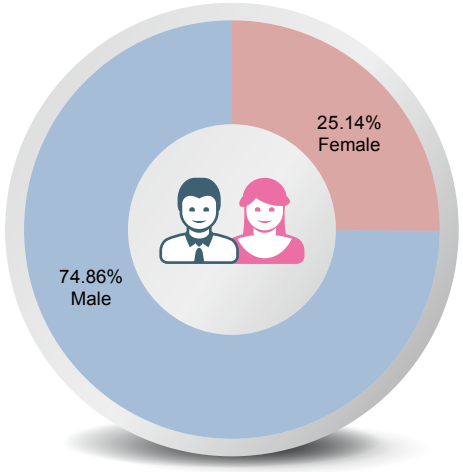
Broken down by age



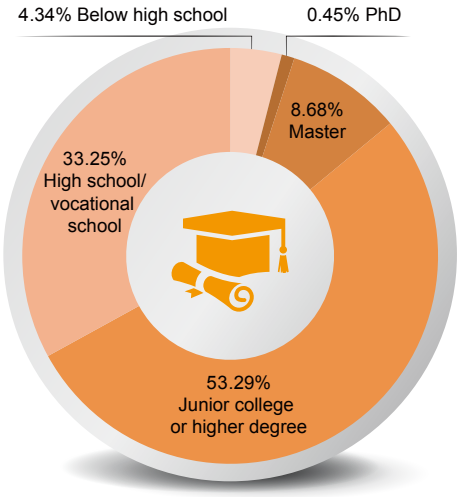
2016 Employee age statistics

Age	Male	Percentage	Female	Percentage
Under 30	399	25.46%	128	8.17%
30-50	750	47.86%	255	16.27%
Over 50	24	1.53%	11	0.70%
Total	1173	74.86%	394	25.14%

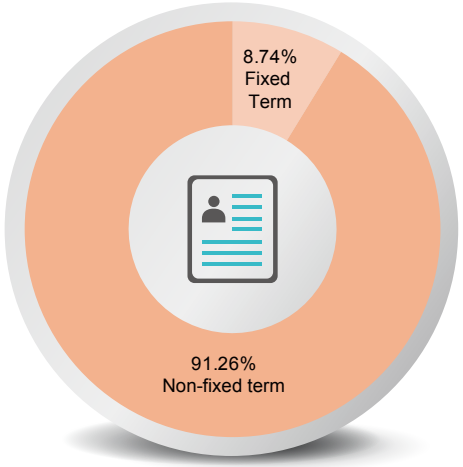
Broken down by gender



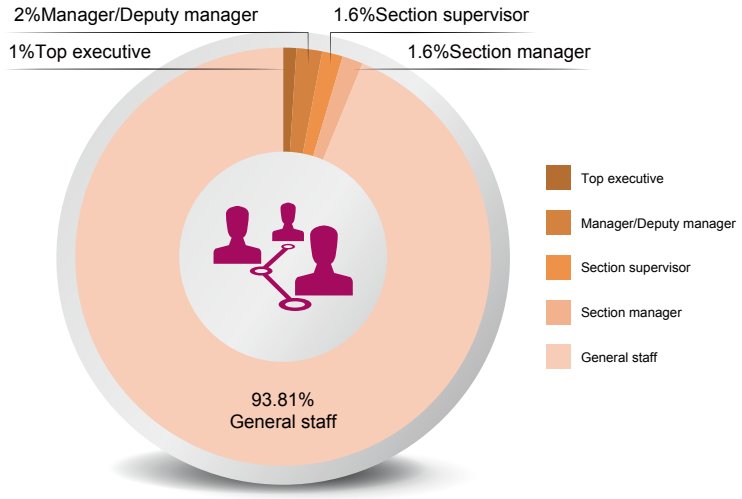
Broken down by education



Broken down by fixed term/non-fixed term



Broken down by employment category



2014~2016 Staff structure analysis

Year		2014	2015	2016
Average age		33.96	35.64	34.80
Average years of service		4.11	4.05	5
Broken down by gender	Male	988	1331	1173
	Female	298	412	394
	Total	1286	1743	1567
Full-time/Part-time or Temp	Full-time	1286	1743	1567
	Part-time/temp	0	0	0
	Total	1286	1743	1567
Broken down by contract type	Non-fixed term	1159	1467	1430
	Fixed term (Contracted, interns, foreign workers, seasonal)	127	276	137
	Total	1286	1743	1567
Broken down by work characteristics	Direct	972	1320	1158
	Indirect	314	423	409
	Total	1286	1743	1567
Broken down by education level	PhD	8	7	7
	MA	86	124	135
	Junior College	694	1021	840
	High school/vocational school	430	519	517
	Below high school	68	72	68
	Total	1286	1743	1567

Number of managers

In 2016, 100% of all managers were local citizens (ROC nationals). 77.78% of all managers were male and 22.22% were female. Broken down by management positions, the company employed 16 top executives (division level and above), 31 managers and deputy managers, 25 section supervisors, and 25 section chiefs.

	Division manager or above	Manager/Deputy manager	Section supervisor	Section manager	General staff	Total
Male	13	24	20	19	1097	1173
Female	3	7	5	6	373	394
Total	16	31	25	25	1470	1567
Percentage	1.00%	2.00%	1.60%	1.60%	93.81%	100.00%

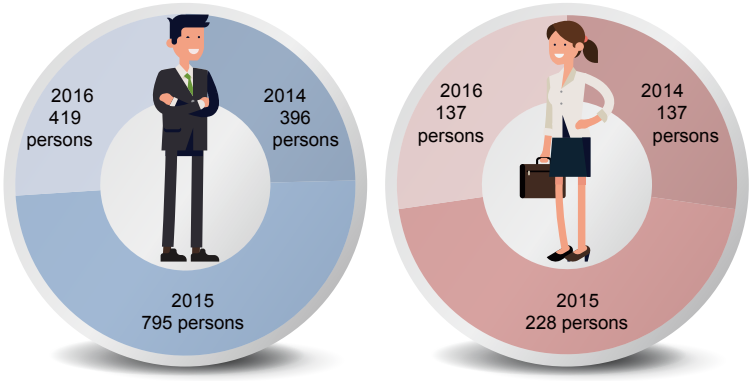
Number of newly inducted employees

In 2016, incoming employees amounted to 556 (75.35% male and 24.64% female). 237 of these employees were still in active service in 2016.

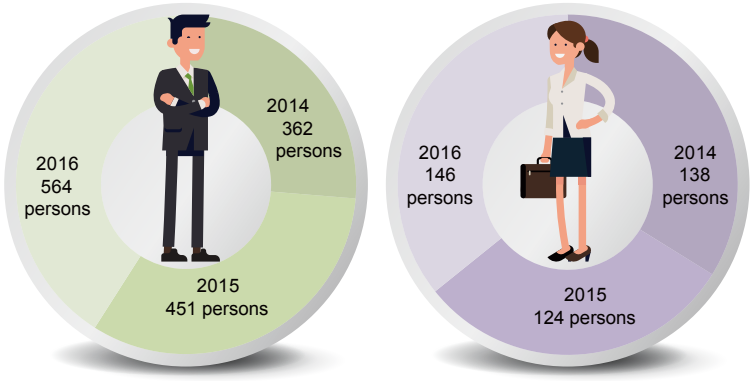
Outgoing employees amounted to 710 resulting in a turnover rate of 41.07%. When employees submit their resignation letter, the HR unit immediately schedules an exit interview to gain a better understanding of the reasons for the resignation. This also enables the HR units to provide active assistance in adjustments and detailed explanations with regard to work contents, personal characteristics, and identified problems to achieve the goal of talent retention.

2014~2016 Incoming employee statistics

Age	Male (number)			Percentage			Female (number)			Percentage		
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Under 30	240	478	230	35.02%	45.03%	46.73%	74	117	70	13.88%	11.44%	12.59%
30-50	152	312	187	36.44%	28.52%	30.50%	61	111	66	11.44%	10.85%	11.87%
Over 50	4	5	2	0.95%	0.75%	0.49%	2	0	1	0.38%	0.00%	0.18%
Total	396	795	419	72.40%	74.30%	77.71%	137	228	137	25.70%	22.29%	24.64%



Incoming employee statistics



Outgoing employee statistics

2014~2016 Outgoing employee statistics

Age	Male (number)			Percentage			Female (number)			Percentage		
	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016
Under 30	155	239	320	31.00%	41.57%	45.07%	67	67	75	13.40%	11.65%	10.56%
30-50	203	206	240	40.60%	35.83%	33.80%	70	57	69	14.00%	9.91%	9.72%
Over 50	4	6	4	0.80%	1.04%	0.56%	1	0	2	0.20%	0.00%	0.28%
Total	362	451	564	72.40%	78.43%	79.44%	138	124	146	27.60%	21.57%	20.56%

4.3 Salary & benefits

Compensation policy

SAS places high value on career development and work-life balance of employees. In addition to the creation of a competitive salary structure and performance system to attract and retain outstanding talent, the company has also established a sound benefit system. It organizes various activities and lectures to increase staff cohesion, raise morale, and enhance work efficiency.

The company carries out performance appraisals for all staff members every May. Performance tracking and interviews give the company a clear understanding of the work performance of every single employee. This enables the company to assess employee work performance and contributions in a fair and reasonable manner. Promotion recommendations are submitted based on performance appraisal results every January and July.

In addition to fixed monthly salaries, employees also receive special bonuses on the Dragonboat, Moon, and Lunar New Year Festivals. Annual salary adjustment standards are formulated every July based on operating conditions, salary adjustment range of the whole industry, consumer price indices, and employee performance. In addition, the company also issues employee bonuses based on accumulated earnings of the previous fiscal year between July and September of each year in accordance with operating conditions to motivate employees and show appreciation for their efforts and contributions.

Insurance system

In addition to the statutory labor and health insurance system, SAS also provides group insurance for every employee which exceeds requirements set forth in labor laws. Insurance types include term life and accident insurance, aviation accident insurance, injury claim limits, and hospitalization coverage. The goal is to provide sound safeguard measures and minimize personnel losses.

Employee 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 satisfy individual culinary demands. A restaurant monitoring task force has been established to ensure the quality and nutritional value of meals and implement culinary controls.

Company dining environment

Pensions

For workers who conform to the regulations of the old labor pension system, the company makes monthly contributions of 2% deposited in a pension fund account of the Bank of Taiwan. In March 2016, pension fund deposits were sufficient to pay pensions for retired personnel until the end of the year pursuant to relevant laws to safeguard the rights and interests of employees. For employees who meet the criteria of the new pension system monthly contributions of 6% are deposited in employee labor pension accounts.

Unpaid child care leaves

SAS employees are entitled to unpaid child care leaves. Employees with a minimum of six months of service may apply for unpaid child care leaves if they have to take care of children under the age of three. A total of 83 staff members applied for such leaves between 2014 and 2016.

Childbirth subsidy implementation results

Item	Gender	Total/ratio			
		2013	2014	2015	2016
Number of employees eligible for unpaid child care leaves	Male	185	225	197	201
	Female	85	102	99	92
Number of employees who applied for such leaves	Male	7	6	9	9
	Female	19	14	21	24
Number of reinstated employees upon the expiration of child care leave periods	Male	13	3	8	7
	Female	19	18	14	11
Number of employees who resumed their duties	Male	6	3	4	2
	Female	13	12	13	7
Ratio of employees who resumed their duties (reinstatement rate)	Male	46.15%	100.00%	50.00%	28.57%
	Female	68.42%	66.67%	92.86%	63.64%
Number of employees still in service 12 months upon expiration of unpaid child care leaves	Male	2	0	3	2
	Female	11	10	10	5
Ratio of employees still in service 12 months upon expiration of unpaid child care leaves (retention rate)	Male	66.67%	0.00%	100.00%	50.00%
	Female	90.91%	76.92%	83.33%	38.46%

Welfare Committee

The SAS Employee Welfare Committee which was established in 1988 actively strives for the adoption of more welfare measures for the benefit of our staff including emergency relief or assistance for employees who face drastic changes or hardship, marriage, childbirth, and funeral allowances, birthday and festival cash gifts, scholarships, hospitalization subsidies, discounts in designated stores, regular trips, year-end banquets, sponsorship of events organized by social welfare units, and family day activities. In addition to SAS employees, their family members are also invited to participate in these activities to increase the emotional attachment and identification with the company.

The Family Day Event manifests the team spirit of SAS employees

Family members are encouraged to participate in staff trips

School choirs from remote areas are invited to perform at year-end banquets

4.4 Labor-management communication

SAS places strong emphasis on employee rights and interests. Employees are notified of key policy changes or modifications of compensation, benefit, and leave systems that affect their rights and interests in labor-management meetings or by newsletter or public notice prior to implementation in accordance with relevant laws and internal regulations.

SAS has also established excellent labor-management interaction and communication channels to allow employees to make their voices and opinions heard. The HR Department sends out weekly newsletters with articles, columns, English learning sections, and event and health information. The company also releases recruitment information and has added recruitment channels to enlist outstanding internal and external talent. HR reports and health columns provide employees with new knowledge and an opportunity to participate in internal and external events. This also enables employees to achieve work-life balance and maintain their physical and spiritual health while performing their work duties.

Plants convene labor-management meetings on a regular basis and provide various channels that enable employees to freely express their views and opinions such as employee suggestion boxes, an OHS committee, meetings on the old pension system, and a welfare committee. Employees are able to fully express their opinions via meeting exchanges and discussions. This creates an effective bi-directional communication channel between labor and management, resulting in a win-win scenario for both sides.

SAS also appoints dedicated management personnel who provide assistance to facilitate the work and daily lives of foreign workers. Living environments of foreign workers are inspected at least on a quarterly basis and an Internet communication platform has been established to gain a better understanding of the needs and problems of foreign co-workers and allow real-time communication and assistance.

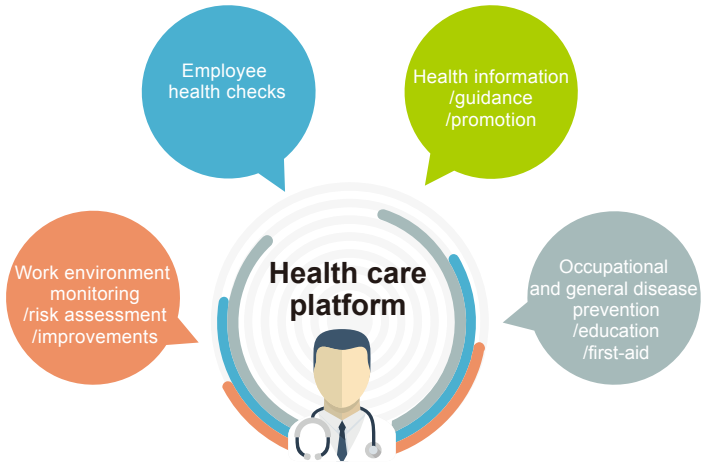
SAS has also created a work environment characterized by gender equality and the absence of gender discrimination to ensure equal treatment of male and female employees in the field of compensation, performance, promotion, and bonuses. We have also formulated Workplace Violence and Protection Guidelines and Sexual Harassment Prevention Guidelines and designated grievance liaisons to prevent related incidents. The company provides an unimpeded grievance and communication platform and organizes relevant training courses. Workplace violence risks are assessed on a regular basis to gain a full understanding of potential risk factors as a reference for improvements. Highly confidential, rapid, and fair grievance channels to safeguard the work rights of employees.

In addition, SAS conducts interviews with new employees after their first month of service to gain a better understanding of their work conditions in the company, shorten adjustment periods, and provide timely assistance for problems they face. This also increases the adaptability and identification of these employees with the company and thereby effectively enhances the work efficiency and quality.

Different communication methods

Communication method	Content
Labor-management meeting	Quarterly meetings to discuss labor-management issues, the company's operating status, and employee related issues and communication meetings involving all employees of the plant
Grievance channels	Dedicated liaison personnel for the handling of employee opinions and employee suggestion boxes in all plants
HR newsletters	Communication of company policies, analysis of industry developments, and sharing of high-quality articles
Internal platform	Dedicated mailbox on the company website with dedicated personnel in charge of responses and handling of problems reported by employees

4.5 Friendly workplace



Employee health care mechanism

The physical health of employees is a key factor for the maintenance of work-life balance. SAS has established health management centers and dedicated nursing personnel inside its plants. Specialist physicians are hired to provide monthly on-site services including health consultation, guidance, and assessment, tracking of employee health issues, and referral and medical services. The physical and mental health of co-workers is maintained through various health care initiatives, health lectures, and health promotion activities in an effort to create a blissful and healthy work environment.

Health checks

SAS views its employees as a key asset and therefore embraces the concept of diversified health care. Analysis of health data is carried out on a biennial basis based on employee health check reports and annual health management plans that meet relevant needs and cover planning of improvements are formulated to maintain the physical health of employees.

SAS carries out customized health checks in consideration of the physique of different operating personnel groups. Health check items and frequency exceed legal requirements and are combined with free cancer screening (colon cancer, cervical cancer, mammography, and oral cancer) provided by hospitals to maintain a firm grasp of employee health conditions without any oversights. Upon completion of health check operations, professional nursing personnel create statistics of abnormal results and analyze health trends. This data is discussed with visiting physicians and serves as a key reference for health improvement activities and health promotion initiatives.

Description of different employee health exams

Incoming employees	Active staff	Top executives	Catering personnel
General physical examinations	General health exams	Specially designed health exams	Health exams for food practitioners
Completed at designated hospitals prior to reporting for duty	Administered in accordance with relevant labor health protection norms, laws, and regulations	Exceeds the requirements set forth in relevant labor health protection norms, laws, and regulations	Pursuant to Article 322 of the Labor Safety Device Rules
Preservation of workplace selection assessment records	Preservation of workplace assignment assessment records	Preservation of health risk assessment records	Independently administered by catering businesses which submit relevant records/ reports to the company

Health promotion

SAS organizes a large variety of employee health management and health promotion activities. A total of 42 such activities including smoking and betel nut cessation courses, weight loss activities, blood donation drives, aerobics and fitness courses, bone mineral density tests, and health lectures with a total of 3,602 participants were organized between 2014 and 2016. In 2015, the company won second place in a workplace weight reduction competition held in Miaoli County. In addition, information related to health and major diseases is shared via EDM to raise employee health awareness, enhance their weight management knowledge, and give them an understanding of a wide range of health information.

The company also provides free influenza vaccination services and comprehensive inoculation consultation services for its employees to protect them from communicable (influenza etc.) and other diseases. Convenience of employee vaccination inside plants is enhanced and a safety protection network is established to guarantee employee health.

In addition, the management center utilizes annual health check and incoming employee data in combination with job burnout questionnaire and working time analysis results to identify medium- and high-risk groups. Case-by-case management measures such as one-on-one counseling by physicians, individual health education guidance, and work pattern adjustments are adopted to minimize risks for identified groups. Furthermore, convenient blood pressure check stations have been established in the company to allow employees to measure their blood pressure in a convenient manner and health education related information is posted in offices to reinforce self-health care concepts among employees.

Number of participants in health promotion activities

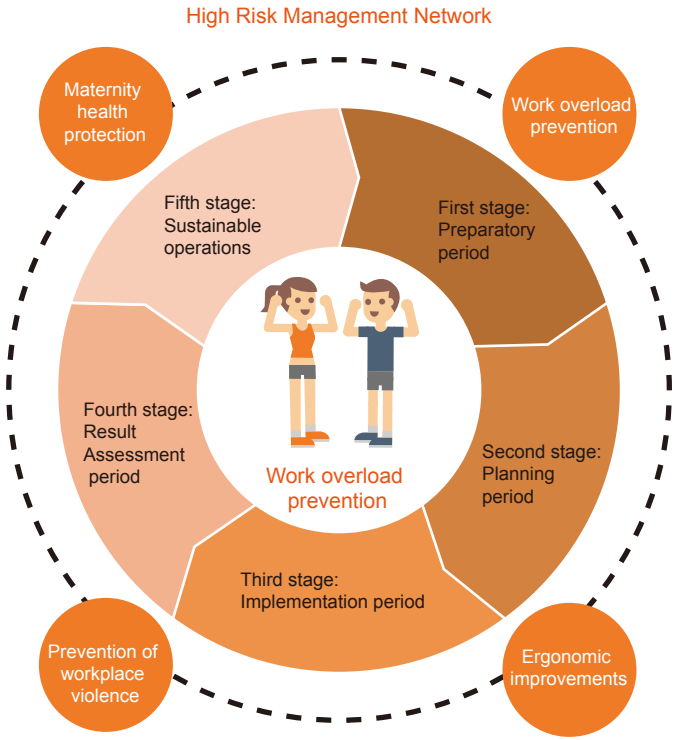
Number of participants in health promotion activities			
Item	2014	2015	2016
Blood donation activities	204	256	149
Weight loss activities	-	537	590
Bone mineral density tests	-	-	99
Smoking cessation activities	-	20	-
Betel nut cessation activities	-	-	16
Health lectures	236	329	412
Influenza vaccination activities	116	324	314
Total	556	1466	1580

Sharing of insights from betel nut cessation courses

Prize Award Ceremony of Miaoli County Healthy Weight Control Program

Health management and concern for patients

SAS nursing personnel aim to gain a better understanding of groups with abnormal results in physical exams for incoming employees or regular health checks, high-risk groups, maternity health protection groups, and workplace or traffic accident victim groups. In addition, consultations with physicians to show concern are arranged based on individual needs on a case-by-case basis to provide mental support.



SAS High Risk Management Network

Healthy workplace

SAS designs smart healthy eating slogans for its staff restaurants, implements improvements in its breastfeeding rooms, attaches health posters in its office areas, and disseminates health information for educational purposes to create a healthy workplace.

The company also conducts maternity health risk assessments and tracking to ensure the health of female employees in different stages of pregnancy. Designated parking spaces for expectant mothers have been created to provide a convenient and safe work environment for female SAS employees during pregnancy. The company also strongly supports breastfeeding and has therefore established special rooms in its plants to provide breastfeeding mothers with a worry-free and comfortable space. SAS also offers childbirth subsidies and special discounts for SAS employees at designated child-care centers and kindergartens to provide worry-free care for children of SAS employees while they are at work.

SAS Maternity protection measures

ID Badge for expectant mothers

・Helps co-workers identify pregnant employees and provide assistance at the workplace

Free parking spaces for pregnant employees

・Thoughtful provision of convenient parking spaces for pregnant co-workers

Happy pregnancy" Manual

・Contents include rights and interests, leave policies, benefits, and health guidance

Regular care provided by RNs

・Provision of regular health guidance and care as well as information on young children

Plant breastfeeding rooms

・These rooms provide an ideal environment for breastfeeding at the workplace

Special discounts at designated kindergartens

・Contracts guaranteeing discounted tuitions for SAS employees are signed with kindergartens in vicinity of plants

Breastfeeding room improvements

4.6 Career development and training

The company allocates an annual budget for the organization of training courses for employees to enhance their skills and literacy and expand the use of human resources. Training guidelines have also been formulated. The company organizes employee training and provides diverse learning channels and development resources to create opportunities for constant growth and advancement.

Training plans for the following year are formulated in the second half of each year in consideration of the business goals of the 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 respective quarter. The results of these reviews and assessments serve as a key reference for improvements for the next courses. The SAS training system encompasses the following five categories: competency training for new employees, professional competency training, general management competency training, intellectual property training, and health and safety management training. This system provides suitable training courses for employees during different stages of career development.

SAS Training Courses

SAS has established an E-Library Academy to give employees an opportunity to read and review training materials at any time. The stored data cover a wide range of topics and can be read by busy co-workers in a relaxed manner, thereby creating a reading culture in the company. The academy features training materials for every professional field. This gives employees who are interested in different fields an opportunity for self-study and rapid personal growth.

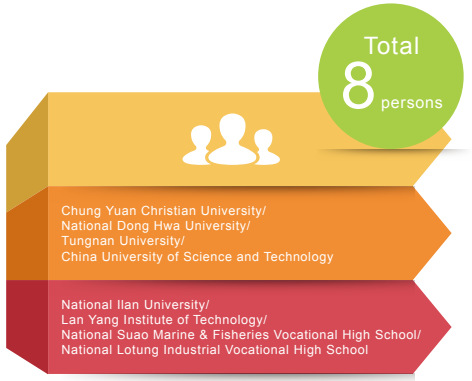
SAS is firmly convinced that constant learning also leads to constant improvements in the field of overall business performance. In 2014 and 2016, total training hours amounted to 49,212.4 hours. These efforts in the field of training and development enable employees to accomplish their tasks in a more effective manner.

SAS training environment

2014~2016 Trainee numbers and total training hours

Training category		Competency training for new employees	Professional training	General competency training	Training
2014	Sessions	246.0	726.0	243.0	1,215.0
	Trainees	1,088.0	6,377.0	3,029.0	10,494.0
	Courses	2,346.0	1,874.6	596.5	4,817.1
	Total training hours	3,743.5	6,683.6	3,166.0	13,593.1
2015	Sessions	514.0	800.0	399.0	1,713.0
	Trainees	2,684.0	7,033.0	4,436.0	14,153.0
	Courses	4,046.0	1,936.5	778.0	6,760.5
	Total training hours	5,401.5	5,736.3	3,261.5	14,399.3
2016	Sessions	255.0	523.0	239.0	1,017.0
	Trainees	1,309.0	5,559.0	2,446.0	9,314.0
	Courses	1,967.0	2,136.5	597.0	4,700.5
	Total training hours	7,696.00	8,430.0	5,094.0	21,220.0

4.7 Talent cultivation



SAS highly values research and development and is firmly committed to the cultivation of industry and academic talent. In addition to the organization of campus lectures with the goal of introducing current and future trends of the solar energy industry and providing assistance for students in the planning of their future careers, the company also offers internship opportunities and plans factory visits for related departments and institutes. These activities allow students to gain a better understanding of workplace environments and career planning through shared experiences and exchanges with active workers. An industry-academia collaboration mechanism enables us to provide internship opportunities which give students real workplace experience and allow them to combine theoretical knowledge with practical work prior to graduation with the goal of strengthening the links between the company and university campuses, ensuring long-term cultivation of future talent, and increasing the future competitiveness in the field of employment.

In addition, we also take advantage of the R&D and Industry Reserve Substitute System of the government. In 2016, a total of 8 talented researchers were enlisted to make a contribution to the cultivation of solar industry talent and achieve the goal of sharing of resources and mutually beneficial development. Campus lectures were organized at the following universities: Chung Yuan Christian University, National Dong Hwa University, Tungnan University, China University of Science and Technology, National Ilan University, Lan Yang Institute of Technology, National Suao Marine & Fisheries Vocational High School, and Luodong Vocational High School. Student participation was enthusiastic.

4.8 Occupational health and safety

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 the best resources for improvements of the health and safety facilities of plant areas in accordance with the nature and risks of the organization to prevent injuries and dangers. The ultimate goal is to safeguard the health and safety of employees, contract workers, and relevant third parties.

Occupational Safety Management System

SAS has adopted an occupational health and safety management system to prevent accidents, enhance employee health and safety, and protect company assets. The SAS Yilan and Chunan plants successively passed the OHSAS 18001 certification in 2009 and April 2015, respectively. Internal audits are carried out on an annual basis and suggestions for improvement of identified shortcomings are put forward based on audit results. The respective units are required to complete improvements within a specified time limit. External system certifications are carried out by third-party verification units upon completion of internal audits to ensure the effectiveness of management systems.

Third-party verification of OHSAS 18001 management systems of SAS plants

In addition, occupational health and safety committees (hereinafter referred to as “OHS Committees”) with elected labor representatives have been formed at each operating base in accordance with relevant laws and regulations. OHS management personnel, department executives, and medical personnel who serve as committee members regularly discuss and inspect promotion and implementation conditions of environmental protection, safety, and health related services and track the progress of required improvements. Various health and safety related resolutions and tracking items are promoted and announced by committee members of different units to give every employee a better understanding and ensure compliance.

Chunan and Yilan plant labor representative ratios

Chunan plant

Number of labor representatives	11
Number of committee members	26
Ratio	42%

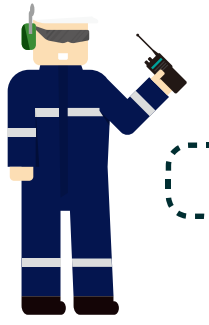
Yilan plant

Number of labor representatives	7
Number of committee members	20
Ratio	35%

Note:Ratio =Number of labor representatives/Number of committee members *100%

Joint responsibility for work safety and safety culture

SAS actively promotes OHS policies to create a comfortable and safe work environment to ensure workplace safety. Since July 2015, the company has been organizing safety culture competitions. The winning units receive commendations, monetary awards, and prizes which are presented by the OHS Committee on a quarterly basis to motivate employees to raise their health and safety awareness, boost their participation in health and safety matters, and reduce the incidence of occupational accidents.



Safety culture competition prize award and promotional poster

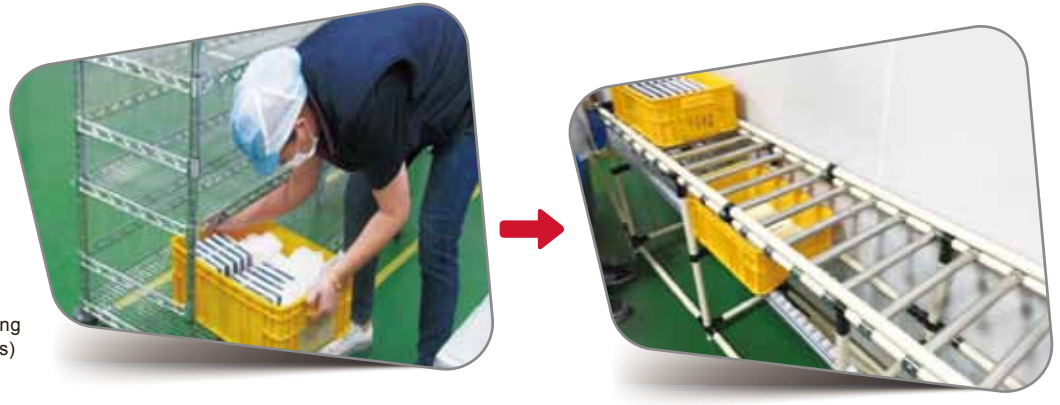
Ergonomic improvements

SAS optimizes interactions between employees and tools, machinery, systems, and operating and work environments to protect the health and safety of co-workers, achieve optimal compatibility, and maximize performance and efficiency. Ergonomics focuses on the detection and application of co-worker behavior, abilities, limitations, and other attributes to the design of suitable tools, machinery, systems, and operating and work environments. This allows co-workers to achieve maximum work efficiency and performance in a safe and comfortable environment and creates a win-win situation for both employees and the company.

With regard to highly repetitive operations involving hard physical labor, employees are asked to describe the severity and incidence rate of injuries and diseases affecting different body parts, records of medical treatment, and identification of baseline ergonomics hazard factors and risks in employee interview surveys. In addition, ergonomic risk assessments are conducted based on actual work conditions to identify improvement priorities.

The following ergonomic improvements have already been carried out: Adoption of new integrated machinery; replacement of previously unprotected grinding, polishing, and chamfering work stations; height improvements of sorting table tops and trolleys to facilitate material transportation conducted horizontally; improvements of packing benches and tables which have been equipped with rollers to reduce friction and effort required for pushing. The Health and Safety Management Department will continue to track the progress of operation improvements in all departments and observe the characteristics of operations carried out at different work stations. Employee interviews, questionnaire surveys, on-site inspections, and continued improvements enable the company to provide its employees with a comfortable and high-quality work environment.

Addition of an effort-saving wafer suction device to reduce the workload during the transportation process and lower the risk of injuries



Packing bench improvements ◦
(Manual transportation requiring stooping has been replaced with roller conveyors)

Management of special operations inside plants

SAS frequently carries out special operations involving elevated structures, fire, and fire prevention system interruptions in accordance with process attributes and employee demands. Relevant safety and protection measures must be in place and inspections must be carried out to provide support for plant personnel who carry out such operations independently. Plant personnel are required to submit applications and safety inspections must be conducted prior to the carrying out of special operations to increase operational safety.

Contractor management

SAS has formulated Contractor Management Guidelines which prescribe duties and responsibilities of company units and contractors from project initiation to completion to guarantee a win-win situation for both sides. In addition, an e-application system has been established inside plants. The eligibility of contractors to enter plants must be verified prior to the submission of project applications. The application process and the management of all stages of the project are strictly controlled. In addition to the implementation of on-site supervision by competent units, OHS management department personnel also carry out reviews on a non-scheduled basis to ensure that all operations meet safety, health, and environmental regulations.

SAS contractor management procedures

Before contractors enter plants	· Contractors are required to sign an OHS Policy Statement and a Contractor Safety, Health, and Environmental Protection Notification and Letter of Commitment and must agree to abide by all relevant company regulations prior to entering the plant. · Preparation of valid insurance certificates and OHS training certificates for construction personnel to prevent follow-up problems generated by occupational accidents caused by carelessness and effectively safeguard labor rights and interests.
Prior to initiation of in-plant operations	· Prior to initiation of operations, personnel are notified of work environment characteristics, hazard factors, and safety and health related regulations. · Strict controls of personnel entering and exiting the company premises are implemented through personal ID badges to ensure adequate protection and controls. · Construction personnel are also required to provide professional skill certificates. All operations must be suspended immediately if it is verified that qualifications of on-site operation personnel don't meet relevant criteria in order to prevent unnecessary disputes in the future.
Management during operations	· During construction periods, responsible departments conduct on-site supervision of operations and contractors are required to dispatch on-site supervisors, while health and safety departments carry out relevant reviews on a non-scheduled basis. · If it is detected that contractors violate relevant laws and regulations, the company may request suspension of operations and immediate improvements or impose fines for infractions committed by contractors.
Contractor selection/ evaluation and performance appraisals	· The health and safety management department may request that contractors immediately leave the plant and revoke their plant access rights upon approval by unit executives if contractors are unable to abide by relevant management standards and operating procedures or commit serious violations. · The Health and Safety Management Department and Procurement Department appraise contractors upon completion of projects based on project, labor health and safety, and procurement evaluation and scoring standards. Cooperation with contractors is continued or discontinued based on appraisal results to minimize potential operational risks.

Annual repairs and tool-box meeting

Absence and disabling injuries

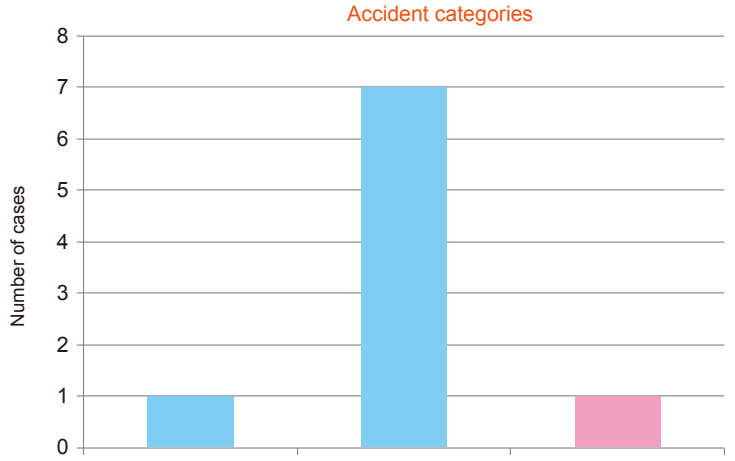
SAS occupational accident data analysis is based on the key statistical indicators on disabling injuries released by the Ministry of Labor. Disabling Frequency Rate (FR) and Disabling Severity Rate (SR) were selected as the main indicators (disabling injuries result in at least one day of work loss and exclude traffic accidents). Disabling injury trends were tracked based on these statistics. This data serves as a key reference for improvement initiatives. The goal is to reduce injury incidence rates and injury severity and make constant progress toward the goal of zero accidents.

2014~2016 SAS Disabling Frequency Rate (F.R) and Disabling Severity Rate (S.R)

	2014		2015		2016	
	Male	Female	Male	Female	Male	Female
Disabling Frequency Rate (FR)	1.50	0.00	3.24	0.00	1.92	1.26
Disabling Severity Rate (SR)	37.96	0.00	17.52	0.00	22.76	11.38
Occupational Disease Rate (ODR)	0.00	0.00	0.00	0.00	0.00	0.00

・Disabling Frequency Rate (FR)＝Number of disabling injuries *106 / Total man-hours worked
・Disabling Severity Rate(SR)＝Number of lost work days*106 / Total man-hours worked
・Occupational disease rate (ODR) = Number of occupational disease cases*106 /Total working hours

Occupational injuries (excluding traffic accidents) that occurred in 2016 can be divided into the following categories: Injuries caused by falling objects, cuts and abrasions, and injuries caused by contact with hazardous materials. Occupational injuries have been incorporated as an item of the risk identification process carried out by departments. Protective equipment is added or modified, operation procedures are revised, and employees receive additional training based on different work attributes to achieve the goal of a comfortable and safe work environment.



	Falling objects	Cuts and abrasions	Contact with hazardous materials
Female	0	0	1
Mmale	1	7	0

・Distribution of accident categories in 2016

2014~2016 Absence statistics

Year	2014		2015		2016	
Gender	Male	Female	Male	Female	Male	Female
Number	978	298	1326	410	1173	394
Days of absence-A	3140.766	1414.035	5032.009	2028.193	6102.2	4009.6
Working days-B	241566	73606	328848	101680	291480	97880
Absence rate(AR)=A/B	1.30%	1.92%	1.53%	1.99%	2.09%	4.10%

・Absence rate (AR) = Total days of absence / Total working days * 100%

・Definition of absence: Sick leaves (menstrual leaves), personal leaves, occupational injury leaves, and absenteeism excluding granted vacations, maternity and paternity leaves, and bereavement leaves

Management of chemicals

In line with amendments of occupational health and safety laws, SAS has formulated management guidelines governing the storage, transportation, and safe use of chemicals. The company has also strengthened management practices and keeps detailed inventories and records of chemicals used in plants. Management measures have been adopted for the hazard and risk ranking of chemicals to implement source and ranking management. Lists of materials are created and reports are submitted to the competent authority in accordance with relevant laws to ensure the safety and legality of chemical usage in plants. In addition, a review system has been adopted and chemicals can only be used after a hazard and risk assessment conducted by relevant departments and final verification.

Emergency response management

SAS gives top priority to the safety of its employees. In 2016, the Health and Safety Management Department therefore conducted a total of four emergency response drills in accordance with department characteristics to ensure effective emergency response plans and procedures and rapid handling of incidents with the goal of preventing or mitigating employee injuries, property losses, and environmental pollution caused by emergencies. Relevant emergency response procedures have been formulated for fires, explosions, chemical leakage, and earthquakes. In addition, four evacuation drills involving all employees of SAS plants were carried out with the goal of strengthening the awareness and familiarity of employees with work environments and evacuation routes. Emergency response drills are organized on a regular basis to familiarize employees with emergency response procedures and raise crisis awareness to minimize environmental impacts and maintain sustainable operations.

Operation area disaster prevention drills

Evacuation drills for office area employees

Evacuation drills for on-site personnel

Operating environment monitoring

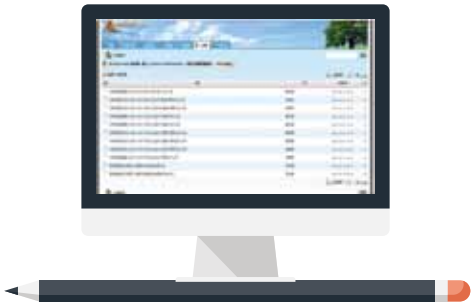
SAS commissions qualified industrial and mining hygienists and operating environment monitoring organizations to devise monitoring plans and carry out operating environment surveys in accordance with Operating Environment Monitoring Guidelines. These hygienists and organizations also determine whether the results conform to relevant laws and regulations. If abnormalities are detected, improvements and corrections must be implemented immediately to safeguard the physical health of employees. Annual operating environment surveys are carried out according to plan. Test items include organic materials, special chemicals, dust, noise, CO_2, and lighting. Adequate safety equipment is provided and improvements are carried out for nonconforming areas or equipment.

Safety education and training

Safety concepts are instilled in newly inducted employees and active staff through health and safety training, the internal website, e-mails, and bulletin board announcements to increase health and safety knowledge.

SAS Safety education and training results

Health and safety training



Health and safety education on the internal website

E-Mail announcements

Bulletin board announcements

Protective equipment training

Fire prevention training (foreign co-workers)

4.9 Social concern

Tidbits of the Dream Fulfillment Activity

Since 2003, compassionate manufacturers of the Hsinchu Science Park have been organizing Christmas gift collection activities on Christmas Eve to fulfill the dreams of disadvantaged children. This activity has turned into a precious tradition in the Hsinchu Science Parke area. SAS continues to promote this Dream Fulfillment Activity in cooperation with Accton Cultural & Educational Foundation. These little gifts help fulfill the dreams and desires of these children. We are all Santa Clauses and spread hope and love to these children. SAS has participated in a total of seven activities and its employees take part in the gift purchase activities with great enthusiasm. Over the years, a total of 3,153 children in remote areas and social welfare organizations have received Christmas gifts in the context of this activity.

Tidbits of the compassionate blood donation activities

Since 2010, SAS has served as a sponsor for the heartwarming and compassionate fair activity organized by a family support center in Hsinchu. This activity aims to show concern for disadvantaged families in the Hsinchu area and abused children in foster care. In addition to this sponsorship, the company also actively promotes environmental protection by conducting charity sales of second hand materials on the day of the activity to financially support the center. The goal of this joint activity is to promote charity and spread love and joy to these underprivileged groups. In addition, the health center organizes annual blood donation drives. These activities enable employees to demonstrate social concern and effectively stimulate metabolism. Every bag of blood saves a life and represents the passion and love of the donors.

The moon cakes donation activities

Based on a passionate commitment to social welfare and assistance for underprivileged groups, SAS employees donate their moon cakes in a show of compassion and love for these groups. The moon cakes are donated to charitable organizations under the company's name to demonstrate the amalgamated spirit of compassion of all employees.

GRI G4 content index table

Index	Description	Corresponding chapter	Page	Note/ Reasons for non-disclosure	External Assurance
Strategy and Analysis					
G4-1	Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability	Message from the Chairman	7		◎
G4-2	Provide a description of key impacts, risks, and opportunities	1.4 Risk management	42		◎
Organizational Profile					
G4-3	Name of the organization	1.1 Company Overview	21		◎
		1.1.1 Company Profile	21		◎
G4-4	Primary brands, products, and services	1.1 Company Overview	21		◎
		1.1.1 Company Profile	21		◎
		2.1 Innovation management	47		◎
G4-5	Location of the organization's headquarters	1.1 Company Overview	21		◎
		1.1.1 Company Profile	21		◎
G4-6	The number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	1.1 Company Overview	21		◎
		1.1.1 Company Profile	21		◎
		1.1.4 Market and product services	24		◎
G4-7	Nature of ownership and legal form	1.1 Company Overview	21		◎
		1.1.1 Company Profile	21		◎
G4-8	The markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	1.1 Company Overview	21		◎
		1.1.1 Company Profile	21		◎
		1.1.4 Market and product services	24		◎
G4-9	Scale of the organization	1.1 Company Overview	21		◎
		1.1.1 Company Profile	21		◎
G4-10	Report the total number of employees by employment type/contract/region/and gender	4.2 Human Resources	72		◎
G4-11	Percentage of total employees covered by collective bargaining agreements	–	-	Labor unions have not been established by SAS	◎
G4-12	Describe the organization's supply chain	1.1.3 Establishment of a complete solar energy supply chain with integrated up-, mid-, and downstream operations	23		◎
G4-13	Any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	–	-	Addition of a new plant building in 2016	◎
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization	1.4 Risk management	42		◎
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	–	-	Non-participation in relevant charters	◎
G4-16	List memberships of associations and national or international advocacy organizations	1.1.7 Participation in external associations	31		◎
Identified Material Aspects and Boundaries					
G4-17	List all entities included in the organization's consolidated financial statements or equivalent documents	About this report	1		◎
G4-18	Explain the process for defining the report content and the Aspect Boundaries. Explain how the organization has implemented the Reporting Principles for Defining Report Content	Stakeholder identification and communication	9		◎
G4-19	List all the material Aspects identified in the process for defining report content	Stakeholder identification and communication	9		◎
G4-20	For each material Aspect, report whether the Aspect is material within the organization	Stakeholder identification and communication	9		◎
G4-21	For each material Aspect, report the Aspect Boundary outside the organization, report any specific limitation regarding the Aspect Boundary outside the organization	Stakeholder identification and communication	9		◎

Index	Description	Corresponding chapter	Page	Note/ Reasons for non-disclosure	External Assurance
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements	About this report	1	First release of SAS CSR Report	◎
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries	About this report	1	First release of SAS CSR Report	◎
Stakeholder Engagement					
G4-24	Provide a list of stakeholder groups engaged by the organization	Stakeholder identification and communication	9		◎
G4-25	Report the basis for identification and selection of stakeholders with whom to engage	Stakeholder identification and communication	9		◎
G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process	Stakeholder identification and communication	9		◎
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns	Stakeholder identification and communication	9		◎
Report Profile					
G4-28	Reporting period (such as fiscal or calendar year) for information provided.	About this report	1		◎
G4-29	Date of most recent previous report	About this report	1	First release of SAS CSR Report	◎
G4-30	Reporting cycle	About this report	1		◎
G4-31	Provide the contact point for questions regarding the report or its contents	About this report	1		◎
Gri Content Index					
G4-32	Report the 'in accordance' option the organization has chosen, the GRI Content Index for the chosen option, the reference to the External Assurance Report, if the report has been externally assured	GRI G4 content index table	95		◎
Assurance					
G4-33	External assurance for the report	Verification Statement	-		◎
Governance					
G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	1.1 Company Overview 1.1.2 Business philosophy 1.1.6 Sustainability organization 1.2 Corporate Governance 1.2.1 Corporate governance framework	21 23 29 34 34		◎
G4-35	Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees	1.1 Company Overview 1.1.6 Sustainability organization	21 29		◎
G4-36	Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body	1.1 Company Overview 1.1.6 Sustainability organization	21 29		◎
G4-37	Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body	1.1 Company Overview 1.1.6 Sustainability organization	21 29		◎
G4-38	Report the composition of the highest governance body and its committees by type	1.2 Corporate Governance 2016 Annual Report of the company	34 -	Not classified by underprivileged social groups, economic, social, and environmental impacts, relevant capabilities, and stakeholder representatives	◎
G4-39	Report whether the Chair of the highest governance body is also an executive officer	1.2 Corporate Governance 1.2.2 High-level management 2016 Annual Report of the company	34 35 -		◎

Index	Description	Corresponding chapter	Page	Note/ Reasons for non-disclosure	External Assurance
G4-40	Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members	1.2 Corporate Governance Please see the company's official website: Investor/About SAS/ Guidelines for the Corporate Governance	34		◎
G4-41	Report processes for the highest governance body to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders	1.2 Corporate Governance 1.2.2 High-level management Please see the company's official website: Investor/About SAS/ Guidelines for the Corporate Governance	34 35		◎
G4-42	Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts	1.1 Company Overview 1.1.6 Sustainability organization	21 29		◎
G4-43	Report the measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics	2016 Annual Report of the company Please refer to "Continuing Education for Directors"	-		◎
G4-44	Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics including, as a minimum, changes in membership and organizational practice. Report whether such evaluation is independent or not, and its frequency. Report whether such evaluation is a self-assessment	_	-	Relevant assessment procedures are currently not available	◎
G4-45	Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes and whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental and social impacts, risks, and opportunities	1.1 Company Overview 1.1.6 Sustainability organization 1.4 Risk management	21 29 42		◎
G4-46	Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics	1.1 Company Overview 1.1.6 Sustainability organization 1.4 Risk management	21 29 42		◎
G4-47	Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities	1.1 Company Overview 1.1.6 Sustainability organization 1.4 Risk management	21 29 42		◎
G4-48	Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered	About this report 1.1 Company Overview 1.1.6 Sustainability organization	1 21 29		◎
G4-49	Report the process for communicating critical concerns to the highest governance body	1.1 Company Overview 1.1.6 Sustainability organization	21 29		◎
G4-50	Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them	Stakeholder identification and communication 1.1 Company Overview 1.1.6 Sustainability organization	9 21 29		◎
G4-51	Report the remuneration policies for the highest governance body and senior executives and how performance criteria in the remuneration policy relate to the highest governance body's and senior executives' economic, environmental and social objectives	1.2 Corporate Governance 1.2.2 High-level management	34 35	Performance standards in the field of economic, social, and environmental targets are currently not linked to compensation policies	◎
G4-52	Report the process for determining remuneration. Report whether remuneration consultants are involved in determining remuneration and whether they are independent of management. Report any other relationships which the remuneration consultants have with the organization	1.2 Corporate Governance 1.2.2 High-level management	34 35		◎
G4-53	Report how stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals	1.2 Corporate Governance 1.2.2 High-level management	34 35	Stakeholders' views are currently not linked to remuneration	◎

Index	Description	Corresponding chapter	Page	Note/ Reasons for non-disclosure	External Assurance
G4-54	Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country	2016 Annual Report of the company	-	Ratios not calculated	◎
G4-55	Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country	2016 Annual Report of the company	-	Ratios not calculated	◎
Ethics and Integrity					
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	1.3 Ethics and integrity	39		◎
G4-57	Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines	1.3 Ethics and integrity	39		◎
G4-58	Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	1.3 Ethics and integrity	39		◎
CATEGORY: ECONOMIC					
Aspect: Economic Performance					
G4-DMA	Disclosure of specific indicators and management approaches	Stakeholder identification and communication Chapter 1 DMA	9 18		◎
G4-EC1	Direct economic value generated and distributed	1.1.5 Operating performance	27		◎
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	1.4 Risk management	43	The financial impact of climate change on organizational activities has not been calculated	◎
G4-EC3	Coverage of the organization's defined benefit plan obligations	–	-		–
G4-EC4	Financial assistance received from government	–	-	These figures have not been calculated	◎
Aspect: Market Presence					
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	–	-		–
G4-EC6	Report the percentage of senior management at significant locations of operation that are hired from the local community	4.2 Human Resources	72		◎
Aspect: Indirect Economic Impacts					
G4-EC7	Development and impact of infrastructure investments and services supported	—	-	Immaterial issues are not disclosed in this report	–
G4-EC8	Significant indirect economic impacts, including the extent of impacts	—	-	Immaterial issues are not disclosed in this report	–
Aspect: Procurement Practices					
G4-EC9	Proportion of spending on local suppliers at significant locations of operation.	–	-	Immaterial issues are not disclosed in this report.Only ratio of local suppliers is disclosed	◎
Category: Environmental					
Aspect: Materials					
G4-DMA	Disclosure of specific indicators and management approaches	Stakeholder identification and communication Chapter 3 DMA	9 54		◎
G4-EN1	Materials used by weight or volume	3.1 Clean production	55		◎
G4-EN2	Percentage of materials used that are recycled input materials	3.1 Clean production	55		◎
Aspect: Energy					
G4-EN3	Energy consumption within the organization	3.3 Energy management	57		◎

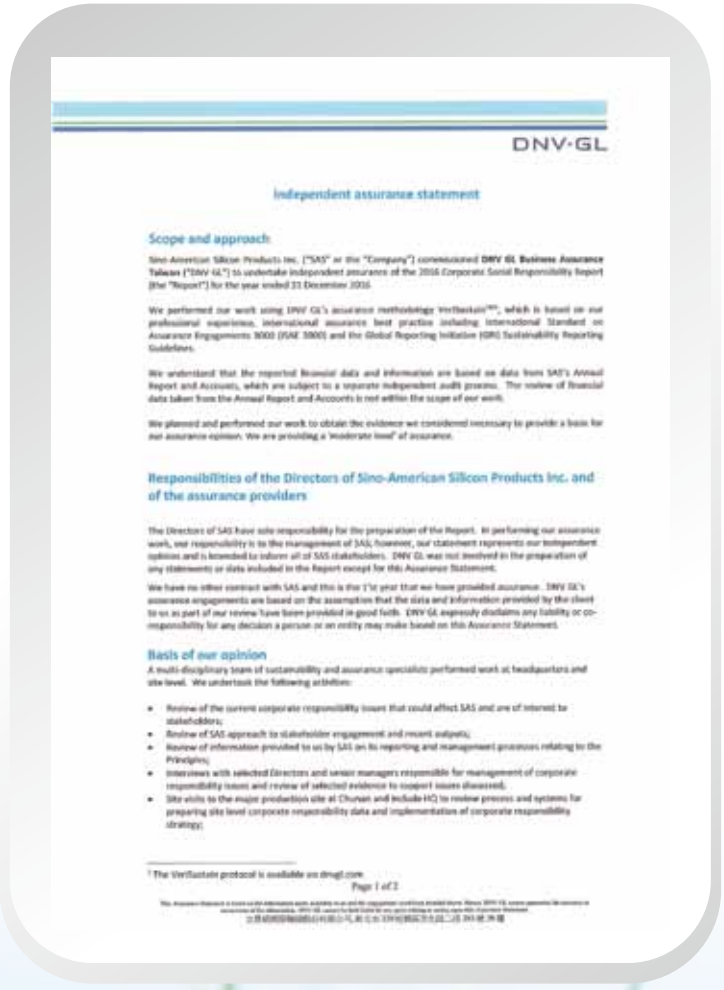
Index	Description	Corresponding chapter	Page	Note/ Reasons for non-disclosure	External Assurance
G4-EN4	Energy consumption outside of the organization	–	-		–
G4-EN5	Energy intensity	3.3 Energy management	57		◎
G4-EN6	Reduction of energy consumption	3.3 Energy management	57		◎
G4-EN7	Reductions in energy requirements of products and services	3.3 Energy management	47		◎
Aspect: Water					
G4-EN8	Total water withdrawal by source	3.4 Water resource management	61		◎
G4-EN9	Water sources significantly affected by withdrawal of water	3.4 Water resource management	61		◎
G4-EN10	Percentage and total volume of water recycled and reused	3.4 Water resource management	61		◎
Aspect: Biodiversity					
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	–	-	Immaterial issues are not disclosed in this report	–
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	–	-	Immaterial issues are not disclosed in this report	–
G4-EN13	All habitat protected areas or restored areas	–	-	Immaterial issues are not disclosed in this report	–
G4-EN14	Report the total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Emissions					
G4-EN15	Direct greenhouse gas (GHG) emissions (scope 1)	3.2 Response to climate change and global warming	56		◎
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (scope 2)	3.2 Response to climate change and global warming	56		◎
G4-EN17	Other indirect greenhouse gas (GHG) emissions (scope 3)	3.2 Response to climate change and global warming	56	Figures of Scope 3 are not disclosed in this report	–
G4-EN18	Greenhouse gas (GHG) emissions intensity	3.2 Response to climate change and global warming	56	Greenhouse gas (GHG) emissions intensity has not been calculated	–
G4-EN19	Reduction of greenhouse gas (GHG) emissions	Message from the Chairman 3.2 Response to climate change and global warming	7 56		◎
G4-EN20	Emissions of ozone-depleting substances (ODS)	–	-	Immaterial issues are not disclosed in this report	–
G4-EN21	Nox, Sox, and other significant air emissions	3.5 Emissions	63		◎
Aspect: Effluents and Waste					
G4-EN22	Total water discharge by quality and destination	3.5 Emissions	63		◎
G4-EN23	Total weight of waste by type and disposal method	3.6 Waste management	65		◎
G4-EN24	Total number and volume of significant spills.	3.5 Emissions 3.6 Waste management	63 65		◎
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex i, ii, iii, and viii, and percentage of transported waste shipped internationally	3.6 Waste management	65		◎
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	3.5 Emissions	63	Wastewater was discharged to sewage system of the science park therefore water bodies and related habitats didn't be affected by it.	◎
Aspect: Products and Services					
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	2.2 Customer and product services	49	No digitized information available	◎
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	3.1 Clean production	55		◎

Index	Description	Corresponding chapter	Page	Note/ Reasons for non-disclosure	External Assurance
Aspect: Compliance					
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	3.7 Sustainable management and legal compliance	67		◎
Aspect: Transport					
G4-EN30	Report the significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Overall					
G4-EN31	Total environmental protection expenditures and investments by type	–	-		–
Aspect: Supplier Environmental Assessment					
G4-EN32	Percentage of new suppliers that were screened using environmental criteria.	–	-	Immaterial issues are not disclosed in this report	–
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Environmental Grievance Mechanisms					
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	–	-	No grievances have been filed	◎
Category: Social					
Sub-category: Labor Practices And Decent Work					
Aspect: Employment					
G4-DMA	Disclosure of specific indicators and management approaches	Stakeholder identification and communication Chapter 4 DMA	9 70		◎
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	4.2 Human Resources	72		◎
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	4.3 Salary & benefits	76		◎
G4-LA3	Return to work and retention rates after parental leave, by gender	4.3 Salary & benefits	76		◎
Aspect: Labor/Management Relations					
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	4.4 Labor-management communication	79	No relevant agreements exist	◎
Aspect: Occupational Health and Safety					
G4-LA5	Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs	4.8 Occupational health and safety	86		◎
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	4.8 Occupational health and safety	86	Suppliers related data have not been calculated	◎
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	4.8 Occupational health and safety	86		◎
G4-LA8	Health and safety topics covered in formal agreements with trade unions	–	-	No relevant agreements exist (labor unions have not been established)	◎
Aspect: Training and Education					
G4-LA9	Average hours of training per year per employee by gender, and by employee category	4.7 Talent cultivation	86		◎
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	4.7 Talent cultivation	86		◎
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	4.3 Salary & benefits 4.7 Talent cultivation	76 86		◎
Aspect: Diversity and Equal Opportunity					
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	4.2 Human Resources	72	Information of board of director are not disclosed in this report	◎
Aspect: Equal Remuneration for Women and Men					
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	4.3 Salary & benefits	76	There is no gender wage gap	◎

Index	Description	Corresponding chapter	Page	Note/ Reasons for non-disclosure	External Assurance
Aspect: Supplier Assessment for Labor Practices					
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	–	-	Immaterial issues are not disclosed in this report	–
G4-LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Labor Practices Grievance Mechanisms					
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	–	-	No grievances have been filed	◎
Sub-category: Human Rights					
Aspect: Investment					
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	–	-	Immaterial issues are not disclosed in this report	–
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Non-Discrimination					
G4-HR3	Total number of incidents of discrimination and corrective actions taken	–	-	No instances of discrimination have been reported	◎
Aspect: Freedom of Association and Collective Bargaining					
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Child Labor					
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	–	-	The company does not employ child labor; supplier conditions are not disclosed in this report due to immateriality	◎
Aspect: Forced or Compulsory Labor					
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	Chapter 4 DMA 4.1 Staff policies	71	Suppliers data are not disclosed in this report	◎
Aspect: Security Practices					
G4-HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Indigenous Rights					
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Assessment					
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Supplier Human Rights Assessment					
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	–	-	Immaterial issues are not disclosed in this report	–
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Human Rights Grievance Mechanisms					
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	–	-	No grievances have been filed	◎
Sub-category: Society					
Aspect: Local Communities					
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	–	-	Immaterial issues are not disclosed in this report	–
G4-SO2	Operations with significant actual and potential negative impacts on local communities	–	-	Immaterial issues are not disclosed in this report	–

Index	Description	Corresponding chapter	Page	Note/ Reasons for non-disclosure	External Assurance
Aspect: Anti-corruption					
G4-SO3	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	1.3 Ethics and integrity	39		◎
G4-SO4	Communication and training on anti-corruption policies and procedures	1.3 Ethics and integrity	39		◎
G4-SO5	Confirmed incidents of corruption and actions taken	1.3 Ethics and integrity	39		◎
Aspect: Public Policy					
G4-SO6	Total value of political contributions by country and recipient/beneficiary	1.3 Ethics and integrity	39	No political donation and item donation	◎
Aspect: Anti-Competitive Behavior					
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	–	-	The company was not involved in lawsuits due to anti-competitive behavior	◎
Aspect: Compliance					
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	–	-	No legal violations	◎
Aspect: Supplier Assessment for Impacts on Society					
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	–	-	Immaterial issues are not disclosed in this report	–
G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken	–	-	Immaterial issues are not disclosed in this report	–
Aspect: Grievance Mechanisms for Impacts on Society					
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	–	-	No grievances have been filed	◎
Sub-category: Product Responsibility					
Aspect: Customer Health and Safety					
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	–	-	Immaterial issues are not disclosed in this report	–
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	2.4 Product liability and marketing communication	52	No violations of relevant laws or voluntary principles	◎
Aspect: Product and Service Labeling					
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	2.4 Product liability and marketing communication	52		◎
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	2.4 Product liability and marketing communication	52	No violations of relevant laws or voluntary principles	◎
G4-PR5	Results of surveys measuring customer satisfaction	2.2 Customer and product services	49		◎
Aspect: Marketing Communications					
G4-PR6	Sale of banned or disputed products	2.4 Product liability and marketing communication	52	No violations of relevant laws or voluntary principles	◎
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	2.4 Product liability and marketing communication	52		◎
Aspect: Customer Privacy					
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	2.3 Protection of confidential customer information	50		◎
Aspect: Compliance					
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	2.4 Product liability and marketing communication	52	No violations of relevant laws or regulations	◎

Verification statement issued by independent third-party



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Independent assurance statement

Scope and approach

Sino-American Silicon Products Inc. ("SAS" or the "Company") commissioned **DNV GL Business Assurance Taiwan** ("DNV GL") to undertake independent assurance of the 2016 Corporate Social Responsibility Report (the "Report") for the year ended 31 December 2016.

We performed our work using DNV GL's assurance methodology VeriSustain[TM], 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 Guidelines.

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 a 'moderate level' of assurance.

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 GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement.

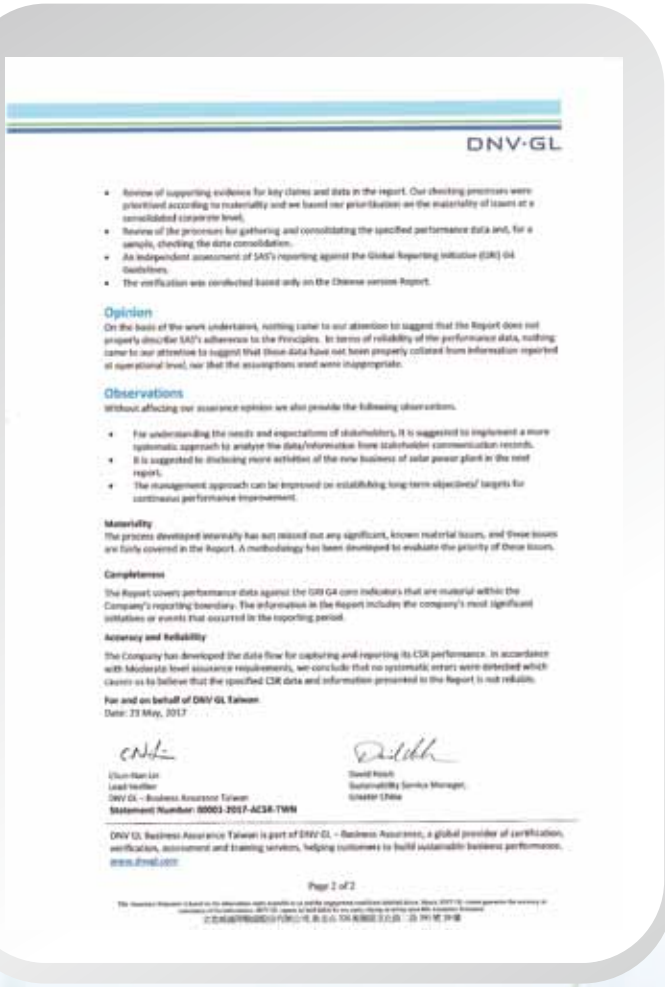
We have no other contract with SAS and this is the 1st year that we have provided assurance. DNV GL's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith. DNV GL expressly disclaims any liability 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 visits to the major production site at Chunan and include HQ to review process and systems for preparing site level corporate responsibility data and implementation of corporate responsibility strategy;

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



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- Review of supporting evidence for key claims and data in the report. 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) G4 Guidelines.
- The verification was conducted based only on the Chinese version Report.

Opinion

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, nothing came to our attention to suggest that those 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.

- For understanding the needs and expectations of stakeholders, it is suggested to implement a more systematic approach to analyze the data/information from stakeholder communication records.
- It is suggested to disclosing more activities of the new business of solar power plant in the next report.
- The management approach can be improved on establishing long-term objectives/ targets for continuous performance improvement.

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 G4 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 GL Taiwan
Date: 23 May, 2017

Chun-Nan Lin
Lead Verifier
DNV GL – Business Assurance Taiwan
Statement Number: 00001-2017-ACSR-TWN

David Hsieh
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