

Vanguard International Semiconductor Corporation  
**2018 Corporate Social Responsibility Report**



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## Letter from Chairman

# Focus on Changes, March toward the Common Good

2018 was a fruitful year for VIS. Our annual revenue and profit, as well as EPS, all reached record high despite uncertainties within the global semiconductor industry resulted from the trade war between the U.S. and China. Such performance was only accomplished through the collective effort of the management team and our employees; in addition to sharing this achievement with our employees and returning to shareholders, VIS also acquired an 8-inch wafer fab in Singapore from GlobalFoundries to be our growth engine that will take us to new heights in the future, as we prepare for the next great harvest.

Upholding our corporate values of integrity, VIS continues to improve our practices in corporate governance, environmental protection, and social responsibility. The CSR Committee will target the indicators of major CSR topics and formulate sustainability goals and development directions; through constant examination of outcomes and enhancement of standards, the company continues to accumulate strength and achieve upgrade through the process of reaching our goals; also, keeping pace with global corporate social responsibility trends, we further focus our CSR endeavors on responding UN Sustainable Development Goals.

In 2018, VIS tried to define 14 major CSR topics jointly with our stakeholders for the first time in response to the 17 SDGs set forth by the United Nations. Among these major topics, VIS's efforts have echoed, to various degrees, 15 UN SDGs of

"No Poverty, Zero Hunger, Good Health And Well-Being, Quality Education, Clean Water And Sanitation, Affordable And Clean Energy, Decent Work And Economic Growth, Reduced Inequalities, Sustainable Cities And Communities, Responsible Consumption And Production, Climate Action, Life Below Water, Life On Land, Peace, Justice, And Strong Institutions, and Partnerships For The Goals;" VIS has also made arrangement for the host and experts of our sponsored broadcast program, "Focus on Taiwan," to discuss and share with audience the impact of "climate change" on human society, as a part of our advocation for the SDG of "Climate Action".

In the area of corporate governance, VIS has formulated human rights policy and established corporate governance framework; in addition to the CSR Committee, which is in charge of economic, social, and environmental affairs, VIS has also designated an executive responsible for overseeing corporate governance under





the Board of Directors to assist with related affairs. VIS has achieved the honor of top 5% listed companies at TPEx for five consecutive years in the corporate governance evaluation conducted by Taiwan Stock Exchange.

Regarding environmental protection, VIS participated in the "Material Flow Cost Accounting Demonstration Project" launched by Industrial Development Bureau in 2018, introducing ISO 14051 Material Flow Cost Accounting method and earning third-party verification; together with the product carbon and water footprint verification introduced in 2016 and ISO 50001 energy management system and environmental accounting introduced in 2017, all three projects achieved concrete results in 2018, and began to show benefits. VIS Fab3 also won EPA's silver award of the "ROC Enterprise Environment Protection Award" for the second straight year, as well as "Taoyuan Department of Environment Protection Award" for reduction of air-borne pollutants in public and private spaces.

As for social participation, in addition to having volunteers go to Smangus regularly to spend time with the children of the tribal village, VIS also sponsored the kids to come down to urban areas and participate in winter camps, where they learned to recognize the insects they grew up around in natural environment. Furthermore, VIS went to Guang Ming Elementary School to offer students environmental education. VIS also introduced environmental safety knowledge on par with workplace safety standards of foundry fab to school laboratories, conducting inspections on the labs of National Tsing Hua University and HsinKe Junior High

School, and helping the schools to implement campus safety and ensure learning safety. Moreover, VIS has made continuous donations to disadvantaged groups for over five consecutive years. In 2018, VIS made donations to 9 different charity organizations that focused on elders living alone, Down syndrome children, people with intellectual and physical disabilities, and children of underprivileged families; with the mindset of "caring for all," VIS invited them to partake in company activities, to enjoy the warmth and joy shared by our employees.

We fully understand that corporate sustainable development not only relies on the collective effort of the management team and all employees, but also needs the support of external resources. Therefore, as a responsible corporate citizen, VIS will launch more concrete actions in the aspects of corporate governance, environmental protection, and corporate social responsibilities, and focus on changes. VIS will remain determined on the path towards sustainable development of the environment and company. We will join hands with all stakeholders, including our employees, customers, investors, and vendors, and together, we shall march toward the common good.

Chairman of VIS

Leuh Fang



# 1/ About VIS

2018 consolidated revenue reached NT\$28.93 billion; compared to the previous year, the revenue increased approximately

2018 average monthly 8-inch capacity was

16.1%

199,000 wafers

Total number of VIS employees was

5,579

ROE was

21.5%

EPS was

NT\$3.72



## 1.1 Company Profile

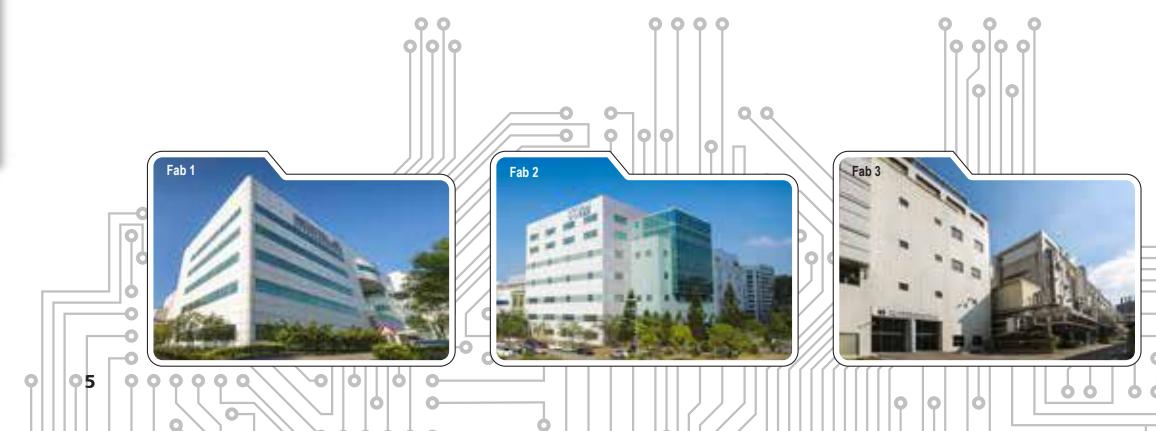
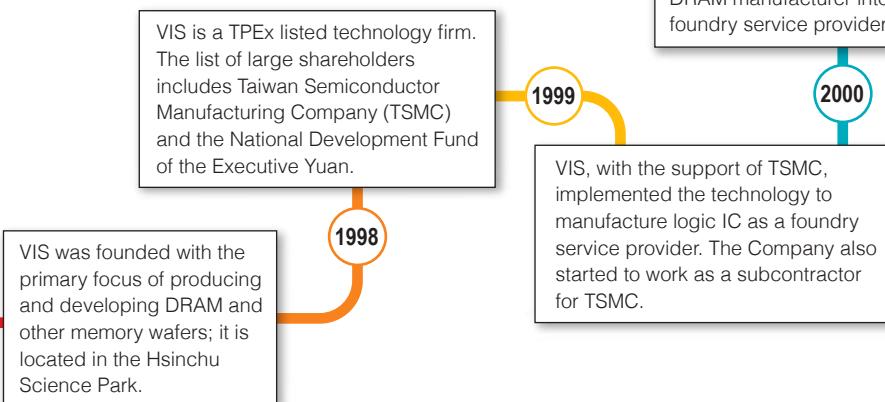
Vanguard International Semiconductor Corporation (VIS) is a leading specialty IC foundry service provider. Since its founding in December 1994 in Hsinchu Science Park, Taiwan, VIS has been achieving continuous success in its technology development and production efficiency improvement. VIS has also been consistently offering its customers cost-effective solutions and high value-added services. VIS currently has three 8-inch fabs with a monthly capacity of approximately 199,000 wafers in 2018. VIS headquarters is located at 123, Park Ave. 3, Hsinchu Science Park, Hsinchu, Taiwan.

VIS is a spin-off of the Sub-Micron Project, sponsored by the Industrial Technology Research Institute (ITRI). Original investors include Taiwan Semiconductor Manufacturing Company (TSMC) and 13 other institutional investors. VIS was founded with the primary focuses on the production and development of DRAM and other memory IC. In March 1998, VIS became a listed company on the Taiwan Over-The-Counter Stock Exchange (OTC). Its main shareholders include TSMC, National Development Fund and other institutional investors.



VIS acquired GLOBAL-FOUNDRIES' Fab 3E 8-inch fab in Singapore, and will officially take over operation and management in 2020.

## Milestones of VIS





In 1999, VIS started to work as a subcontractor for TSMC for the manufacturing of logic and mixed signal IC. In 2000, VIS officially announced its plan to transform from a DRAM manufacturer into a foundry service provider. In February 2004, VIS completely terminated its DRAM production and became a pure-play foundry company. Later on, various process technologies, such as High Voltage Device and 0.18 Nanometer Flash, all successfully entered volume production. In July 2004, VIS officially ended DRAM manufacturing, and successfully transitioned into a 100% foundry service provider.

In 2008, VIS announced the procurement of an 8-inch fab from Winbond. With this acquisition, VIS unleashed the growth momentum, accommodated customers' demands in capacity and technology, and provided a more comprehensive solution portfolio for our customers. In 2014, VIS acquired the fab owned by Nanya Technology located in Taoyuan County and acquired Sumpro's equipment, spare parts and inventories. This transaction allows VIS to obtain capacity advantages and VIS will continue to grow and improve profitability steadily.

In 2019, VIS acquired GLOBALFOUNDRIES' Fab 3E 8-inch fab in Singapore. The transaction included buildings, facilities, equipment, and MEMS IPs and related business. After the one-year transfer period, VIS will take over full operation and management of the fab in 2020, which will become the fourth Fab of VIS, as well as the first overseas fab of VIS. VIS has reached maximum capacity in 2018,

and its customers expect the company to expand to satisfy growing demands. This acquisition of asset is projected to increase the annual capacity of VIS by 400,000 8-inch wafers, demonstrating the determination and commitment of VIS to expand capacity.

### Company Information

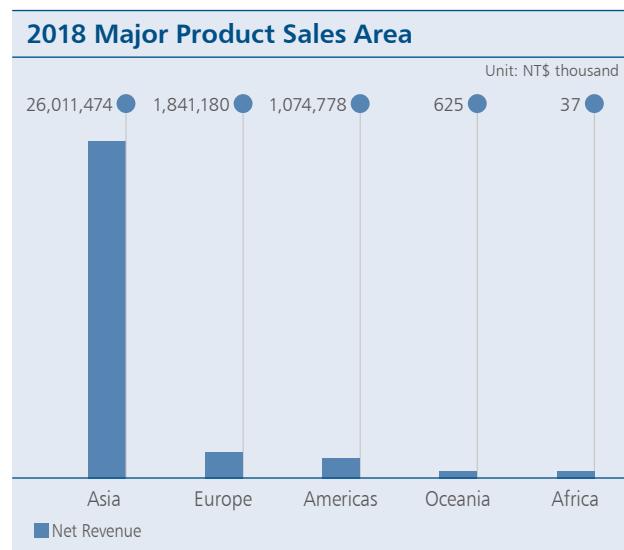
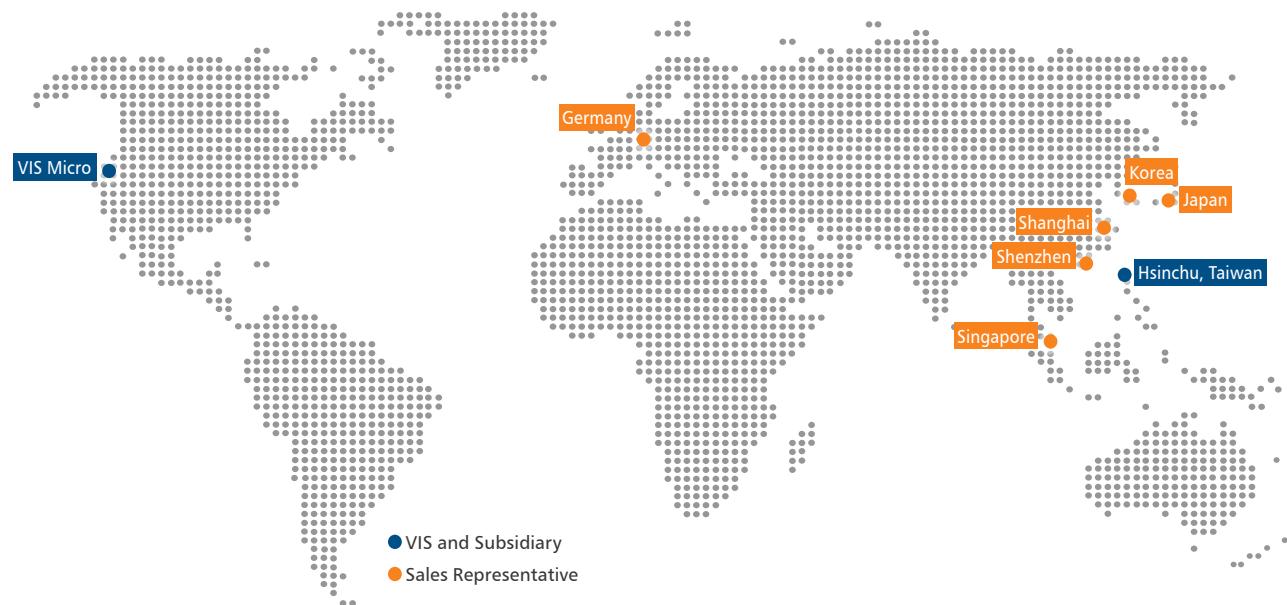
Company Name	Vanguard International Semiconductor Corporation		
Stock Symbol	5347	Date of Establishment	December 5, 1994
Chairman	Leuh Fang	Total Number of Employees	5,579
President	Leuh Fang	Independent Director	Chintay Shih W.C. Liu Benson Kenneth Kin
Capital	NT\$16.39 billion		
Total Assets	NT\$37.65 billion		
Net Income	NT\$6.17 billion		
Company Telephone	03-5770355		
Company Address	123, Park Ave. 3, Hsinchu Science Park, Hsinchu, Taiwan 30077, R.O.C.		
Company Website	<a href="http://www.vis.com.tw">www.vis.com.tw</a>		

VIS has leveraged its existing core technologies and skills to continue its investment in product development and process technology in fulfillment of industry and market needs. VIS offers a wide range of process technologies, including High Voltage, Ultra High Voltage, Bipolar

CMOS DMOS (BCD), Silicon on Insulator (SOI), Discrete, Logic, Mixed-Signal, Analog, High Precision Analog, and Embedded Memory to further help increase the global competitiveness of its foundry customers.

In order to enhance its IP service capability, VIS has continued its IP development by strengthening strategic partnership with its IP providers. Currently available IPs are standard cell library, SRAM, one-time programmable memory, multiple-time programmable memory, electrical fuse, and power phantom cells. With help from strategic IP partners, VIS is also able to provide IPs that are required by specialty ICs.

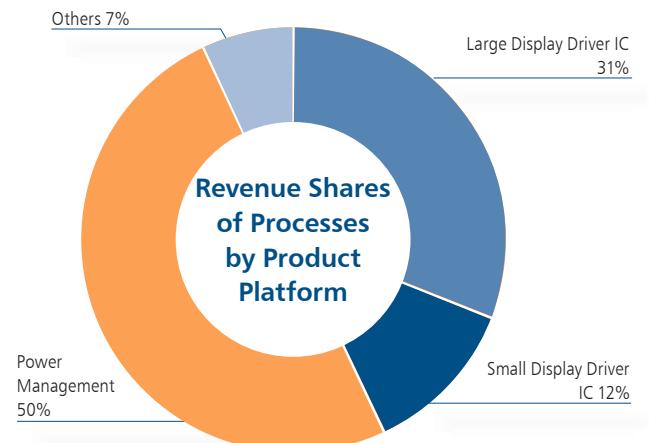
As of 2018, VIS has 5,579 employees. We are committed to adhering to our customer-oriented business philosophy to provide our customers with continuously improved and enhanced specialty IC foundry services. To better serve its worldwide customers, VIS has established sales offices in Taiwan and sales representatives in worldwide main IC clusters.



VIS's production of display driver ICs, power management ICs, and discrete components have exhibited distinctive operational performances. In order to diversify product and market centralization, reduce operating risks, and simultaneously extend its reaches in the high-profit market, in addition to our existing high-voltage analog, BCD process, and ultra-high-voltage processes, VIS will continue to accelerate development projects relating to sensing devices, fingerprint sensor ICs, and high-power



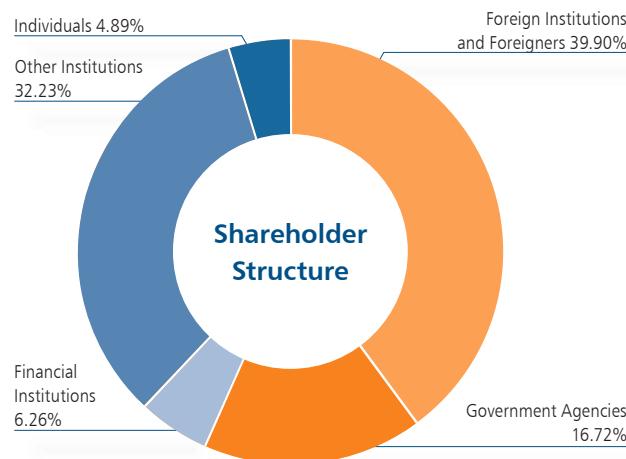
management ICs as well as embedded memory platforms. This will enable VIS to adapt to the energy saving and carbon reduction era and to satisfy market demand for automobile electronics and Internet of Things applications. We believe these efforts will be beneficial toward enhancing VIS's business operations. To solicit more IDM customers, projects for raising the percentage of our foreign customers will continue to be implemented in hopes of deepening long-term partnerships with customers to consolidate our leading status among special foundries and to establish ourselves as the global leading supplier of wafers for high-voltage and power semiconductor processes.





## Shareholder Structure

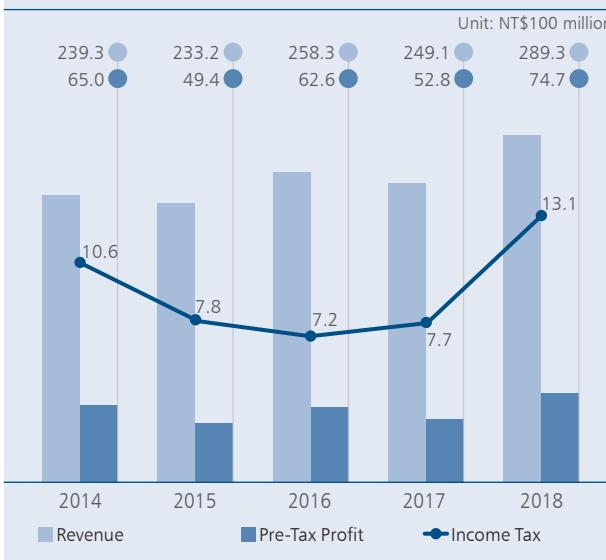
In 1994, Taiwan Semiconductor Manufacturing Company (TSMC) and 13 other companies jointly invested and founded the Vanguard International Semiconductor Corporation. In March of 1998, VIS became a TPEx listed technology firm. The list of large shareholders included TSMC and the National Development Fund of the Executive Yuan. The current shareholder structure is shown in the table below:



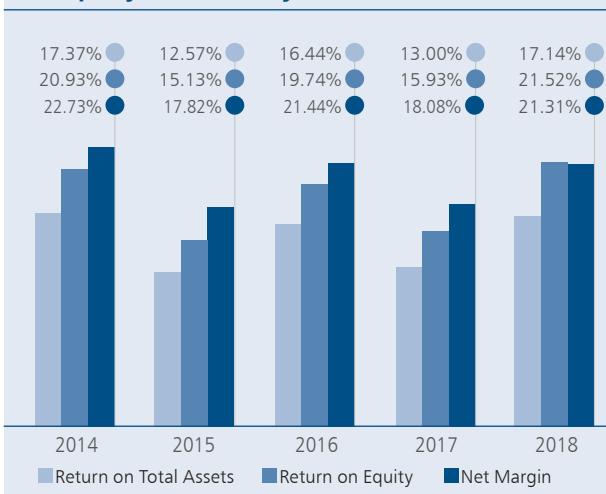
## 1.2 Financial Performance

Due to thriving semiconductor industry, VIS's annual revenue in 2018 reached NT\$28.93 billion, an increase of approximately 16.1% compared to NT\$24.91 billion of the previous year. The company's average gross profit for the year was approximately 35% with NT\$6.17 billion in net income, an EPS of NT\$3.72, and a return on equity of approximately 21.5%. VIS contributed as many as NT\$1.31 billion in tax money.

## Revenue, Pre-Tax Profit and Income Tax

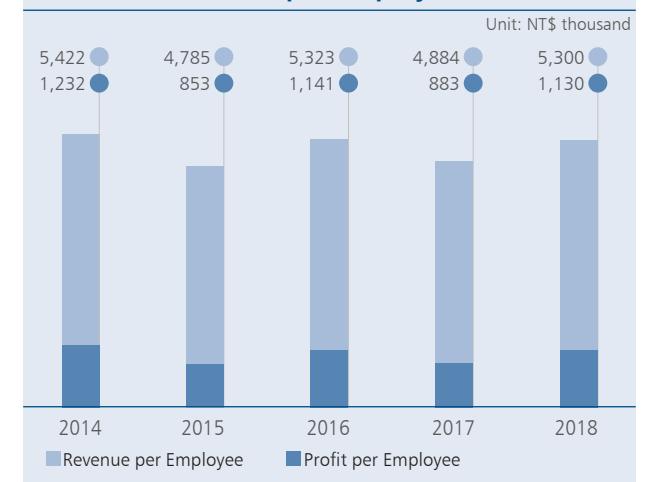


## Company Profitability



The profitability of VIS relies on each and every employee. In 2018, the revenue per employee was NT\$5,300 thousand, and profit per employee was NT\$1,130 thousand.

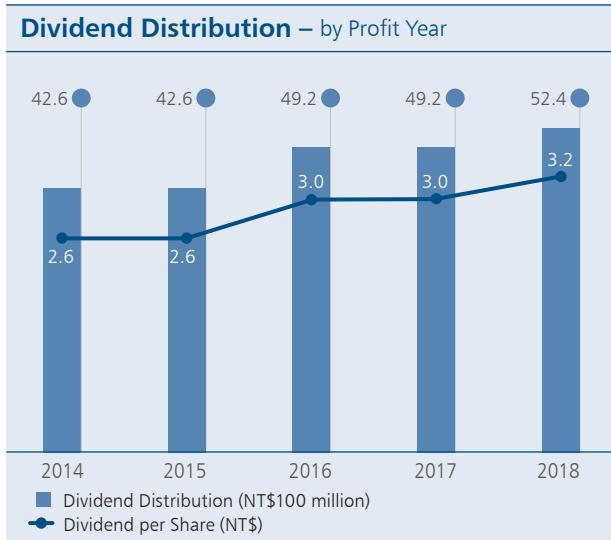
## Revenue and Profit per Employee



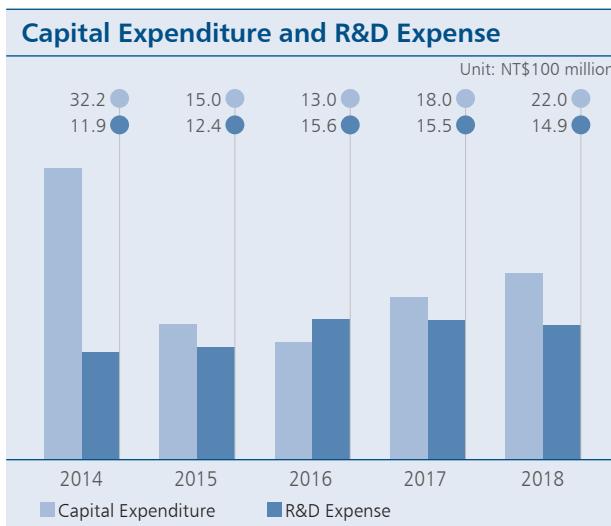
VIS is experiencing steady growth, and since 2005, it has distributed cash dividends every year. Current five years distributed dividends as follows:

Item	2014	2015	2016	2017	2018 (Note)
Distributed dividends (NT\$100 million)	42.6	42.6	49.2	49.2	52.4
Per share amount (NT\$)	2.6	2.6	3.0	3.0	3.2

Note: The distribution of earnings for year 2018 are subject to the resolution of the shareholders' meeting to be held on June 14, 2019.



In addition to distributing dividend to shareholders, VIS will also invest profit into capital expenditure and R&D expense according to company strategy. In 2014, VIS acquired Fab 3 to expand capacity and ensure our competitiveness in global market.



### Financial Analysis

Unit: NT\$100 million  
Except for EPS, Revenue per Employee and Profit per Employee

Item	2014 (Note 1)	2015	2016	2017	2018
Business Performance	Revenue	239.3	233.2	258.3	249.1
	Operating Cost (Note 2)	119.0	127.9	131.3	131.2
	Employee Salaries and Welfare	58.0	59.0	65.7	65.4
	Pre-Tax Profit	65.0	49.4	62.6	52.8
	Income Tax	10.6	7.8	7.2	7.7
	Net Income	54.4	41.6	55.4	45.1
Operating Ability	Total Assets	337.5	323.8	349.8	343.0
	Shareholder Equity	275.5	274.1	287.0	278.8
	Capital Expenditure	32.2	15.0	13.0	18.0
	R&D Expense	11.9	12.4	15.6	15.5
Profitability	Return on Total Assets	17.37%	12.57%	16.44%	13.00%
	Return on Equity	20.93%	15.13%	19.74%	15.93%
	Pre-tax Profit to Capital Stock	39.63%	30.13%	38.19%	32.21%
	Net Margin	22.73%	17.82%	21.44%	18.08%
	Earnings Per Share (NT\$)	3.30	2.50	3.35	2.73
	Revenue Per Employee (NT\$, in thousands) (Note 3)	5,422	4,785	5,323	4,884
	Profit Per Employee (NT\$, in thousands) (Note 3)	1,232	853	1,141	883

Note 1: Year 2014 figures have been restated in accordance with the 2013 version of IFRSs

Note 2: Operating costs = cost of goods sold + operating expenses – employee salaries and welfare - (property tax + stamp tax + vehicle tax)

Note 3: The average number of employees is calculated based on the average number for that year

Note 4: Above financial information is based on the consolidated financial statements which contains VIS Associates Inc., VIS Investment Holding Inc., VIS Micro Inc., Specialty TechFarm Inc., and VIS Shanghai Company Limited. Specialty TechFarm Inc. was liquidated in April 2016. VIS Shanghai Company Limited was established in August 2017.



### 1.3 Tax Policy

Tax payments made to the government by VIS primarily encompasses corporate income tax, property tax and stamp tax. In 2018, total tax amounted to NT\$1.33 billion; and actual amount paid to the government was NT\$820 million.

Item	2014	2015	2016	2017	2018
Tax Expenses (Note)	10.8	8.0	7.4	8.0	13.3

Note: Tax Expenses = Income tax + property tax + stamp tax + vehicle tax

Tax credits and tax exemptions in 2018 are as follows:

Legal Basis	Tax Exemptions	Amount
Article 10 of the Statute for Industrial Innovation	Tax credit for Research and Development expenditure	145

- Received the Award of Excellence for Dynamic Workplace Creativity from the Health Promotion Administration, Ministry of Health and Welfare, Executive Yuan
- Received Taiwan iSports Certification from the Sports Administration, Ministry of Education, Executive Yuan
- Received "Award of Quarantine Excellence" and "Model Friendly Enterprise Award" by Taiwan Centers for Disease Control, Ministry of Health and Welfare, Executive Yuan
- Received Award of Excellence at the "Waste Reduction and Circular Economy Excellent Enterprise Evaluation" by Hsinchu Science Park
- Received Award of Excellence at the "Science Park Greenification Contest" held by Hsinchu Science Park
- Received the Taoyuan Department of Environmental Protection's "Award for Reduction of Airborne Pollutants in Public and Private Spaces"

### 1.4 Awards and Achievements

In 2018, VIS devoted much effort and resources in CSR dimensions of corporate governance, environmental sustainability, and healthy workplace, receiving the recognitions of the following awards and certifications:

- VIS was ranked in the top 5% and received the highest honor in the Fifth Corporate Governance Evaluation of Listed Companies
- ISO 26262 International Standard for Functional Safety of Electronics in Vehicles
- ISO 14064-1 International Standard for Quantifying and Reporting GHG emissions
- ISO 14046 Product Water Footprint Verification
- ISO 14067 Product Carbon Footprint Verification
- ISO 14051 Material Flow Cost Accounting Analysis
- ISO 50001 Energy Management System
- EPA's silver award at the "ROC Enterprises Environmental Protection Award"



## 2/ Sustainable Governance



Environmental  
Protection



Corporate  
Governance



Business  
Ethics



Health and  
Safety



Employee  
Benefits



In 2018, VIS and stakeholders jointly formulated 14 Major Topics of CSR. Targeting these topics, related departments of VIS have proposed corresponding Sustainable Goals and Actions. These are our responsibilities and commitments to the society:

## 2018 VIS CSR Major Topics and Sustainable Goals



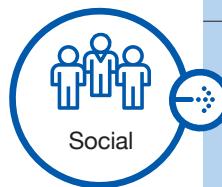
Major Topics	Corresponding GRI	Sustainable Goals	2018 Performances	Future Direction and Plan
Business Ethics	102-16 414-2	•Uphold business integrity	<ul style="list-style-type: none"> <li>The Company regularly administers trainings and promotional classes on CSR, Ethical Corporate Management Best Practice Principles, and Code of Conduct. In 2018, 5578 employees completed Code of Conduct training, and 5,109 completed Ethical Corporate Management Best Practice Principles training.</li> <li>VIS conducts annual investigation on conflict of interest reporting. In 2018, the reporting rate was 100%.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to conduct Code of Conduct re-training and annual conflict of interest reporting investigation every year</li> </ul>
Sustainable Management of Suppliers	204-1 308-1~308-2 414-1	<ul style="list-style-type: none"> <li>100% Suppliers recognize and comply with VIS CSR Policy</li> <li>100% Suppliers comply with R.B.A. Responsible Minerals Initiative</li> </ul>	<ul style="list-style-type: none"> <li>2013 supplies signed VIS CSR Policy</li> <li>All suppliers related to responsible sources of minerals have completed Responsible Minerals Survey</li> </ul>	<ul style="list-style-type: none"> <li>Supplier sustainable management evaluation and management</li> <li>Supplier CSR Policy Management</li> </ul>
Customer Service / Sustainable Products	302-5 416-1~416-2 418-1	<ul style="list-style-type: none"> <li>VIS continues to prove more competitive manufacturing technology for customers to produce products that are highly efficient and energy-saving</li> </ul>	<ul style="list-style-type: none"> <li>Over ten customers mass-produce LED lighting and motor-driving products on the UHV platform, reaching an output of 45,000 wafers, which is equivalent to saving 5% of energy consumed by Taiwan in a year, with an actual benefit of NT\$26 billion</li> </ul>	<ul style="list-style-type: none"> <li>Actively promote VIS UHV production platform to new customers and help existing customers in product upgrade; it is projected to increase output by 10,000 wafers in applications of LED lighting and motor driver, thus achieving the sustainable goal of energy conservation and carbon reduction</li> </ul>
Legal Compliance	206-1 307-1 419-1	<ul style="list-style-type: none"> <li>No material regulatory violations</li> <li>No litigations relating to anti-competition, anti-trust, and anti-monopoly laws</li> </ul>	<ul style="list-style-type: none"> <li>In 2018, VIS did not have any material regulatory violations</li> <li>In 2018, VIS did not have any litigations relating to anti-competition, anti-trust, and anti-monopoly laws</li> </ul>	<ul style="list-style-type: none"> <li>Continue to adopt laws and regulations governing various business areas into company policies and rules, and organize training courses on legal compliance</li> <li>Continue to include the prevention of violation of anti-trust law as the focus of legal compliance, and demand high-risk business units to complete training course on anti-trust law</li> </ul>



Major Topics	Corresponding GRI	Sustainable Goals	2018 Performances	Future Direction and Plan
Energy Management	302-1~302-4	•Reduce electricity consumption to 10% below 2015 level by 2020	•In 2018, power consumption per unit area of wafer was reduced to 31.6% lower than 2015 level	•Continue to promote ISO 50001 Energy Management System •Continue to enhance energy-saving performances
Occupational Safety and Health	403-1~403-7	•Provide employees safe and healthy working environment •Reduce employee disabling injury frequency and severity	•No major occupational accidents or injuries (including occupational injuries and diseases) •Employee disabling injury frequency (FR) was 0.5 and severity (SR) was 5, lower than the average of domestic semiconductor industry for three consecutive years, and lower than average of domestic electronic components industry for 5 years in a row	•Zero-occupational safety accidents and proactive prevention of occupational diseases •Employee disabling injury frequency (FR) <0.45 and severity (SR) <4; future goal is to have zero accident, becoming a world-class company of occupational safety and health
Climate Change	305-1~305-6	•Reduce carbon emission per unit area of wafer to 20% below the 2015 level by 2020	•In 2018, carbon emission per unit area of wafer was reduced to 14.7% below 2015 level	•Continue to promote ISO 14064 GHG Verification and ISO 14067 Product Carbon Footprint Verification •Continue to promote measures of GHG reduction
Air Pollution Prevention	305-7	•Reduce VOC emission per unit area of wafer to 10% below 2015 level by 2020	•In 2018, VOC emission per unit area of wafer was reduced to 4.7% below 2015 level	•Chemicals source reduction •Optimization of parameters of air pollution prevention devices
Water Management	303-1~303-3 306-1 306-3 306-5	•Reduce water consumption per unit area of wafer to 13% below 2015 level by 2020 •Water recycling processing rate >85% (Fab 3 > 75%)	•In 2018, water consumption per unit area of wafer was reduced to 25.4% lower than 2015 level •Water recycling processing rate in 2018: Fab 1 86.4%; Fab 2 85.3%; Fab 3 77.0%	•Continue to promote optimization of process water •Continue to promote ISO 14046 Product Water Footprint Verification
Waste Management	306-2 306-4	•Waste recycling rate over 90%	•2018 waste recycling rate reached 90.49%	•Continue to promote waste source reduction and waste recycling and reuse •Cooperate with partners to develop new waste recycling technology



Major Topics	Corresponding GRI	Sustainable Goals	2018 Performances	Future Direction and Plan
Talent Recruitment and Retention	102-41 201-3 401-1~401-3 405-1~405-2	•Continue to promote "Employer Value Proposition" to attract talents that share the same vision	•Organized three corporate visits, and received a total of 120 participants, among them, 90% expressed willingness to work at VIS •Homecoming for alumni attracted 189 students, among which, 46% proactively submitted resumes •Social media marketing accumulated 2,371 fans in 2018, and each post reached an average of 1,500 views	•Continue to target schools and organize corporate visits and alumni homecoming activities to gain campus visibility and enhance brand image of VIS •Promote VIS Employer Value Proposition to job seekers and the public through social media
Talent Development	401-1 404-1~404-3	•Responding to the needs of company growth, plan and organize talent development, build talent echelon, and strengthen employee capabilities and development, in order to achieve sustainable operation	•Plan and execute managerial development program to hone managers' leadership skills •Organized trainings for various managerial levels. A total of 711 people attended the trainings, and the trainings averaged 4.5 points in satisfaction evaluation (out of 5 points). Through post-training action plans, trainees applied the skills in actual workplace •The Company organized a total of 152,234 hours of training sessions or development activities (including e-Learning platform), with a total participation of 129,036 people; on average, each employee received 27.49 hours of training •Learning Passport completion rate reached 99.85%	•Continue to carry out talent development project, establishing managerial talent pool for different levels •Strengthen managerial capacity of executives at different levels and offer management skill training •Tailor personal development plan based on employee personal needs and career development, and continue to perfect "Learning Passport" system
Human Rights	406-1 407-1 408-1 409-1 412-2~412-3	•Help employees to maintain physical and mental health and work-life balance-building challenging yet fun working environment	•The Company journal was relaunched in October 2018 to convey the business principles of VIS, share awards and recognitions, and report outstanding teams and activities held at different fabs. The journal has accumulated 80 participations/submissions, and published 1,050 copies, enhancing corporate identity and brand image of VIS •In October 2018, employee feedback channel was fully systemized, facilitating communication with employees, offering hotlines, and putting emphasis on employee opinions, to care for employees and build harmonious employer-employee relationship •2018 Family Day was held at Lihpao Resort in Taichung, and a total of 3,928 employees and family members participated in the event. The year-end party was held in two separate sessions at Hsinchu Gangnan Restaurant. A total of 5,532 people participated	•Continue to organize company-wide activities to enhance corporate identity •Continue to care for employees and build harmonious employer-employee relationship through diverse and open channels where employees can reflect opinions and feedbacks •Continue to publish quarterly journal to share local and overseas company achievements, and share the VIS world within the greater world around, enhancing corporate identity
Social Engagement	413-1	•Select specific issues and demographics for long-term engagement •Develop diverse volunteering services •Continue making charity donations to underprivileged groups	•During winter break in 2018, VIS invited and sponsored children from Smangus to participate in "Small Insects, Big Secrets" Two-Day Camp organized by Tze-Chiang Foundation of Science and Technology at National Tsing Hua University •In 2018, VIS donated to nine social welfare organizations a total of NT\$4 million •In 2018, VIS sponsored National Tsing Hua University's "Sunrise Program" by providing an annual scholarship of NT\$200,000 to two students from disadvantaged family backgrounds	•Continue to care for the underprivileged •Continued effort in community building •Continue to invest in environmental protection and ecological conservation •Strive to alleviate urban-rural gap and digital divide





## 2.1 VIS Corporate Social Responsibility Policy

VIS commits to embrace, support, and enact, within its sphere of influence, to the extent of applicable laws, a set of internationally recognized standards in the areas of business ethics, employee rights, health and safety, and the environment, and actively invests itself in environmental protection and social participation to realize environmental sustainability through actions and create common goods for the society.

Our management further commits to establish a management system for ensuring the compliance of the Company and its next tier of suppliers to this set of standards and their continuous improvement.

### Corporate Governance

VIS complies with corporate governance principles and has in accordance with relevant laws and regulations established effective corporate governance frameworks that strengthen the functionality of the board of directors and fulfill the functions of the Audit Committee. While maintaining normal business development and protection of shareholders' equity, VIS also respects the rights of stakeholders and strengthens information disclosure of corporate governance to promote information transparency.

### Business Ethics

VIS upholds integrity in employee and executive conducts in all business activities and internal interactions. Financial statements shall be clean, transparent, and compliant

to applicable regulations and accurately reflecting the financial performance and health of the Company.

VIS will work against corruption in any and all forms, including extortion, bribery, and embezzlement.

VIS respects intellectual property rights of others and establishes tight control in protecting customers' intellectual property as well as trade secrets.

### Employee Rights

VIS supports internationally proclaimed human rights of employees, and treats them with dignity and respect, without discrimination of any kind. No inhumane treatment including sexual harassment, corporal punishment, mental coercion, or verbal abuse, shall be tolerated.

Employees' work hours are not to exceed the maximum limit set by local law. All works are voluntary and employees are free to terminate their employment at any time. VIS does not employ child labors.

Employee compensation shall comply with all applicable local laws, including minimum wages, overtime pay rates, labor, medical and group insurances, fringe benefits and severance/retirement pays.

Employees are free to join or organize labor unions in accordance with local laws. Elected employee representatives meet with management once every quarter to communicate grievances and solutions.

### Health and Safety

VIS recognizes its utmost responsibility is to provide a healthy and safe work environment for its employees, and to enhance the Company's global competitiveness. VIS is diligent in conducting risk management, legal compliance, and self-audits to achieve continuous improvement.

### Environmental Protection

As a global citizen, VIS undertakes precautionary environmental protection measures to minimize adverse effects of its manufacturing operation on the community, environment and global warming, and continuously invests in the development and deployment of environmentally friendly technologies.

## 2.2 Corporate Social Responsibility Committee

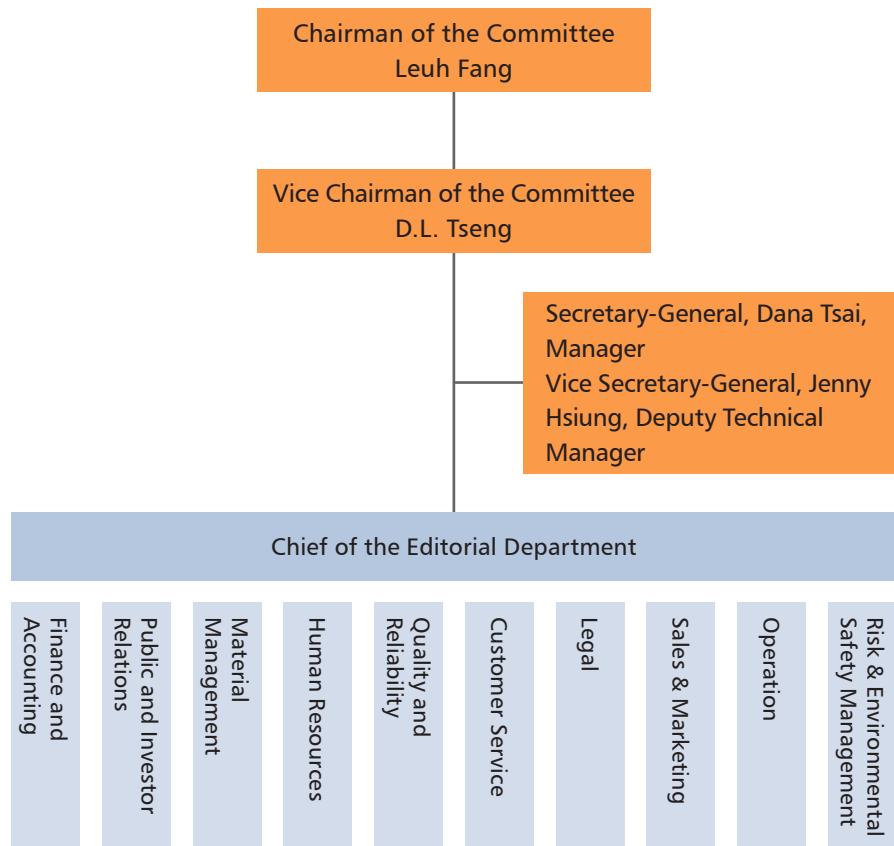
To implement CSR, promote economic development, strike a balance between society and environmental ecology, and maintain sustainable development, VIS formulated the Company's Corporate Social Responsibility Policy in 2012 in accordance with the Corporate Social Responsibility Best Practice Principles for TWSE/GTSM-Listed Companies and the Responsible Business Alliance (RBA), and founded the Corporate Social Responsibility Committee (CSR Committee) to build the CRS management system of VIS.

The CSR Committee is chaired by VIS Chairman Leuh Fang, CFO/VP D.L. Tseng serves as the Vice Chair of the committee. The committee formulates the Company's CSR guidelines and regularly reviews the execution progress of various tasks. The committee also consists



of representatives of various divisions of the Company, include those involved in human resources, public and investor relations, legal affairs, material management, business operations, quality and reliability assurance, industrial safety, environmental protection, finance and accounting, customer service, and marketing. Each representative plans and implements different CSR missions based on respective responsibilities, and reports on the progress and achievements during the quarterly CRS Committee Meeting. Through the process of continuously setting and adjusting goals, all the committee members brainstorm together and constantly reviews implementation outcomes and make improvements.

### CSR Committee Organization Chart



In addition to refining existing practices, CSR Committee members also visit other domestic leading CSR enterprises for exchange and learning. In 2018, VIS CSR Committee visited Delta Electronics and conducted a three-hour in-depth interview with Delta Electronics' CSR committee members, sharing and discussing various CSR activities of the Company.



A learning trip for VIS CSR Committee members, visiting Delta Electronics for in-depth exchange

### 2.3 Major Topics and Sustainable Performances

#### Major Topics

Implementing corporate governance, managing customer relationships and supply chains, maintaining a happy workplace and protecting the environment, and Social participation, are the five major aspects of the DNA of our corporate social responsibility.

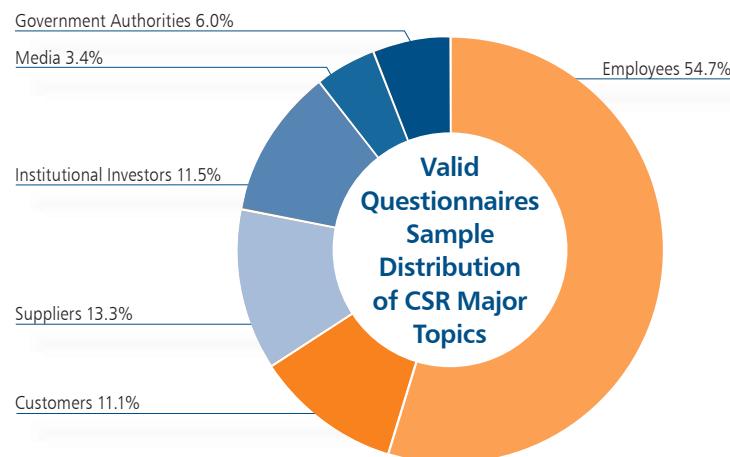
In 2018, VIS focused on these five aspects and followed Global Reporting Initiative (GRI) standards and AA1000 Stakeholders Engagement Standards (SES), while also referencing other major semiconductor companies' major topics, for the compilation of the VIS CSR Questionnaire. The questionnaire was discussed and compiled by the CSR Committee members and then sent to all stakeholders, including our employees, customers, suppliers, investors, media, and related public and private agencies.



## Engagement Mechanism of Major Topics



Out of the 239 questionnaires collected from stakeholders, 234 questionnaires were valid. To properly listen to the opinions of our colleagues, VIS collected 128 valid questionnaires from VIS employees of different positions, divisions, and nationalities, in order for the samples to better represent and reflect the thoughts at different levels.



CSR Committee defined 14 major CSR topics of VIS based on the Company's development direction and stakeholders' responses. The 14 major topics include 4 economic topics, 6 environmental topics, and 4 social topics.

## Sustainable Performance and Goals

The 14 major topics of CSR identified by VIS cover a wide range of aspects, and are the responsibilities of different units within the Company. CSR Committee members, according to their responsibilities, brought these 14 major topics back to respective organizations and worked with their executives to compile the achievements of these topics in 2018. They also further formulated sustainable goals and action guidelines for each major topic as the CSR development direction of VIS, while also responding to stakeholders' expectations of VIS in CSR.

## 2.4 Response to UN SDGs

In 2018, VIS tried to define 14 CSR major topics jointly with our stakeholders for the first time in response to the 17 SDGs set forth by the United Nations. Among these major topics, VIS's efforts have echoed, to various degrees, 15 UN SDGs of "No Poverty, Zero Hunger, Good Health And Well-Being, Quality Education, Clean Water And Sanitation, Affordable And Clean Energy, Decent Work And Economic Growth, Reduced Inequalities, Sustainable Cities And Communities, Responsible Consumption And Production, Climate Action, Life Below Water, Life On Land, Peace, Justice, And Strong Institutions, and Partnerships For The Goals".



## VIS Major Topics of CSR and SDGs

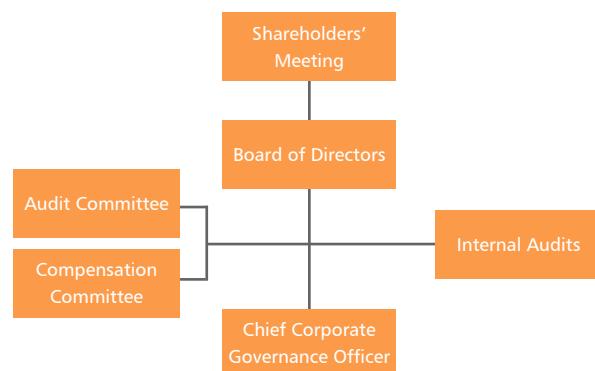
Major Topics	SDGs
Customer Service	
Sustainable Management of Suppliers	
Talent Development	
Occupational Safety and Health	
Water Management	
Energy Management	
Climate Change	
Waste Management	
Air Pollution Prevention	
Social Engagement	
Talent Recruitment and Retention	
Business Ethics	
Human Rights	
Legal Compliance	

In terms of initiatives, the broadcast program on IC FM97.5 sponsored by VIS regularly invited experts of different domains to explore the difficulties and potential solutions in Taiwan's development, in aim to cultivate listeners' ability to contemplate and debate on public issues through

dialogues and discussions. In 2018, VIS has made the special requirement that the program must discuss the influences of "climate change" in the next year as a part of the CSR initiative of VIS.

## 2.5 Corporate Governance

### 2.5.1 Corporate Governance Structure



The Board of Directors is the Company's highest level of governing body, which is responsible for strategy direction, management and oversight, and should fulfill obligations for the entire organization and stakeholders. To better implement corporate governance and strengthen management of the Board of Directors, two committees—Audit Committee and Compensation Committee—have been established under the Board of Directors to assist the Board perform its duty of oversight. In 2019, the Board passed the decision to appoint the General Counsel as the Chief Corporate Governance Officer of VIS, responsible for the matters related to corporate governance. However,

decisions related to economic, environmental, and social issues shall be made by "CSR Committee" consisting of representatives of different execution units, such as Public and Investor Relations, Workplace Safety and Environmental Protection, and Human Resources, which convenes quarterly meetings to formulate CSR guidelines and actions, and reports to the Board of Directors every six months.

VIS has garnered much recognition for its efforts in corporate governance, and has ranked in the top 5% and received the highest honor in the Corporate Governance Evaluation of Listed Companies conducted by Securities and Futures Institute.



VIS ranked in the top 5% in the Corporate Governance Evaluation of Listed Companies. General Counsel of Legal Ellen Lin (L), person responsible for corporate governance, receives the award on behalf of VIS Chairman Leuh Fang

### 2.5.2 Organization of the Highest Level Governing Body

VIS insists on operational transparency and cares about shareholders' equity. We also believe that a sound and efficient Board of Directors is an underlying requirement for optimal corporate governance. VIS has established a Compensation Committee and an Audit Committee to improve its function of oversight and strengthen management. The Compensation Committee is responsible for assisting the Board of Directors in



setting and evaluating the performances of directors and managers, compensation policies, compensation systems, standards and structure, and help to set and conduct periodic evaluations of these members' salaries. The Audit Committee is tasked with overseeing adequate representation of the Company's financial statements, appointment (or dismissal) of certified public accountants as well as their competence, independence, and performance, effective implementation of the Company's internal controls, the Company's compliance with relevant laws and regulations, and control over existing or potential risks to the Company.

### **Organization of the Board of Directors**

VIS's highest level of governing body, the Board of Directors, is composed of seven outstanding individuals with extensive experience in industrial and academic fields. VIS follows the board member diversity policy. Board members who also serve as managerial officers of the Company should not exceed more than one third of the board members and they should have different professional backgrounds and work experience and should be balanced between the genders. They should possess the knowledge, skills, and experience necessary for performing their duties.

For the election of the ninth Board of Directors in 2018, the Company followed the principles of corporate governance and adopted the nomination system. Among the seven Directors, three are independent, they are as follows: Kenneth Kin, former Senior Vice President of Taiwan Semiconductor Manufacturing Company; Benson W.C. Liu, Chairman of Taiwan Corporate Governance

Association; and Chintay Shih, former Chairman of the Industrial Technology Research Institute. Among the other four Directors, three are representatives of juristic persons, they are: TSMC Representative Leuh Fang (Chairman of VIS), TSMC Representative F.C. Tseng (Vice Chairman of VIS), and Representative of the National Development Fund Management Committee, Executive Yuan, Lai-shou Su. Six out of the seven directors do not serve as managers at the Company, and the term of Directors is three years.

The Board of Directors has established two committees. They are the Audit Committee and the Compensation Committee.

#### **●Audit Committee**

The primary purpose of establishing the Audit Committee is to reinforce the oversight capabilities of the Board of Directors. The Audit Committee is tasked with overseeing adequate representation of the Company's financial statements, appointment (or dismissal) of certified public accountants as well as their competence, independence, and performance, effective implementation of the Company's internal controls, the Company's compliance with relevant laws and regulations, and control over existing or potential risks to the Company. The main scope of authority of the Audit Committee consists of the following:

1. The adoption of or amendments to the internal control system pursuant to Article 14-1 of the Securities and Exchange Act.
2. Assessment of the effectiveness of the internal control system.

3. The adoption or amendment, pursuant to Article 36-1 of the Securities and Exchange Act, of the procedures for handling financial or business activities of a material nature, such as acquisition or disposal of assets, derivatives trading, loaning of funds to others, and endorsements or guarantees for others.
4. Matters in which a director is an interested party.
5. Asset transactions or derivatives trading of a material nature.
6. Loans of funds, endorsements, or provision of guarantees of a material nature.
7. The offering, issuance, or private placement of equity-type securities.
8. The hiring or dismissal of a certified public accountant, or their compensation.
9. The appointment or discharge of a financial, accounting, or internal audit officer.
10. Annual, semi-annual, and quarterly financial reports.
11. Review of the annual business report, the surplus earning distribution, or loss make-up proposal.
12. Review the changes of accounting policies or accounting estimate and other material matters as may be required by this Corporation or by the competent authority.

The Audit Committee convened 6 regular meetings in 2018. Meeting attendance was as follows:

Name	No. of Meeting Attended	No. of Meeting Substituted	Attendance Rate (%)
Benson W.C. Liu	6	0	100
Chintay Shih	5	1	83.33
Kenneth Kin	6	0	100



### ● Compensation committee

The Compensation Committee was established with the objective of enhancing corporate governance and assisting the Board of Directors in developing the Company's overall compensation policy and framework in order to attract, motivate, reward, and retain outstanding talent. In accordance with the provisions of the Compensation Committee's organizational rules, its roles and responsibilities include: Formulation of the Company's overall compensation policy and framework; formulation of the compensation and forms of payment to directors (including the chairman); formulation of the compensation, forms of payment, and incentives for long-term managers (including the company president); planning and executing performance evaluations for directors (including the chairman); planning and executing performance evaluations of managers (including the company president); and other matters designated or authorized by the Board of Directors.

The Compensation Committee held 5 meetings in 2018; attendance information by members of the committee is as follows:

Name	Attended in Person	Attended by a Representative	Attendance Rate (%)
Kenneth Kin	5	0	100
Chintay Shih	4	1	80
Benson W.C. Liu	5	0	100

### Duties and Operations of the Board of Directors

The Board of Directors is the Company's highest level of governing body and the primary business decision-maker. The duties of the Board of Directors include the appointment and directing of corporate executives; supervising business performance; preventing conflict of interest; ensuring Company's compliance with laws, Articles of Incorporation, the resolutions adopted in shareholders' meetings.

The Board of Directors shall be responsible for the Company's overall operational activities, establish definitive goals, and strive to achieve these goals. The Board of Directors shall direct the Company's operation and management strategies, formulating concrete objectives. The Board of Directors shall be responsible to the shareholder's committee.

Directors' compensations shall be determined based on the performance evaluation conducted by the Compensation Committee and Board of Directors. The results are then presented at the shareholders' meeting for final approval. The shareholders shall determine and acknowledge the outcomes submitted by the Board of Directors. This process serves as a means for measuring the managerial performance of the Company's highest level of governing body. Through the performance evaluations of the Board of Directors, the Board's decision-making ability and efficiency will be enhanced, resulting in the effective management and supervision of the Company's goals. Furthermore, the Company's annual report discloses the meeting attendance rates of the Directors of the Board; this strengthens the Directors' sense of obligation in fulfilling their responsibilities, and ensures they fully utilize their skills to oversee and manage company operations.

The Board of Directors meeting is held at least once per quarter, where they will listen to reports by the management team and evaluate development strategies and other proposals submitted by management teams. VIS held a total of 7 board meetings in 2018.

Title	Name	Attended in Person	Attended by a Representative	Attendance Rate (%)
Chairman	TSMC Representative: Leuh Fang	7	0	100
Vice Chairman	TSMC Representative: F.C. Tseng	7	0	100
Independent Director	Benson W.C. Liu	7	0	100
Independent Director	Chintay Shih	6	1	86
Independent Director	Kenneth Kin	6	1	86
Director	Edward Y. Way	7	0	100
Director	Representative of the National Development Fund Management Committee, Executive Yuan: Lai-Shou Su	7	0	100

Note: During the 2018 shareholders meeting, President Leuh Fang was elected as a new Board Director and was also elected as the Chairman. All the members of the Board of Directors are male over the age of 50. Please refer to VIS's Annual Report or website for details on education and work experience of VIS directors and their positions at other companies.



### 2.5.3 Regulations and Prevention of Conflict of Interest

The Company has established provisions related to the prevention of conflict of interest, and has rules and regulations in place to prevent conflict of interest in the Rules of Procedure of Board of Director Meetings and Audit Committee Charter. If any Director or juristic person represented by a Director is a member of the interested party, or a Director's spouse or lineal blood relatives, or companies that have controlling and subordinate relation with a Director, whose involvement with a meeting agenda may have conflict of the Company's interests, they may not be present nor participate in any discussion or vote on that item, and may not act as another director's representative to exercise their voting rights. When engaging in activities within the business scope of VIS for him/herself or on behalf of others, the director or general manager shall acquire prior approval at the shareholders or Board of Directors' meetings in accordance with the laws and regulations; any transactions concerning related-parties must be disclosed.

Furthermore, the Company has elected professional and independent directors. Independent directors shall propose business ideas from an objective and fair standpoint based on their expertise and experience while formulating corporate strategies. When discussing any topic with the Board of Directors, opinions of the independent directors must be taken into full consideration. Any reasons for agreeing or disagreeing must be fully documented in

meeting minutes, and the conflict of interest prevention principle must be taken into account to protect the Company's best interests. In addition, no members of the Board of Directors are involved in cross-holding with the Company's key suppliers.

### 2.6 Engagement of Stakeholders

In the value chain of VIS's overall operations, various stakeholders are often concerned about different issues; therefore, the Company has attempted to identify who the stakeholders are, and to fully understand their ways of thinking in order to formulate appropriate business strategies, establish business goals, elevate its overall competitiveness, strengthen communication, and satisfy the expectations of various stakeholders. These endeavors have always been the goals of corporate sustainable management pursued by VIS.

Within the Company's CSR Committee, representatives of distinct divisions have established a list of stakeholders with whom they frequently interact with during daily business operations, the concerns of stakeholders, the frequency with which they interact, methods of communication, and the importance and relevance of the stakeholder with respect to the Company's pursuit of sustainable development. Following a discussion, committee members have established the following seven categories of stakeholders: Shareholders and investors, customers, employees, suppliers, communities, government authorities, and the media. The identification process for stakeholders is as follows:

**Step 1:**  
Representatives from each department list the stakeholder they are most likely to interact with on a regular basis

**Step 2:**  
List each stakeholder issue of concern and frequency of communication

**Step 3:**  
Determine the importance and relevance of the stakeholder with regards to the Company's pursuit for sustainable development

Verify each stakeholder

To strengthen communications with stakeholders, the Company's official website contains the contact information of various departments, which also serves as a communication channel for filing complaints for our stakeholders (such as customers, suppliers, and shareholders and investors) in case of rights infringement ([http://www.vis.com.tw/visCom/chinese/g\\_footer/g02\\_contactus.jsp](http://www.vis.com.tw/visCom/chinese/g_footer/g02_contactus.jsp)). In addition, investor conferences are held periodically to provide briefings on operation performance. We also visit all major customers on a regular basis to discuss product-related issues and their needs. Revenue related financial information is published in our monthly press releases, the Market Observation Post System, and Company's official website for the general public. To strengthen communication channels for employees, the



Company has set up mailboxes for communicating with the president/vice president, and Board of Director's communication meetings are conducted on a quarterly basis. The Board of Directors has also established a chairman/Audit Committee mailbox on the company website (vis\_chairman@vis.com.tw, audit\_committee@vis.com.tw). The mailbox serves as a channel for reporting violations of professional ethics, regulations, or misconducts, and the chairman as well as independent directors shall take necessary measures.

## Stakeholder Communication Mechanism

Groups of stakeholders	Primary target	Issue of concern	Method and frequency of communication
Shareholders and investors	Major shareholders Institutional shareholders General investors	<ul style="list-style-type: none"> <li>• Business strategy</li> <li>• Business performance</li> <li>• Corporate governance</li> <li>• Innovation management</li> </ul>	<ul style="list-style-type: none"> <li>• Annual meeting of shareholders</li> <li>• Quarterly meetings of the Board of Directors and investors conference</li> <li>• Monthly business revenue announcements</li> <li>• Immediate update of material information on the company website and the Market Observation Post System</li> </ul>
Customers	Customers	<ul style="list-style-type: none"> <li>• Service quality and customer satisfaction</li> <li>• Managing customer relations and methods for filing a complaint</li> <li>• Customer privacy</li> <li>• Child labor</li> <li>• Forced labor</li> </ul>	<ul style="list-style-type: none"> <li>• Real-time online customer communication system</li> <li>• Quarterly business meeting</li> <li>• Regular project discussion meetings</li> <li>• Unscheduled customer visits</li> </ul>
Employees	Employees	<ul style="list-style-type: none"> <li>• Talent recruitment and retention</li> <li>• Labor-Management Relations</li> <li>• Employee communication and satisfaction</li> <li>• Human resources development</li> <li>• Employee diversity</li> <li>• Method for filing a labor condition complaint</li> <li>• Human rights policy</li> <li>• Forced labor</li> <li>• Discrimination</li> <li>• Occupational health, safety, and sanitation</li> </ul>	<ul style="list-style-type: none"> <li>• Internal network and telephone communication platform</li> <li>• Employee Assistance Program (EAP) hotline</li> <li>• Quarterly meeting between employer and employees</li> <li>• Quarterly meeting of factory directors</li> <li>• President communication meeting</li> <li>• Mailbox of the executives, mailbox of the Audit Committee, mailbox of the chairman</li> </ul>

Groups of stakeholders	Primary target	Issue of concern	Method and frequency of communication
Government authorities	Hsinchu Science Park Administration County/city department of environmental protection, Environmental Protection Administration National Taxation Bureau County/city labor affairs bureaus, Ministry of Labor Financial Supervisory Commission County/city department of health, Ministry of Health and Welfare	<ul style="list-style-type: none"> <li>• Compliance with environmental protection regulations</li> <li>• Occupational health, safety, and sanitation</li> <li>• Energy efficiency</li> <li>• Energy management</li> <li>• Waste management</li> <li>• Anti-corruption</li> <li>• Water resource management</li> <li>• Greenhouse gas emissions</li> <li>• Climate Change</li> <li>• Direct impact of goods and services on the environment</li> <li>• Compliance with product regulations</li> <li>• Carbon management</li> </ul>	<ul style="list-style-type: none"> <li>• Instant communication according to law</li> <li>• Periodic reporting</li> </ul>
Supplier	Supply chain vendor	<ul style="list-style-type: none"> <li>• Management of conflict minerals</li> <li>• Green procurement</li> <li>• Compliance with environmental protection regulations</li> <li>• Raw materials</li> <li>• Compliance with product regulations</li> <li>• Management of supply chains</li> <li>• Waste management</li> <li>• Hazardous substance management</li> <li>• Carbon management</li> <li>• Anti-corruption</li> <li>• Conflict minerals</li> <li>• Assessment of suppliers' human rights policies</li> <li>• Local procurement and local recruitment</li> <li>• Child labor</li> </ul>	<ul style="list-style-type: none"> <li>• Semi-annual joint review of qualified suppliers</li> <li>• Annual audit of major suppliers</li> <li>• Scheduled yearly communication with suppliers</li> <li>• E-Supply supplier communication platform</li> </ul>



Groups of stakeholders	Primary target	Issue of concern	Method and frequency of communication
Community	Corporation location, neighboring schools, and disadvantaged minority groups	<ul style="list-style-type: none"> <li>• Charitable events</li> <li>• Compliance with environmental protection regulations</li> <li>• Water resource management</li> <li>• Waste management</li> <li>• Hazardous substance management</li> <li>• Greenhouse gas emissions</li> <li>• Carbon management</li> <li>• Environmental investment</li> <li>• Direct impact of goods and services on the environment</li> <li>• Climate Change</li> <li>• Community impact assessment</li> <li>• Green construction</li> <li>• Biodiversity</li> <li>• Community investment</li> </ul>	<ul style="list-style-type: none"> <li>• Hold randomly scheduled events and make donations</li> <li>• Sponsor regular regional broadcast shows to discuss social concerns</li> <li>• Provide scheduled volunteer services to care for those in need</li> </ul>
Media	Printed media Online, radio, and television media	<ul style="list-style-type: none"> <li>• Business performance</li> <li>• Corporate governance</li> <li>• Compliance with environmental protection regulations</li> <li>• Compliance with product regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Quarterly conferences</li> <li>• Monthly business revenue announcements</li> <li>• Immediate update of material information on the company website and the Market Observation Post System</li> </ul>

## 2.7 Foreign and Domestic Associations

VIS has actively and selectively participated in domestic and foreign organizations and associations over the past few years to contribute to the industry and society. Also, through the exchanging and sharing information with member companies of the organizations, VIS strives to make improvements and create win-win situations through "cooperation through competition" with other companies within the industry, jointly achieving common goods for the society.



VIS Chairman Leuh Fang (R2) was re-elected as a member of TSIA's 12th Board of Directors

### Foreign and Domestic Associations

Category	Organization	Role of VIS
Industrial	Taiwan Semiconductor Industry Association	Director
	The Allied Association for Science Park Industries	Director
	Taiwan IC Industry & Academia Research Alliance	Member
	Taiwan Electrical and Electronic Manufacturers' Association	Member
	Chinese National Association of Industry and Commerce, Taiwan	Member
	Electronic Industry Citizenship Coalition	Member
Social	WBCSD Global Network Partner	Member
Professional	The Institute of Internal Auditors-Chinese Taiwan	Member

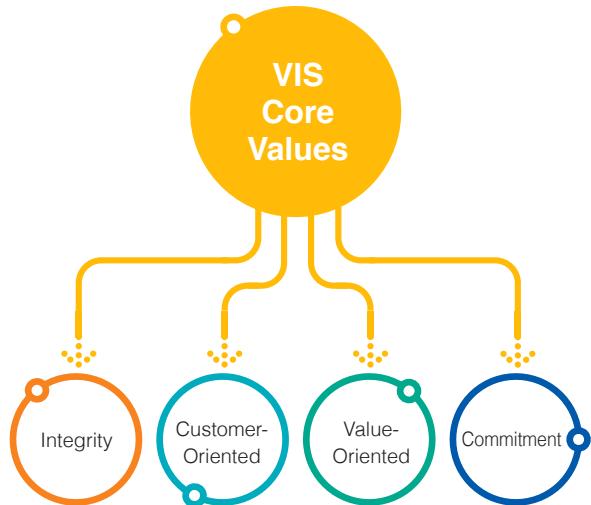


## 3/ Operation and Management





### 3.1 Corporate Business Philosophy and Core Values



#### Ten Articles of VIS Business Philosophy

1. Upholding Ethical Business Practices
2. Focusing on Core Business
3. Internationalized Operation with View on Global Market
4. Focusing on Long-term Business Strategies, Striving to Be a Perpetual Enterprise
5. Treating Customers as Partners
6. Building Quality into All Aspects of Our Business
7. Constant Innovation and Entrepreneurial Vitality
8. Creating a Dynamic and Enjoyable Working Environment
9. Establishing an Open Management Style
10. Being a Good Corporate Citizen by Contributing and Caring for both Shareholders and Employees

#### 3.1.1 Code of Conduct and Ethical Corporate Management Practice Principles

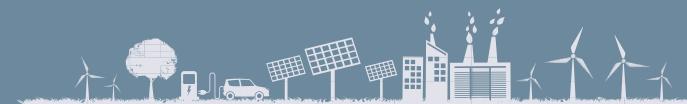
VIS regularly conducts training and promotion of CSR, Ethical Corporate Management Best Practice Principles, and Professional Code of Conduct. For example: to promote corporate governance, VIS regularly reminds directors, independent directors, and employees of "Ethical Corporate Management Best Practice Principles," and conduct training; VIS also advocates fair trade, anti-bribing, and Code of Conduct, and administer Code of Conduct training to help employees understand the important principles of ethics and follow related rules. All VIS employees, whether they are in or out of office, must comply with Code of Conduct when conducting daily tasks and business to protect company reputation and earn respect and trust of customers, suppliers, and all sectors.

VIS Code of Conduct has established provisions related to the prevention of conflict of interest, and has rules and regulations in place to prevent conflict of interest. If any employee has the following situations, he or she must proactively report to the Company: employee or close relative is employed by any supplier, customer, or competitor; employee's activities outside the company are in direct competition with VIS business; employee utilizes company resources for activities outside the company; employee has relatives working in the company. Upon receiving the report, HR and senior executives will jointly discuss how to address the issue and report to the president for approval.

Also, the Company has set up a chairman/Audit Committee mailbox on the company website ([vis\\_chairman@vis.com.tw](mailto:vis_chairman@vis.com.tw), [audit\\_committee@vis.com.tw](mailto:audit_committee@vis.com.tw)), as well as president's mailbox ([vis\\_president@vis.com.tw](mailto:vis_president@vis.com.tw)). The mailboxes serve as channels for reporting violations of professional ethics, regulations, or misconducts, and the chairman as well as independent directors shall take necessary measures. There had not been any reports to the aforementioned three mailboxes in 2018.

#### 3.1.2 Code of Conduct Training and Promotion

Through diverse channels, such as videos of the 10 Articles of VIS Business Philosophy, announcements on internal websites, publications and promotional materials, and company e-mails, VIS continues to promote Code of Conduct to employees; VIS has also established "Professional Code of Conduct and Ethical Corporate Management Best Practice Principles" digital course, which has been included as an annual required course of employees. In 2018, a total of 9,820 employees completed the "Professional Code of Conduct and Ethical Corporate Management Best Practice Principles" digital course, achieving a completion rate of 95% for related courses, which was an improvement of 69% compared to 2017. The goal in 2019 is to achieve 100% completion rate.



## Code of Conduct and Ethical Corporate Management Practice Principles Course

Course	Number of Participants	Description
Professional Code of Conduct and Ethical Corporate Management Best Practice Principles (Digital Course)	Approximately 1,408 People Completed in 2017, a 26% Completion Rate → Approximately 9,820 People Completed in 2018, a 95% Completion Rate	The course includes prevention of conflict of interest, understanding dishonest conducts and prevention, report, and appeal systems, and protection of whistleblower.

## 3.2 Implementation of Legal and Regulatory Compliance

To ensure company operations comply with relevant laws and regulations, and to protect the rights and interests of the Company, its customers, shareholders, and employees, VIS has established a Legal Department to deal with legal and IPR affairs. In addition, all the other departments are requested to pay close attention to any changes in policies, laws, and regulations that may potentially have a significant impact on the Company's operations, businesses, or finance activities. By establishing its policies and rules in accordance with relevant laws and regulations, offering training courses, tracking amendments to laws and regulations, promoting the said policies and rules, providing channels for filing complaints, conducting legal compliance self-inspections and internal audits; VIS has set up its legal compliance program.



### 3.2.1 Establishment and Implementation of Policies and Rules

VIS has established policies and rules, according to relevant governmental policies, laws, and regulations on various business activities, including but not limited to, supply chain safety, information security, CSR, anti-sexual harassment, environmental protection, internal control, financial report compilation, document management and destruction, procurement of non-conflict minerals, ethics compliance, personal data protection and PIP policy, and requested all employees to comply with such policies and rules while performing their job functions. To reinforce the implementation of legal and regulatory compliance and ensure the Company's compliance with relevant policies, laws, and regulations, VIS has also incorporated its internal working principles into its policies and rules.

To support business development and encourage employees to comply with laws and regulations, VIS continues to include the prevention of violation of anti-trust laws as the focus of legal compliance this year. By providing anti-trust training course, requesting high-risk business units to periodically inspect their business activities, we cultivate employees' compliance with anti-trust laws to ensure that VIS continues to adhere to its regulatory commitments.

In 2018, VIS did not have any litigations relating to Anti-Competition, Anti-Trust, and Anti-Monopoly laws and regulations.

### 3.2.2 Legal Compliance Training

Training is an integral part of legal compliance plan. VIS provides online training courses that focus on Authorized Economic Operator (AEO) and supply chain safety, sexual harassment prevention, intellectual property rights introduction, and etc., enabling its employees to get easy access to legal compliance training courses during office hours. Specific training requirements have also been established based on the job functions of employees. Furthermore, tests are conducted after each course to examine and correct the employee's understanding regarding legal articles, policies, and rules.



In order to enable employees to get a better understanding of anti-trust laws in regions where VIS conducts its business activities, and to help employees identify potential violations of anti-trust laws, as well as preventing sexual harassments or conflict of interest when employees conduct business with suppliers, VIS' Legal Department has organized separate offline courses on anti-trust laws, sexual harassment prevention, and Code of Conduct. Furthermore, to enhance the high-risk units' awareness of the importance of complying with fair competition laws, VIS will require high-risk units to complete training course on legal compliance of anti-trust laws in 2019.

### **3.2.3 Laws and Regulations Tracking and Policy Promotion**

In order to ensure the legitimacy of its primary business activities, as well as monitoring changes in laws and regulations, VIS' Legal Department periodically reviews amendments to laws and regulations, and posts the amendment information on the Company's internal website; via the internal mail system, employees are notified of the latest amendments to laws and regulations and court judgments. VIS also requests all departments to conduct legal compliance self-inspection, and posts notices and posters in the promotion of company policies and rules on its internal website and bulletin boards, to reduce the impact and risks of regulatory violation to the Company.

### **3.2.4 Reporting Regulatory Violation**

In order to prevent the rights and interests of its customers and employees from being damaged by any regulatory

violation, and to protect its corporate image, VIS offers multiple internal and external channels for its employees and third parties to report suspected regulatory violation. The Company adheres to the principle of confidentiality over the identity of such employees and third parties as well as the contents of the reported cases.

VIS did not have any material regulatory violation in 2018, which will also be the target for VIS in 2019.

## **3.3 Sustainable Products**

### **3.3.1 Green Products**

Adhering to the Company's value-oriented core value, VIS develops More than Moore wafer fabrication technology to help customers produce and manufacture green products. Through the company's wafer fabrication technology, customers can adopt energy-saving and eco-friendly designs and manufacture green products that are widely used in various products and applications, such as computers, communications, consumer electronics, industrial products, and cars.

VIS has developed technological platforms including HV, BCD, and UHV, which determine the efficiency of energy use and realize energy-saving technology. Through these platforms, the Company is able to create greater value-added for its driver IC and power management IC, producing wafers with lower energy consumption and higher efficiency. These products play an important role in electronic products, providing steady power to terminal devices; these products also have lower energy consumption, helping customers realize their goal of manufacturing green products.

Among the products, the revenue from HV and power management IC account for a significant share in the Company's portfolio. In 2018, VIS delivered over 1 million wafers of HV and power management IC.

When applied in LED lighting, the UHV process of VIS manifests contribution to energy conservation and carbon reduction. For example, VIS produced approximately 45,000 wafers through the UHV process in 2018, and each wafer is approximately 25,000 ICs; when used for lighting, each IC can save 5W of energy. According to statistics, ordinary household averages approximately 5 hours of lighting, which means that, with an annual output of 45,000 wafers, approximately 10 billion kWh of power can be saved in 365 days. Moreover, according to data of Taipower, total power purchased in Taiwan in 2018 was around 219 billion kWh, at an average of NT\$2.6/kWh. The aforementioned 10 billion kWh accounted for approximately 5% of the annual purchased power, or 5% of energy have been saved, with a real benefit of NT\$26 billion.

Moreover, VIS continues to develop more diverse value-oriented technological platforms, such as MEMS, and will continue to create value for the progress of modern society in various industrial applications including IoT and healthcare.

### **3.3.2 Hazardous Substance Management**

In accordance with international regulations on hazardous substance, VIS has established a hazardous material management system (QC 080000) to ensure that wafers produced by us and subsequent outsourced processing meet the following international regulations as well



as customer requirements for hazardous substance management. This includes:

- EU Restriction of Hazardous Substances Directive (EU RoHS): Restrictions on the use of hazardous substances in our products and the respective concentrations are as follows: lead (<1,000ppm), Cd (<100ppm), Hg (<1,000ppm), Cr6+ (<1,000ppm), PBB (<1,000ppm), PBDE (<1,000ppm), Bis (2-ethylhexyl) phthalate (DEHP) (<1,000ppm), Benzyl butyl phthalate (BBP) (<1,000ppm), Dibutyl phthalate (DBP) (<1,000ppm), and Diisobutyl Phthalate (DIBP) (<1,000ppm); all VIS products meet these regulatory requirements.
- Perfluorooctane Sulfonate (PFOS) Restriction Standards: VIS has fully terminated the use of PFOS in our manufacturing processes in 2010; all of our products are PFOS free.
- Perfluorooctanoic acid (PFOA) and Related Substances Restrictions: VIS is aware that in the future, the use

of PFOA and related substances will be restricted by international regulations. In the beginning of 2015, we began a survey of raw materials and worked with our suppliers to develop alternative plans. It is expected that we will be completely free of these types of substances in 2019.

- Halogen-free requirement: all products of VIS comply with the halogen-free requirement.
- EU Registration, Evaluation, Authorization, and Restriction of Chemicals (EU REACH): With respect to the list of hazardous substances specified by EU REACH and the list of Substances of Very High Concern (SVHC), it has been determined that all VIS products are compliant with these requirements.

In addition to these international legislations and customer demands, VIS will continue to monitor potential future legal requirements in order to be prepared for taking effective response measures.

### 3.4 Product Quality

VIS is committed to becoming global customers' preferred choice for semiconductor manufacturing by providing services of the highest quality. Our employees are dedicated to achieving their daily objective of exceeding customer expectations by focusing on delivering exceptional services with continuous quality improvement.

Quality Reliability Assurance Organization continues to make improvements for corporate sustainable operation and offer products with excellent quality. It strengthens the Company's quality culture and promotes to the entire supply chain, helping suppliers to improve operation and management. Also, Quality Reliability Assurance Organization introduces various innovative methods to elevate quality, and coordinates inter-departmental cooperation to ensure worry-free quality of all the products through meticulous inspection procedures.

#### 3.4.1 Strengthening Quality Culture

Quality is the responsibility of all VIS employees, as well as the principle they adhere to when performing tasks and

#### VIS Product Hazardous Substance Management Process





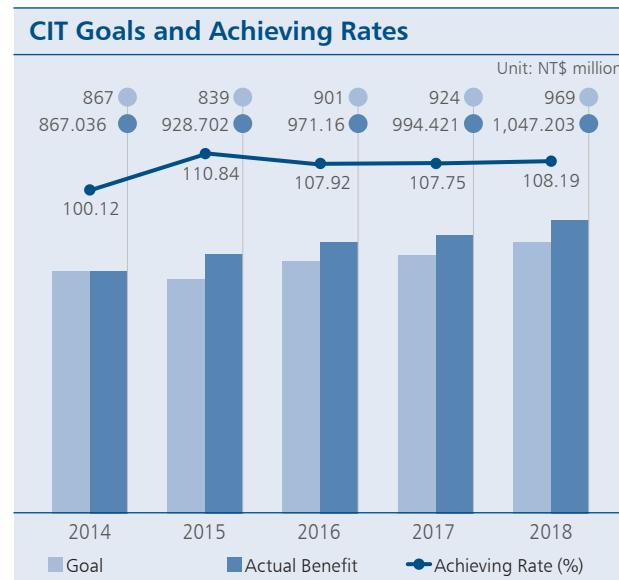
services. In addition to improving product quality, this principle also further raises customers' level of satisfaction.

To strengthen the Company's quality culture, continue enhancing product quality and production efficiency, lower production cost, and improve customer satisfaction, VIS has launched Suggestion System (SS) (Note 1) and Continual Improvement Team (CIT) (Note 2) in all fabs, and organized the company-wide "VIS CIT Conference," aiming to encourage VIS employees to constantly seek improvement and drive inter-departmental learning through measures such as prizes and public recognitions, enhancing employees' problem solving and innovation capabilities and maintaining the Company's competitive edge, while achieving the win-win objective of customer satisfaction.

In 2018, a total of 2,936 suggestions and 492 cases by CIT were proposed and implemented, generating a benefit as much as NTD 1,047 million. Out of the 332 closed CIT cases, 30.4% (101 cases) were related to product quality improvement. In 2018, VIS launched Best Innovation Award, Teamwork Award, and Best Presentation Award to participating CIT's.

Note 1: Employees identify opportunities of improvement in daily operation, and proactively propose solutions or ideas to executives for implementation, in order to make improvement or solve issues. Scope of suggestions include quality, cost, delivery date, production process, internal/external customer service, workplace safety and environmental protection, fab administration, and facilities.

Note 2: A CIT usually consists of 3 to 10 or even more members. Members are usually employees from different business units, who need to solve a shared problem. Improvement goals include quality, cost, delivery date, service, productivity, production technology, workplace safety and environmental protection, and safety and health.



### 3.4.2 Enhancing Quality Capability

VIS continues to optimize manufacturing capability, eliminate product flaws and refine manufacturing process control; Quality Reliability Assurance Organization and Operations Organization cooperate to apply advanced statistical method and quality tools to build an immediate defense system to detect abnormalities in advance, preventing influences of quality incidents on customers.

In addition to meeting customers' demand, achieving customer satisfaction, and creating value for customers, product quality must also strive for environmental sustainability, to ensure ecological stability and sustainable development. To better comply with EU regulations and customers' demand for green products, VIS has introduced the IECQ QC 080000 Hazardous substance Process Management developed by International Electrotechnical Commission Quality Assessment System for Electronic Components, which

has been integrated with Quality Management System ISO 9001, to establish hazardous substance management within manufacturing process R&D, raw material procurement, supply chain management, and manufacturing process control. VIS has also earned third-party certification, ensuring that the hazardous substance management system and quality management system continue to comply with the IECQ 080000 and ISO 9001 requirements. Also, all products produced by VIS are randomly sampled and tested by a third-party external lab, to ensure continued compliance with EU laws and regulations, and customer demands.



ISO 9001 Quality Management System  
Certification



IECQ 080000 Hazardous  
substance Process Management

### 3.4.3 Realizing Quality Application

To provide excellent and reliable product quality, help customers gain market advantage, and ensure consumer and product application safety, avoiding massive call-back after mass-production, Quality Reliability Organization helps customers to introduce into product design product reliability requirements during the R&D and product design stages. Also, to help automotive product customers achieve low defect parts per million (DPPM), VIS implemented the automotive product quality improvement project.



VIS Fab 1

### 3.5 Customer Service

#### 3.5.1 Comprehensive Customer Service Strategy

VIS strives to establish comprehensive customer service to meet customer needs, and win customer trust and recognition, achieving its goal of sustainable operation. Based on such belief, the customer service team has always done its best as a window of communication and coordination, and protected customers' confidential information adhering to the highest standards, supporting customers' needs in design, mask production, and wafer manufacturing; furthermore, VIS provides turnkey service to help customers with backend packaging and testing, so they can successfully earn product certifications.

Customer Trust  
and Recognition

Confidential  
Information  
Protection

PIP

e-Foundry

Online  
Service System  
VIS-Online

Customer  
Satisfaction  
and Methods  
for Filing a  
Complaint

B2B



### 3.5.2 e-Foundry

VIS establishes the VIS-Online service platform, which provides customers comprehensive and real-time online supply chain information, including design support, engineering integration, and logistics service integration. Through the Internet, customers can check order production status, delivery time, and product quality data and status at all times; customers can generate customized report based on their own management needs, so they can immediately learn and manage complete product manufacturing information. In 2014, VIS built a vertically integrated online tape out system to help customers compile tape out information more easily, saving significant time.

To timely learn customer satisfaction, VIS has developed the Customer Service Satisfaction (CSS) online system, where customers can propose their needs, opinions and suggestions for products or services any time they want; later, VIS will have designated personnel be responsible for dispatching and handling, and responding to customers, and customers can inquire progress online anytime. To VIS, this helps us to understand customer needs, and convert

into real actions, constantly enhancing service quality and competitiveness for better customer satisfaction.

In 2018, all customers are satisfied with VIS's dealing with their proposed demands.

### 3.5.3 Customer Satisfaction and Methods for Filing a Complaint

VIS conducts Annual Customer Satisfaction Survey regularly. The survey is conducted by a neutral third-party consulting company, and its objectives are to determine customer satisfaction with the Company in terms of our technology, quality, product delivery, and services. We also make sure to properly handle and fully understand all customer feedbacks in order to provide our customers with the best products and services.

The score of the 2018 Annual Customer Satisfaction Survey was slightly lower than 2017. VIS service team has explored the issues and made improvement according to the opinions provided by our customers, in order to enhance customer satisfaction, establishing a win-win cooperative relationship.

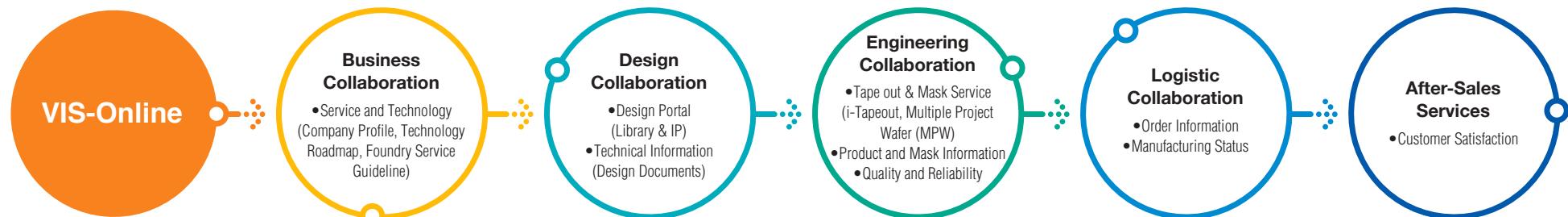
**Average Score of the Annual Customer Satisfaction Survey - Trend of Overall Customer Satisfaction Scores**



Note 1: Satisfaction scores range from 1 to 5

Note 2: Overall customer satisfaction scores are obtained from major customers based on their overall levels of satisfaction.

In addition to the Annual Customer Satisfaction Survey, VIS also conducts Quarterly Business Reviews with its key customers. Through face-to-face communication with our company executives, we are able to gain a better understanding of customer needs and their degree of satisfaction. At the same time, VIS's sales and service teams





continue to maintain close interactions with our customers to fulfill their needs and enhance service quality.

VIS has also established Guidelines for Handling Customer Complaints, which provides customers with transparent, effective channels to file complaints against our products and services. VIS handles all customer complaints in a fair and timely manner to protect the rights and interests of our customers. In 2018, all customer complaints received were properly handled according to the Guidelines for Handling Customer Complaints, and we have responded to each customer accordingly.

### **3.5.4 Realizing Confidential Information Protection**

Proprietary information, such as trade secrets, are important assets of VIS and our customers, and crucial to the competitiveness of the Company. From process recipes, process flow, machine parameters, yield rate, factory design, and customers' product and financial information, when inappropriately leaked or used, will result in severe influences on VIS and our customers.

To prevent inappropriate leakage or usage of trade secrets and proprietary information, and prevent employees from violating laws and regulations and damage company interests, preserving the competitive advantages of VIS and our customers, and becoming trusted partners of our customers, VIS has established the Proprietary Information Protection Policy (PIP Policy) in 2003, setting clear rules governing the classification of proprietary information and the reception, transmission, storage, and

use of information. Also, VIS has established corporate information security management system, and obtained ISO 27001 ISMS Certification in 2015, to properly implement information security policy and management procedures, striving to perfect information protection.

To strengthen compliance with proprietary information protection, VIS launched in 2017 and 2018 reviews on proprietary information protection and management mechanism, re-examining the classification of confidential information, and completing amendments of rules governing proprietary information protection. Also, VIS established Proprietary Information Protection section on the internal website, allowing employees to conveniently access related rules and promotions, and training materials, so they could conduct self-training anytime; and through online courses, case studies, and offline classes, VIS enhanced employees' knowledge on company trade secrets and proprietary information protection, to further strengthen the protection of the Company's trade secrets and important information. In 2018, "PIP Promotion—What You Need to Know about PIP" online course was completed by 5,285 people, achieving a completion rate of 95%.

In terms of execution, to ensure proper operation of the propriety information protection mechanism and timely correct any violations, VIS has established an inter-organizational PIP Committee, consisting of representatives from various units, including Legal, HR, ITEC, Internal Audits, R&D, QRA, Finance and Accounting, OES. The committee convenes quarterly meetings to review the violations over the past quarter and make improvement to

perfect the system; when necessary, special meetings are held to discuss time-sensitive cases and issues in order to continue enhancing the protection of information.

In 2018, no customers filed complaint against VIS regarding infringement of privacy or loss of information.

### **3.5.5 Strengthening Patent Portfolio**

VIS continues to invest in innovative R&D and patent deployment to strengthen its intellectual assets, and carries out global patent deployment according to R&D strategy to ensure comprehensive protection of R&D results. Since its inauguration, VIS has obtained nearly 2,000 patents in different countries; over the past three years, the numbers of patents obtained were 55 in 2016, 79 in 2017, and 96 in 2018, and has been increasing steadily. Such achievements keep VIS obtaining leading position in specific technologies and gaining competitive advantage, also offering better and comprehensive protection of the interests of VIS and our customers.

Protection of patents and trade secrets are important aspects of the management strategy of modern enterprises, VIS offers employees online patent training course. To enhance the knowledge of R&D personnel on patent and trade secret infringement, Legal Department held offline training course for R&D units and related executives; through case analysis and patent analysis, the training helped employees to further gain concrete ideas on protection of patents and trade secrets, enhancing their awareness and knowledge, in order to effectively lower operational risks and increase competitiveness. A total of 88 executives participated and completed the training, achieving a completion rate of 100%.



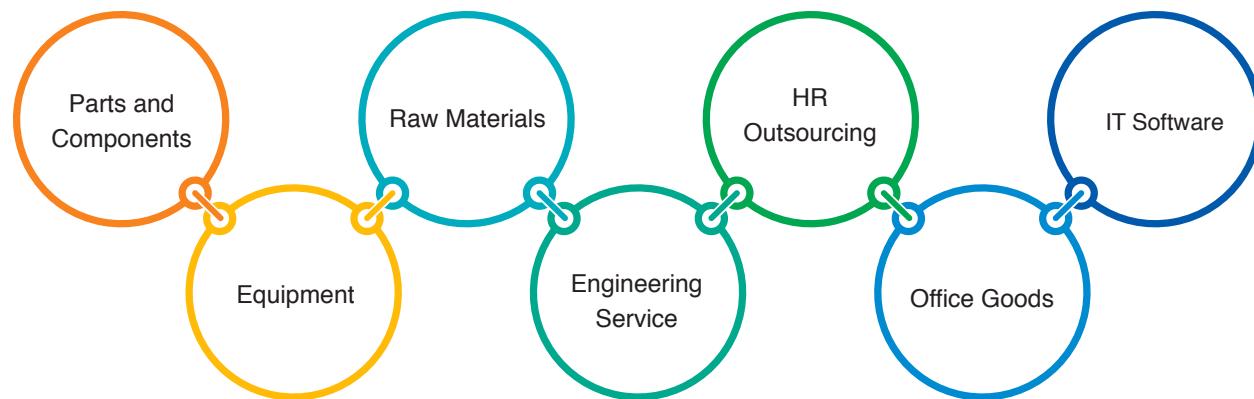
### 3.6 Responsible Supply Chain

VIS's supply chain covers an extensive range of expertise and applications, including international and domestic equipment suppliers, component suppliers, raw material suppliers (8-inch wafers, chemicals, gases, photoresist materials, and metal targets), engineering services, information software facilities, office supplies (including computer, communication, and consumer electronics), information software, and outsourced manpower (security services, cleaning, dormitories, and transportation vehicles). VIS has over 1,000 partners worldwide and we have been dedicated to support local companies in recent years. More than 95% of our suppliers are domestic suppliers (including manufacturers with branch offices in Taiwan, distributors, and wholesalers).

VIS Fab 2 Clean Room



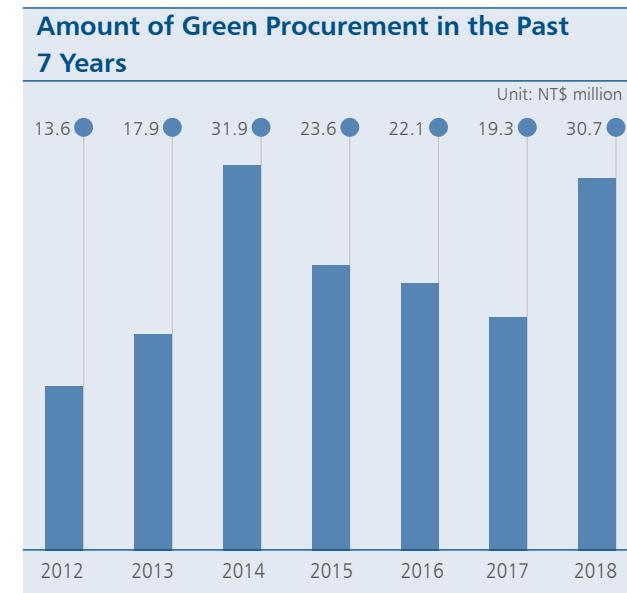
## Types of Supply Chain



### 3.6.1 Green Supply Chain

VIS views all suppliers as business partners, we hope to build strong, long lasting relationships with our suppliers, while jointly establishing competitive, sustainable supply chain partnerships. Apart from closely monitoring the product quality, delivery time, costs, and services provided by our suppliers, we also constantly push them to enhance their competitiveness, protect the environment, continue to improve a safe and healthy environment, value employee rights, schedule reasonable work hours, prohibit the use of child labor, and emphasize gender equality. We seek to fulfill our corporate social responsibilities together with the suppliers, while developing effective risk management and business continuity plans.

In order to fulfill these goals, the Procurement Department not only strives to fulfill its CSR obligations, but also prioritizes the purchase of energy-saving products with environmental protection labels, and engages in the green procurement of government-promoted energy-saving environment-friendly products with environmental protection labels including computer equipment, office papers, and electrical appliances. In recent years, vehicles that are eco-friendly and energy-saving have been launched, and VIS also responded to this trend, targeting these vehicles as priorities for cars of senior executives. The cumulative amount of green procurement over the past 7 years has reached NT\$159.1 million.



VIS will not stop here, however, to further expand our influential power, we urged all suppliers to comply with HSF, occupational safety, health, environmental policies, as well as fulfill their CSR obligations and perform their due diligence in procurement of responsible minerals by following relevant international/domestic laws and regulations. We also required our downstream suppliers to sign commitment guarantee letters to fulfill their corporate citizenship role and extend their activity scope downward. This not only facilitates our environmental protection efforts, but also expands VIS's contribution to CSR.



### 3.6.2 Supplier Management Cycle

VIS's management of suppliers are divided into four categories: selection, declaration, management, and evaluation (shown in the diagram below):



#### Supplier Selection

With regard to supplier selection, potential raw material suppliers must operate according to VIS's supplier management policies as well as the "Vendor Safety, Health, and Environment Audit Management Guidelines"; suppliers must follow these guidelines and complete relevant evaluation procedures before they are selected to become qualified vendors.

The evaluation process includes a preliminary review and an on-site audit. Our Supplier Quality Management Department conducts the preliminary reviews, then invites our Risk and Environmental Safety Management Department, as well as any other relevant departments to conduct inspections. The audits include areas such as environmental protection, health and safety, etc. Finally, our Supplier Quality Management, Procurement, Materials Management, and Risks and Environmental Health and Safety Management Departments jointly select suitable suppliers based on the audit results. In addition, the same evaluation procedures also apply to our existing suppliers. We demand constant improvements of our suppliers in order to raise their competitiveness in product quality, delivery time, costs, and services.

#### Supplier Declaration

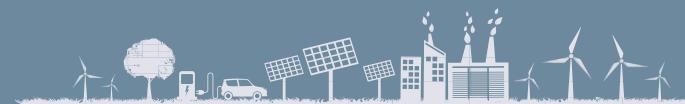
VIS not only formulated and implemented its own corporate social responsibility policies, but also requested all suppliers to follow the Company's requirements. VIS requires all supply chains to sign and submit a copy of the commitment guarantee letter. VIS guarantees that we, as well as our suppliers, conform to applicable laws and regulations of the country where its operations take place as well as international codes of conduct, including but not limited to "Corporate Social Responsibility Policy of Vanguard International Semiconductor Corporation," "EU RoHS Directive," "EU Registration, Evaluation, Authorization and Restriction of Chemical Substances (REACH)," and "Responsible Minerals Rules and Regulations" and any other relevant changes.



CSR Policy Declaration from VIS to Business Partners

#### Supplier Management

In addition to our declarations for the business partners, VIS is also requiring its supply chains to follow the same standards applicable to VIS during their business operations. The management of major suppliers includes their product quality, environmental protection, occupational health and safety, green products, ethical guidelines, non-hiring of child labor, no-overtime requirement, and gender equality. In compliance with the Responsible Business Alliance (RBA, formerly known as EICC: Electronic Industry Code of Conduct), we require them to implement all of the above. We also conduct questionnaires and on-site audit to ensure compliance.



## Supplier Assessment

To effectively manage the product quality, delivery date, costs, services, industrial safety and environmental protection practices of suppliers, the procurement quality management and industrial safety departments conduct joint reviews of qualified suppliers listed in the qualified vendors list (QVL) every six months. The review focuses on their product quality, delivery date, costs, services, industrial safety practices, and environmental protection measures. In this review, the importance of each item is considered, and different weights are assigned to evaluate a supplier's performance. Even if a supplier demonstrated high performance with evaluation scores of all items at 90 points or above, VIS continues to demand the supplier to make continuous improvements and enhance its competitiveness.

Regarding management of key suppliers, the Supplier Quality Management Department holds Quarterly Supplier Review (QSR) Meetings. The Department also conducts annual onsite audits. In the past three years, 133 onsite audits were conducted. More specifically, in 2016: 71 times; 2017: 48 times; 2018: 54 times. Results from audits in recent years (2016-2018) showed that suppliers' overall performance has been stable and all suppliers were able to meet the Company's requirements; nevertheless, each competent audit unit still provided suppliers with recommendations against complacency and to continuously improve so that suppliers are able to continue

to make progress and constantly enhance their overall competitiveness.

To ensure that all suppliers comply with our green product policy, we required suppliers to submit chemical testing reports and safety data sheets (SDS) in accordance with our regulations; reports are reviewed by a designated unit. In addition, we required suppliers to sign a RoHS affidavit, in which they pledge to uphold environmental protection commitments, to ensure that all VIS products and products of its suppliers comply with the VIS green product standards, as well as international regulations and customers' product specifications.

### 3.6.3 No Child Labor

VIS strictly forbids its supply chains from employing child labor (the age of child labor is determined by the laws of that country). In addition to the aforementioned declaration which requests all suppliers to comply with the requirement, the questionnaires also clearly state that a supplier who violates this policy shall be declared as an unqualified supplier, even if they fulfill all other requirements.

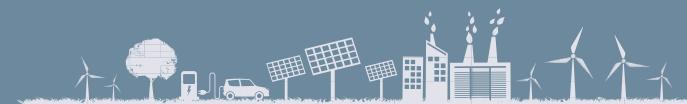
### 3.6.4 Supplier Operation Management

Under the globalization trend, any major natural disasters or accidents around the world (the 921 earthquake, U.S. west coast port labor disputes, volcanic ashes from Iceland, and the 03/11 Tohoku earthquake/tsunami) can trigger a butterfly effect and impact the raw material supply of

VIS directly or indirectly; this in turn would impact our production; in severe cases, delayed product delivery to customers can incur significant losses upon customers and negatively impact their ability to grasp business opportunities in a timely manner.

To keep our promise to customers regarding steady supply of goods, VIS has established the Business Continuity Plan and the After-math Recovery Plan, reinforced employee training and conduct periodic drill exercises, we also looked at risk management of continuous operation of supply chains as a competitive advantage. VIS demands its suppliers to actively report on post-disaster impacts and restoration plans, and implement relevant investigations and management mechanisms according to the situation in order to reduce the risk of supply interruption, thereby achieving the purpose of continuity management.

In addition to a series of earthquakes in Japan and Taiwan in 2018, VIS has also conducted surveys as quickly as possible to provide immediate responses to customer inquiries. The supply of helium tightened up globally, and VIS also needed helium in production processes. Procurement unit closely monitored the suppliers' capacity and source, and adopted responsive measures, successfully overcoming the risk of global helium shortage.



### 3.6.5 Responsible Minerals Management

As for the management of responsible minerals, the Company is fully compliant with the Responsible Business Alliance (RBA, formerly known as EICC: Electronic Industry Code of Conduct), as well as the conflict minerals source disclosure regulations recently issued by the U.S. Securities and Exchange Commission (Rule 13p-1 of the U.S. Securities Exchange Act of 1934), to avoid purchasing conflict minerals (gold, tin, tantalum, tungsten, and other minerals that may be specified in the future by the RMI) from specified countries (Democratic Republic of the Congo and neighboring countries).

The company also requires all suppliers to guarantee their minerals are from refineries (conflict-free smelter) approved by the Responsible Minerals Initiative (RMI), establish a mechanism of reasonable certainty, exercise their due diligence, and acquire relevant certifications. For refineries not approved by the RMI, VIS requests them to obtain certification from RMI or a third-party audit organization, which will verify that the minerals used by the VIS and its suppliers are all in compliance with due diligence and responsible minerals management.

In consideration of customer concern over information on the management of conflict minerals, the procuring department provides the most up-to-date Conflict Minerals Reporting Template Reporting Template (CMRT) on VIS's online system to facilitate customer access to relevant management information since 2016. Customers can make

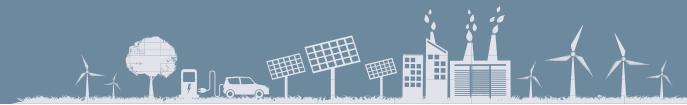
online inquiries and download the template from the platform anytime.

In compliance with the RMI revision in 2018 (v.5.11: effective on April 27, 2018), VIS completed related supply chain surveys and found them to be compliant with regulations. To prevent procurement of conflict minerals from conflict regions, VIS's latest CMRT tables were disclosed on the VIS Online System for customers to make online queries.

### 3.6.6 Supply Chain Localization Strategy

Taiwan's semiconductor industry remains reliant on foreign imports for machinery equipment, raw materials, and software applications. However, VIS has long launched procurement localization policy, fostering related industry chains in Taiwan. In addition to diverting risks, and reducing relevant costs, with the length of transportation routes significantly shortened, we will be able to exercise our corporate social responsibility by reducing carbon emissions.

In 2018, VIS collaborated with over 1,000 partners worldwide, of which 95% are domestic suppliers (including manufacturers with branch offices in Taiwan, distributors, and wholesalers). Our domestic purchases amounted to NT\$3 billion, and we have furthermore contributed NT\$24 billion over the past 7 years (2012 to 2018).

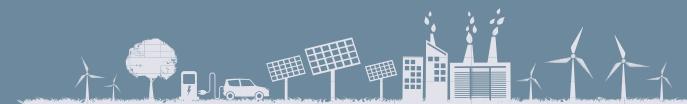


VIS Fab 2 Office Area

### 3.7 Environmental Protection and Occupational Safety

VIS maintained the spirit of continuously improving its environmental protection practices and health and safety management. In compliance with the ISO 14001 and OHSAS 18001 standards, VIS maintained the environment, safety, and health performances of its manufacturing plants at levels exceeding the standard requirements. VIS demonstrated greater than 90% efficiency for its handling of air pollution prevention; greater than 85% water recycling processing rate (more than 75% for Fab 3); greater than 92% waste recycling rate (more than 87% for Fab 3) (Note); zero accidents. For major topics of environmental protection and occupational safety identified by VIS in 2018, and sustainable goals and related outcomes, please refer to "2018 VIS Major Topics and Sustainable Goals" List on page 12.

Note: Waste recycling rate does not include wastes that are not reported online.



### 3.7.1 Environmental, Safety, and Health Policies and Management System

#### VIS Environmental, Safety, and Health Policies

When it comes to the Company's environmental, safety, and health policies, VIS places a strong emphasis on full participation by all employees to ensure across-the-board safety. Amended per requirements of ISO 14001: 2015 and OHSAS 18001: 2007, as well as our commitments to international conventions, VIS has added policies regarding prevention of occupational injuries and diseases for better physical and mental health, and CSR. After being reviewed and signed by VIS Chairman and President Leuh Fang, the latest policies are posted on the Company's official website and the announcement board of each production plant. To ensure that each employee clearly understands the Company's policies and works to achieve their objectives, the policies are also printed out onto cards which are then distributed to all employees, thereby facilitating widespread compliance.

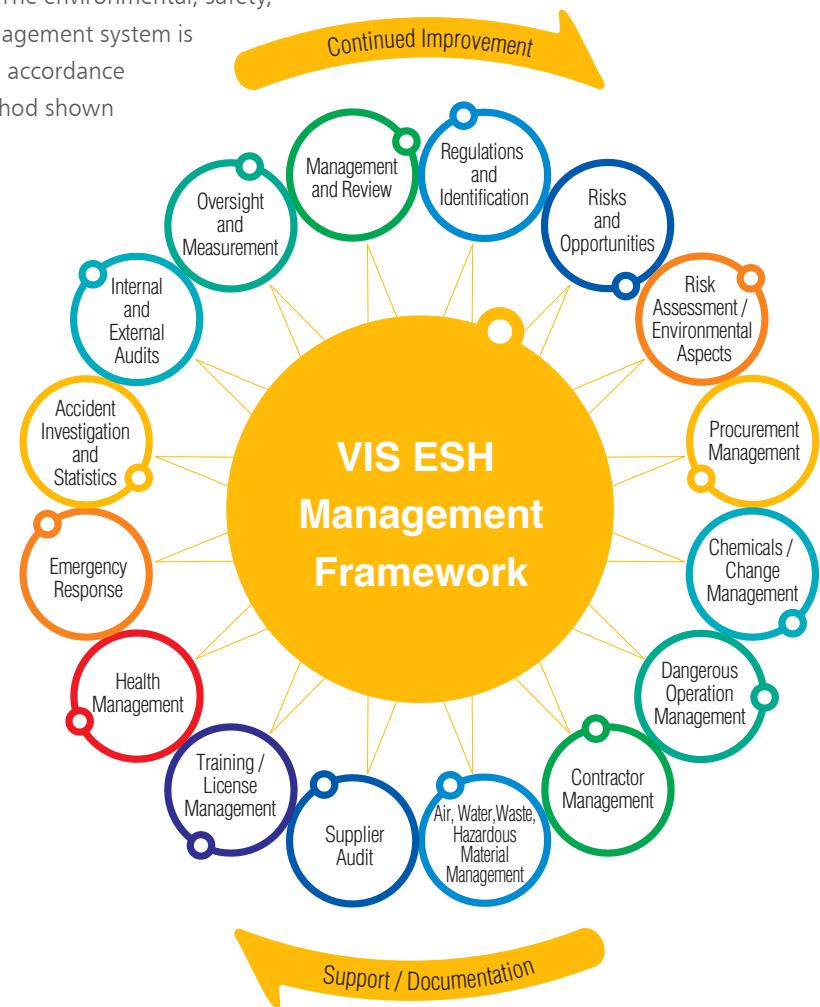
Information on VIS's environmental, safety, and health policies, and applicable scopes of safety and health/environmental management systems have been published on the Company's website, for all stakeholders to access at any time. In addition, VIS's contractors are required to comply with the Company's policies pertaining to safety and health management. To this end, VIS has incorporated various informational directives concerning health, safety, and environmental policies into the safety and health education training provided to contractors, ensuring that all contractors which handle work for VIS clearly grasp the Company's health, safety, and environmental policies. The Company's website: [http://www.vis.com.tw/visCom/chinese/a\\_about/a04\\_environmental.htm](http://www.vis.com.tw/visCom/chinese/a_about/a04_environmental.htm)

#### Environmental, Safety, and Health Management System

Environmental and safety departments of VIS will check the laws and regulations database every month for latest related laws and regulations, as well as other information, to ensure the Company complies with the aforementioned laws and regulations and the requirements of other stakeholders and groups. Through risk assessment and identification of environmental aspects, risk and opportunity analysis, ESH application, procurement management, contractor management, supplier audit, dangerous and high-risk operation application and control, and automatic check, VIS strives to reduce risks within the fabs; VIS also organizes regularly environmental, safety, and health education and training, personal

protective equipments (PPE) training, and emergency response drills to enhance employee emergency preparedness; through fire/fire control, and gas monitoring systems, patrol and inspection, regular inspections of all systems, and internal and external audits, VIS ensures that all units comply with all regulations. When abnormal events take place, investigation system and CAR will be immediately launched, and unit responsible will be asked to make improvements. The environmental, safety,

and health management system is implemented in accordance with PDCA method shown below:



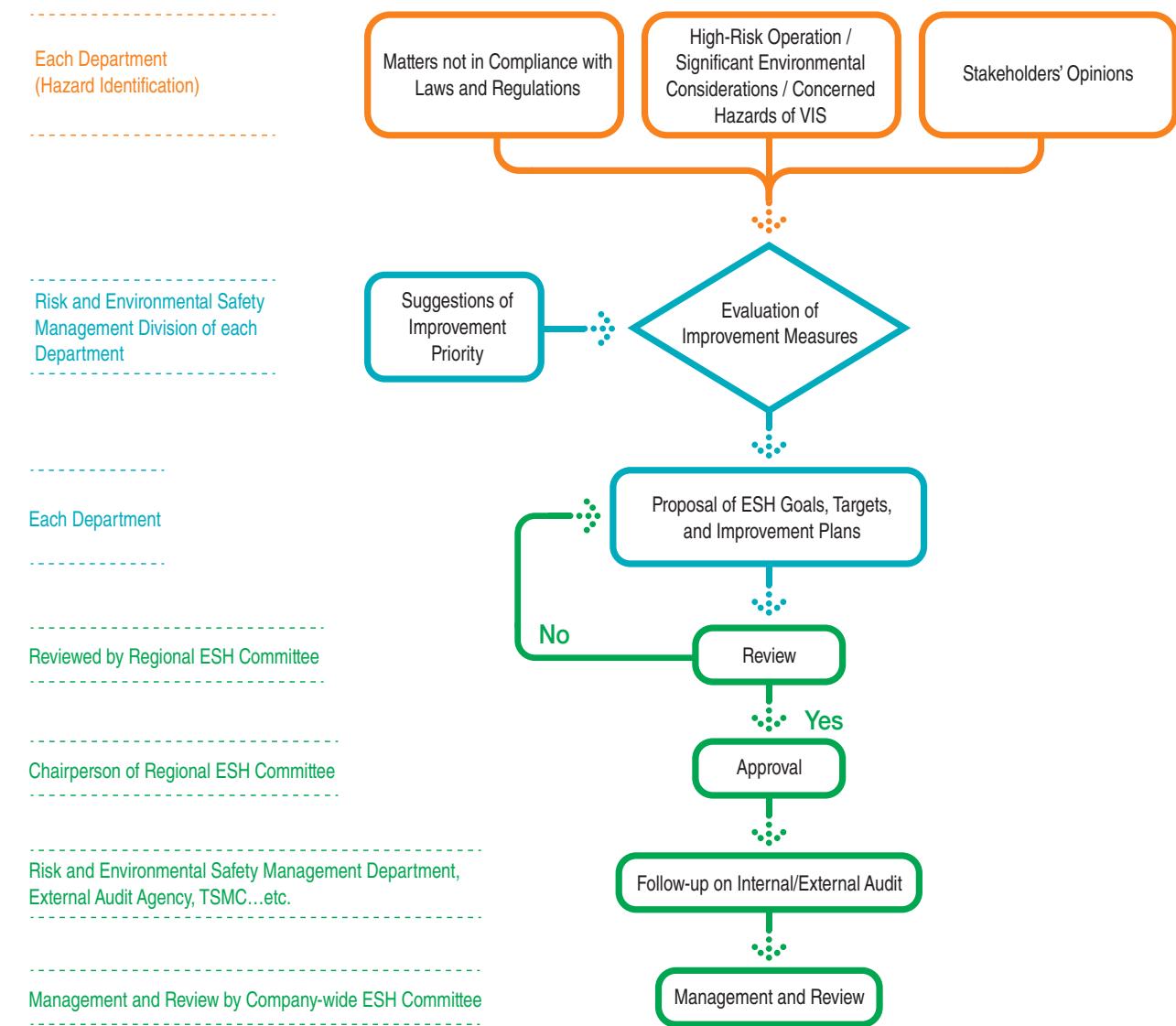


#### Key Examples of VIS ESH Management:

- Hazard Identification, Risk Assessment and ESH Management Programs
- Each responsible department conducts hazard identification and risk assessment in accordance with VIS "Safety and Health/Environmental Policy Management and System Planning Procedure," to identify ESH hazards from activities of all employees, stakeholders (including contractors, dealers, visitors), contract employees, and those related to fab rental interface, as well as external personnel who need access to the working space, equipment, facilities, and production environment, while also considering the derived risks from activities by taking into considerations of human behaviors and abilities, and other human factors. Based on the results, the responsible unit conducts improvement assessment for high-risk items and process control.

If major risks or environmental aspects with significance are founded after hazard identification, and risk assessment and environmental aspects, management programs will be formulated accordingly. ESH programs will be first reviewed and agreed by head of the responsible department, departmental workplace safety representative, and RESM, and will be implemented after approval by the chair of ESH Committee. All applications and related process of proposals of ESH management programs/follow-ups/changes/closure are done on electronic system for convenient control and monitoring of progress. Each fab will report to the fab safety committee the results of ESH implementation every month, and the implementation of the entire fab will be compiled quarterly and reported at the Company's safety committee meeting.

#### ESH Organization Implementation and Operation Procedures



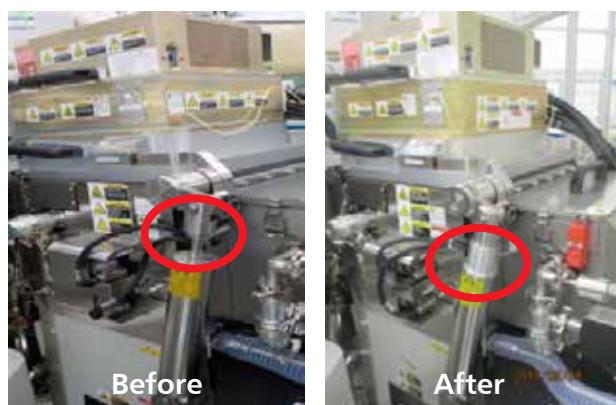


Minimizing environmental impact through green production is VIS's core environmental policy. We completed 113 environmental improvement projects in 2018. In particular, the three main categories were waste reduction, energy conservation, and pollution reduction, including reducing the volume of chemicals and gases used during the production process (e.g. reduction of ACT, O<sub>2</sub>, TMAH, N<sub>2</sub> & photoresists), the use of 3A UPW System variable frequency, energy-saving pump, replacement of the variable frequency dry pump, and reduction of LHF-R filters, in order to minimize the impact on the environment.

Examples of Major ESH Programs Implemented in 2018:



DRM Upper electrode Jig (Risk Level: 3→5)

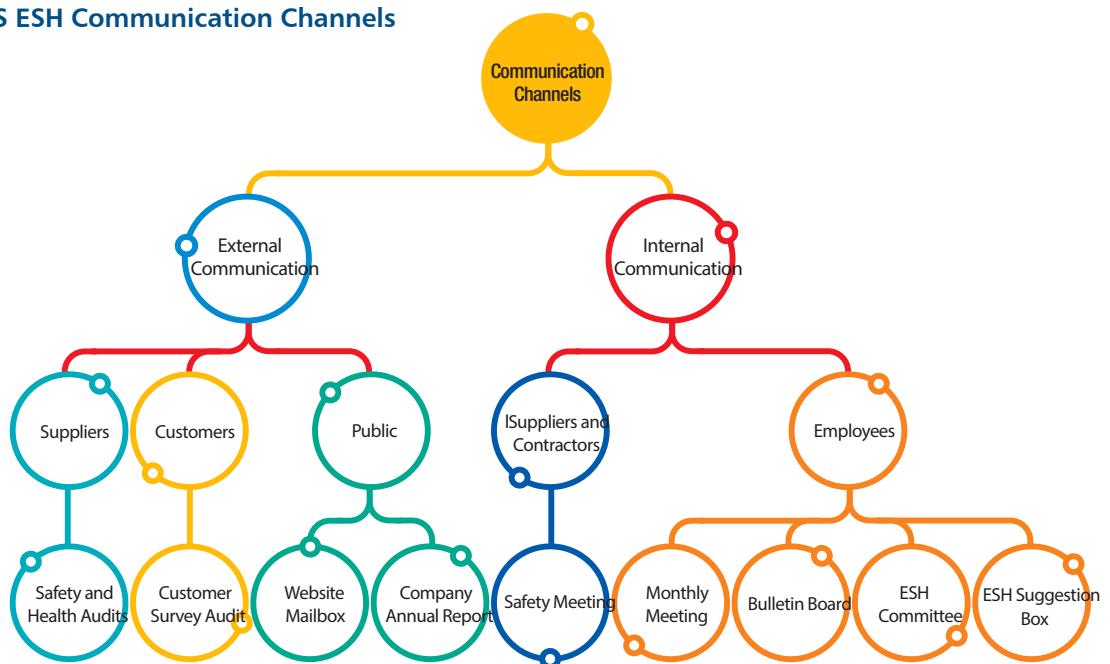


85SCCM Chamber Lid Oil Cylinder Latch Production (Risk Level: 3→5)

- **ESH Worker Consulting and Communication**

As for communication channels of ESH related matters, designated personnel at the fabs provide around-the-clock emergency response consulting, and for related ESH issues, day shift engineers can be consulted. Communication channels include: TE online personnel communication monthly meeting, physical and electronic bulletin boards, toilet literature, departmental ESH meeting, regional ESH meeting, ESH suggestion box, improvement proposal system, new employee seminar, department heads or workplace safety representatives, and electronic employer-employee communication platform. Employees can access any of these channels to make their voice heard. Also, when resident contractors discover any issues, they can immediately communicate with responsible engineers, or reflect their opinions at the monthly hook up consultative meeting; also, through supplier audits, ESH issues can be directly communicated with suppliers and contractors. In sum, VIS has diverse communication channels, and are shown in the following diagram:

#### VIS ESH Communication Channels





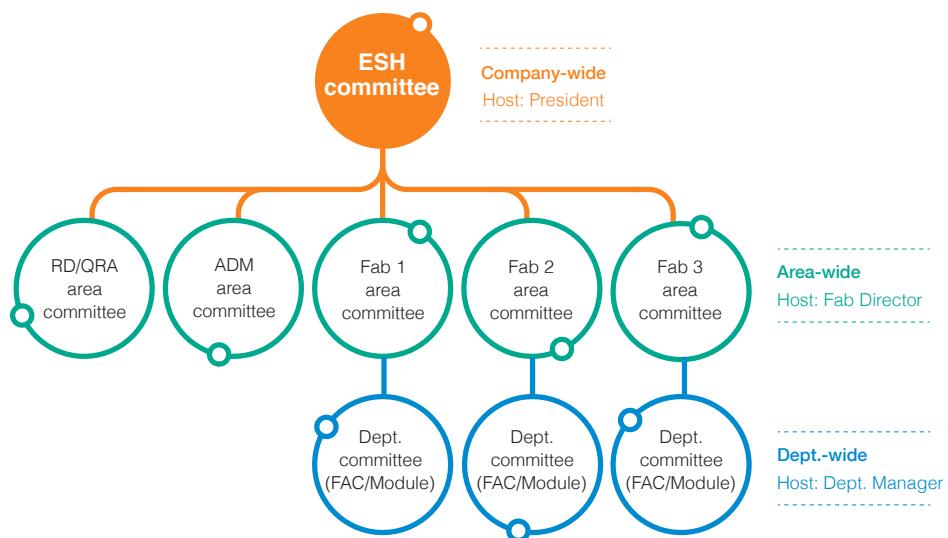
- **Safety, Health, and Environmental Protection Committee**

VIS has established Occupational Safety, Health, and Environmental Protection Committee, where the president, unit heads, labor representatives, medical staff, and safety and health personnel regularly review the implementation of various related issues; also, depending on the nature of each unit, regional committees are established to target each department's operations to propose improvement plans and audit management performance, enhancing overall management level from top to bottom, while also conveying management principles to all levels of employees. The committee also formulate and execute plans according to VIS ESH strategy, and implementations are reviewed at quarterly committee meetings:

### **Safety, Health, and Environmental Protection Committee**

Committee Members: President (Management Rep), Fab Directors, ESH and Medical Personnel, Department Managers, and Labor Representatives of VIS (Accounting for more than a Third of the Safety and Environmental Committee members).

Labor Representatives: Labor representatives elected at employer-employee meeting and representatives nominated by each regional committees.



- **Personnel included in ESH Management System**

VIS has a total of 5,559 employees (614 at headquarters, 1,788 at Fab 1, 1,984 at Fab 2, 1,173 at Fab 3; excluding 20 temp workers).

The number of non-employees whose jobs/working environment are controlled by the organization is 459 (150 at Fab 1, 149 at Fab 2, 140 at Fab 3, and 20 temp workers), accounting for 7.62% of all employees.

The number of employees is the reported number to the online reporting system of occupational injury in December 2018.

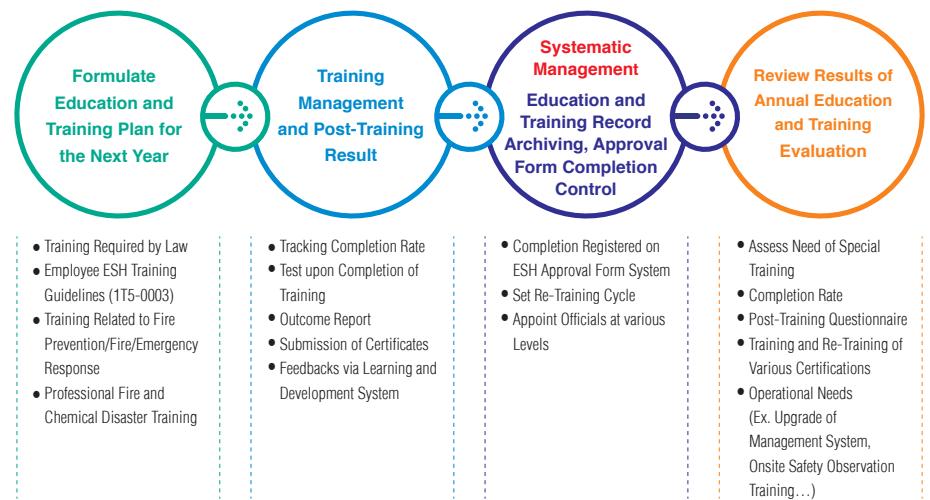
### **Promotion of ESH Education**

With the vision of an employee-oriented "Happy Enterprise" and support of senior executives, VIS actively promotes educational training and certification, enhancing employees' safety awareness through learning, establishing safety culture, and finally achieving the vision of "health, joyous workplace, and happy home".

Different types of trainings are organized according to ESH Training Guidelines and annual training plan in order to enhance every worker's knowledge on hazards, protecting lives and health. Based on trainees, nature of work, and needs, there are four major types of trainings: new employee, dangerous machine and equipment operators, executives, and emergency response. Results of trainings are monitored through tests.



### • VIS Training Planning and Execution Process



### • Photos of Trainings

1. On-the-Job Training: various ESH trainings are held according to natures of different operations.



Commander training

Contractor training

Fire extinguisher training



Fire hydrant training



Supervisor engineer certification training

### • Types of Trainings



Note 1: New employee training targets official non-fixed term employees, including those serving alternative civilian service, contract workers transitioning to full-time employees, reinstated employees, masseurs. A total of 8000 people attended the training.

Note 2: For disaster prevention-related trainings and contractor training, refer to sections on "Emergency Response" and "Contractor Management".



2. Grading System of ESH Trainings: Grading system for ESH trainings aims to enhance professional competencies of ESH personnel at different levels.



Organic solution process executive training



Specific chemical substance process executive training



High pressure container training



Radiation prevention continued education training



Ergonomic hazard prevention practical training



Civil defense training

3. Environmental Promotion Education: VIS is dedicated to fulfilling its responsibilities as a good corporate citizen, including participating in the "annual industrial safety and environmental protection month" events hosted by the Hsinchu Science Park Administration. Also, responding to government policy of energy conservation and carbon reduction, VIS employees participated in "International Beach Cleaning Day," "Succulent Plant DIY," "A Journey with Trees," and "Environmental Education Student Activity," so that they could also be engaged in CSR events outside of workplace.



International Beach Cleaning Day



Succulent plant DIY



A journey with trees



Vis volunteer program green division



Environmental education student activity



Environmental education student activity

#### ● Learning and Development Department System Feedbacks:

##### 1. Feedbacks by Internal Participants

Class	Feedbacks
Succulent Plant DIY	<ul style="list-style-type: none"> <li>When work gets stressful, I can look at the green plants, it's quite relieving.</li> <li>Many colleagues like succulent plants. When last class was over, many colleagues mentioned that they could not attend due to time arrangement. Hopefully we can get more classes like this, and advanced level too.</li> <li>The instructor was not like merchants, who only want to make money, and taught us a lot about succulent plants.</li> </ul>
Employee Motorcycle Road Safety Seminar	<ul style="list-style-type: none"> <li>The instructor was very professional, but asked questions too frequently, sometimes it affected the proceeding of the class.</li> <li>The content is very practical, but only a small portion of employees attended the class. It should be compulsory.</li> <li>I want to experience outdoor class.</li> </ul>
Civil Defense Training	<ul style="list-style-type: none"> <li>Road safety lecture was nice, should let more people attend.</li> <li>Civil defense knowledge is something everyone should learn. Road safety is also something people should beware of.</li> <li>The way the instructor taught traffic laws was intriguing, and knowing the rules helps enhance safety.</li> </ul>
Emergency Medical Technician Training (EMT-1)	<ul style="list-style-type: none"> <li>I hope they would also teach care for drowning.</li> </ul>
Hazardous Substances Labeling Communication Identification Personnel	<ul style="list-style-type: none"> <li>Class and materials were nice. The instructor was very attentive and clear.</li> </ul>



## 2. Feedbacks by External Participants





## Company Achievements Relating to Environmental, Safety, and Health in 2018

Focusing on sustainable management aspects of "corporate governance, managing customer relationships and supply chains, maintaining a happy workplace and protecting the environment, and community involvement," VIS strives to achieve its goal of "zero-accidents, happy workplace". Annual plans are formulated and implemented according to the overall ESH strategy. Through the collective effort of all VIS employees, we have earned many recognitions. In 2018, VIS has won 4 awards, including three environmental protection related awards and one safety and health related award. The awards are listed below:

- 2018 Award of Excellence at the "Waste Reduction and Circular Economy Excellent Enterprise Evaluation" by Hsinchu Science Park



- 2018 Award of Excellence in "Occupational Safety and Health Promotion Performance Award" from the Hsinchu Science Park Administration



- 2018 EPA's Silver Award at the 26th ROC Enterprises Environmental Protection Award



- 2018 Taoyuan Department of Environmental Protection's "Award for Reduction of Airborne Pollutants in Public and Private Spaces"



In 2019, VIS will continue to encourage participation in ESH related competitions to facilitate exchange of professional skills and expand international horizon.



## Environmental Protection Expenditures

VIS is still in the process of improving our environmental protection management practices and investing in pollution prevention facilities by conducting daily equipment maintenance and management. To clearly categorize various environmental protection expenditures, VIS has formulated environmental accounting guidelines and designated environmental accounting codes for all units to properly compile and calculate related expenditures. Refer to "2014~2018 Environmental Protection Expenditures" for environmental protection expenditures. In 2018, approximately NT\$412 million was spent on environmental protection. The categorization of the expenditure is listed in "2018 Environmental Protection Expenditures Categorization," including enhancement and maintenance of air pollution prevention facilities at each fab at around NT\$93.91 million, and replacement of energy-saving pump around NT\$51.18 million. In the area of procurement of green products, the expenditure was approximately NT\$30.66 million.

## 2014~2018 Environmental Protection Expenditures

Unit: NT\$ thousand

Year	2014		2015		2016		2017		2018	
Category	Recurring Cost	Capital Expenditures								
Subtotal	125,380	38,023	149,775	160,116	197,743	197,743	197,743	118,746	273,372	139,330
Total		163,403		309,891		218,508		316,489		412,701

Note 1: 2014 Total environmental protection expenditures (Fab 1 + Fab 2) ; 2015 - 2018 Total environmental protection expenditures (Fab 1 + Fab 2 + Fab 3)

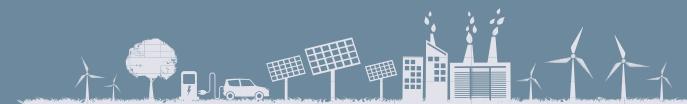
Note 2: Recurring costs included fees required by environmental protection laws and regulations, testing fees, operational maintenance costs, and personnel costs.

Note 3: Capital expenditures included costs for installation of environmental protection equipment, etc.

## Categorization of 2018 Environmental Protection Expenditures

Unit: NT\$ thousand

Categorization	Description	Recurring Cost	Capital Expenditures
1. Direct Costs for Reduction of Environmental Burden			
(1) Pollution Prevention	Including costs for air pollution prevention, water pollution prevention, and other environmental pollution prevention	136,191	138,028
(2) Saving Energy Consumption	Cost for saving resources (such as water)	-	-
(3) Waste Processing and Recycling	Costs for wastes (such as recycling, incineration, landfill)	49,196	-
2. Indirect Costs for Reduction of Environmental Burden (Environmental Protection Related Management Cost)	Including (1) Environment surveillance; (2) Environment management system certification related fees; (3) Employee environmental education; (4) Green procurement; (5) Environmental protection personnel	87,985	1,301
3. Other Costs	Including: (1) Soil purification and natural environment restoration; (2) Environmental pollution and hazard insurance and government environmental protection taxes; (3) Environmental issue compensations, penalties, and litigation fees	-	-
Total		273,372	139,330



### 3.7.2 Climate Change and Energy Management

#### Climate Change

Climate change is a major topic of discussion in the United Nations and among governments, societies, and corporate bodies worldwide. This is also the case for VIS. The VIS Corporate Social Responsibility Promotion Committee has incorporated climate change issues into project implementation and promotion. Since 2016, VIS has conducted carbon and water footprint inventories for company products in recent years as the basis for future GHG emissions reduction measures. VIS introduced environmental accounting and the ISO 50001 Energy Management System in 2017 to strengthen the Company's environmental management tools. In 2018, VIS introduced the material flow cost analysis method and ISO 14064-1 Scope 3 inventory, which have both passed SGS third-party verification. In addition to introducing different analysis projects, VIS has also utilized the analysis results to identify the risks and opportunities brought by global climate change in the three aspects of risk matrix: laws and regulations, weather-related disasters, and influences of other behaviors.

#### Climate Change Risks and Opportunities

Aspect	Risk Aspect	Response	2018 Implementation Result
Laws and Regulations	Compulsory GHG Inventory and Reporting	Launch data inventory: investigate GHG emissions and energy use status	Achieved 100% GHG inventory
	Product Energy Consumption and Carbon Footprint	Enhance product energy efficiency, produce low energy-consumption products for customers, as key criteria for carbon reduction and energy conservation analysis	2018 carbon footprint presented product carbon consumption management
	GHG Reduction	Reduce GHG emissions per unit area of wafer to 20% below the 2015 level by 2020	2018 GHG emissions per unit area of wafer was reduced to 14.7% below 2015 level
Weather-related Disasters	Production Decrease or Interruption by Typhoons, Floods or Droughts	Enhance organizational resilience: formulate crisis management procedures, establish disaster response ability	VIS Business Continuity Management Guideline
Influences of other Behaviors	Stakeholders Demand the Establishment of Green Supply Chain that Can Cope with Climate Change	Advocation: join government and industry to jointly promote climate change related initiatives and projects	Participated in National Carbon Reduction Taskforce and Taiwan Semiconductor Industry Association to implement reduction planning

#### GHG Inventories and Verification

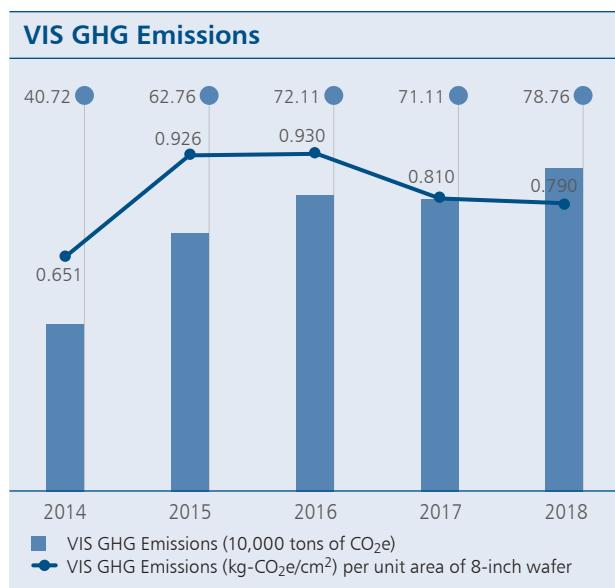
GHG reduction is a key measure for fighting against climate change and global warming, while GHG inventories serve as the basis for emission reduction. Based on inventory results, reduction goals and priorities can be established to facilitate subsequent reduction endeavors and the verification of reduction outcomes. Therefore, performing inventories as early as possible is conducive to early detection of reduction opportunities and directions, thereby achieving favorable reduction effects.

At VIS, Scope 1 GHG emissions refer to direct emission sources at its facilities, including diesel fuel for power generators and natural gas used by stationary emission sources; mobile emission sources include petroleum and diesel fuel (including biodiesel) used for company vehicles; fugitive emission sources include organic waste gas, firefighting equipment, septic tanks, and refrigerant. Scope 2 GHG emissions refer to indirect emission sources consisting of purchased electricity.

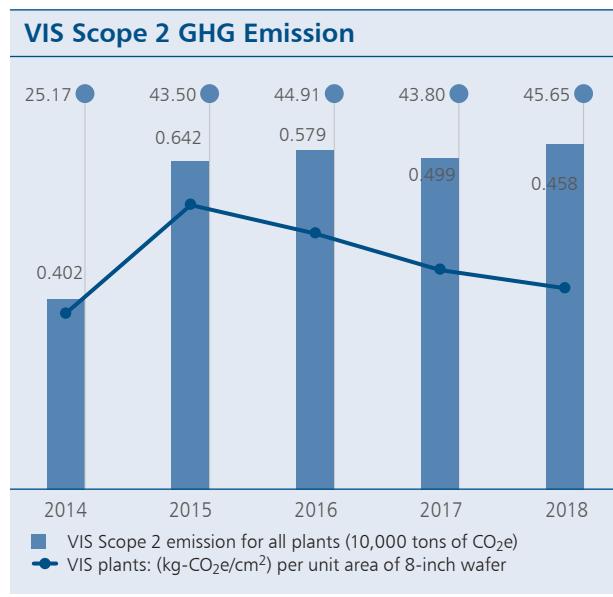
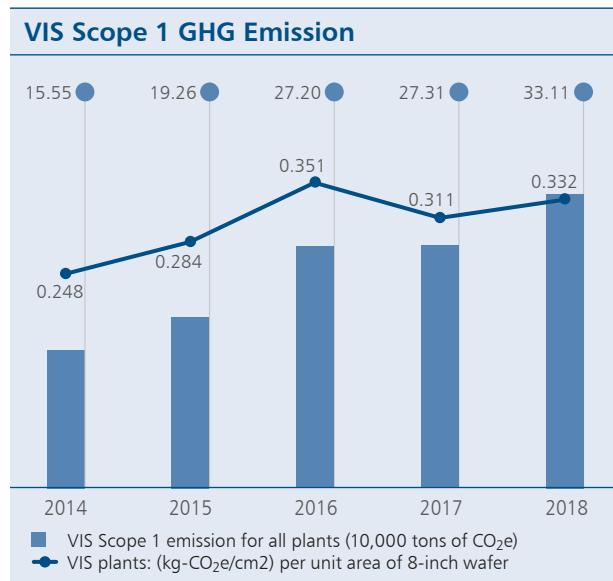


VIS conducts its GHG inventories by following ISO/CNS 14064-1 standards, the Executive Yuan Environmental Protection Administration (EPA) Greenhouse Gas Validation Guidelines (Note), "Greenhouse Gas Emission Inventory Registration Guidelines," and the WBCSD/WRI GHG Protocol, with 100% control to define organizational boundaries (Operational Control Act).

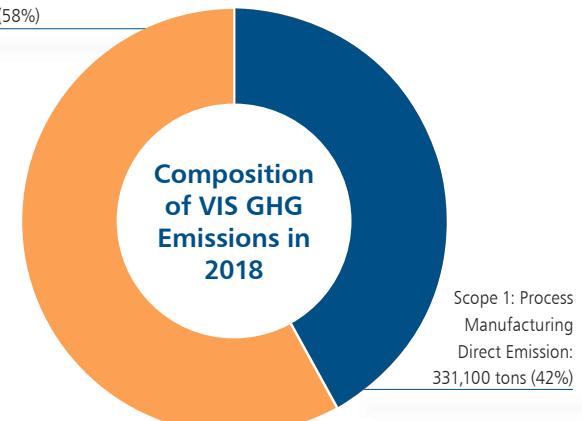
VIS GHG inventory results for Scope 1 and Scope 2 emissions are shown in the charts below. In particular, the area of wafer was based on information that has been verified following GHG inventory.



Note: In 2018, the GHG inventory was based on the fourth evaluation of IPCC report (AR4) as required by the EPA of Executive Yuan. The GHG inventories conducted before 2015 (inclusive) were based on AR2.



Scope 2: Purchased Electricity and Steam  
Indirect Emission: 456,500 tons (58%)



VIS referenced carbon footprint calculation to project the following Scope 3 GHG emissions, and passed SGS third-party verification, identifying other indirect GHG emissions other than Scope 1 and Scope 2. The following chart is the result of 2017 Scope 3 GHG emissions inventory; 2018 inventory verification will be completed in September 2019.



Category	Description	2017 Scope 3 GHG Emissions (tCO <sub>2</sub> e)
Purchased goods and services	Carbon emissions generated by main materials and auxiliary materials in the process procured for the production of 8-inch wafer, not including outsources services.	119,107.47
Fuel- and energy-related activities (not included in Scope 1 and 2)	Fuel and energy used in fabs. Calculated based on lifecycles with results of Scope 1 and 2 deducted.	92,156.87
Upstream transportation and distribution	Main materials and auxiliary materials procured for the production of 8-inch wafer. The carbon emission generated through the ton-kilometers as materials are transported from suppliers to the fabs (including air, land, and sea).	673.641
Waste generated in operations	Carbon emission generated by the wastes through the production process, including transportation and processing of wastes.	1,380.452
Business travel	Carbon emission resulted from domestic and international business trips by employees. Calculated with the round-trip distances via land and air to domestic or international destinations from Fab 1.	219.552
Employee commuting	Calculated using passenger-kilometer from local civic centers of employees' household registrations to each fab.	51.883
Downstream transportation and distribution	First-tier point of sales of 8-inch wafers	411.232
Total		214,001.09

### GHG Reduction

The Company has devoted great efforts in the reduction of GHG. In 2005, VIS signed the "Memorandum of Cooperation for the Reduction of Perfluorinated Compound Emissions" with TSIA and the EPA of Executive Yuan. To reduce our Scope 2 GHG emissions, VIS will continue to promote various energy-saving plans (Please refer to "Energy Management") to reduce GHG emissions per unit area of wafer. VIS's GHG reduction goal is to reduce GHG emissions per unit area of wafer to 20% lower than the 2015 level by 2020; currently, VIS has reduced GHG emissions by 14.7%.

### GHG Information Disclosure

VIS ensures the transparency of its GHG information by disclosing relevant GHG emission and reduction information via various types of channels. VIS performs

self-inspection during the disclosure process and obtains external opinions to continue to improve GHG emission. Information disclosure channels include the following:

- Since 2005, VIS has utilized third-party verification for annual greenhouse gas (GHG) emissions and submitted annual reports of GHG emission to the Taiwan Semiconductor Industry Association (TSIA) and EPA, Executive Yuan.
- Since 2014, VIS has voluntarily participated in the Carbon Disclosure Project (CDP) to disclose climate change-related information on a yearly basis which includes information on GHG emissions and reductions. In addition, we conduct inspections and make improvements on risks and opportunities relating to legal regulations, natural disasters, finance, and business operations. External

bodies are able to access relevant information on the CDP website.

- Since 2014, VIS has made its annual CSR reports publicly available on the Company's website, which includes information disclosures which are of concern to our customers and investors.

### Energy Management

VIS facilities mainly use electrical power, followed by natural gas, and rarely use any other form of energy source. Due to its small size, the development of renewable energy in Taiwan is difficult. Existing power plants are mainly fossil-fuel power stations that require coal or natural gas to generate power. Although power companies have tried to increase their efficiency in power generation, they are still emitting substantial amounts of carbon dioxide. To address this problem, the Taiwan government is currently expanding and implementing renewable energy projects involving wind power and solar energy; VIS is very optimistic about these projects. However, before the completion of these projects, reducing carbon dioxide emission through energy conservation is critical for Taiwan's industries. Through the continuous promotion of energy conservation, not only are we able to reduce GHG and carbon dioxide emissions, but also save on costs.

VIS continues its efforts in lowering carbon emissions. Between 2017 and 2018, VIS's power consumption per unit area of wafer reduced from 0.74 kWh/cm<sup>2</sup> to 0.67 kWh/cm<sup>2</sup>, which was a 9.4% reduction. (Note)

Note: VIS acquired Nanya Technology's completed 8-inch wafer fabrication facility (currently VIS Fab 3) on July 1, 2014. Starting in 2015, the power consumption per unit area of wafer also applies to VIS Fab 3.

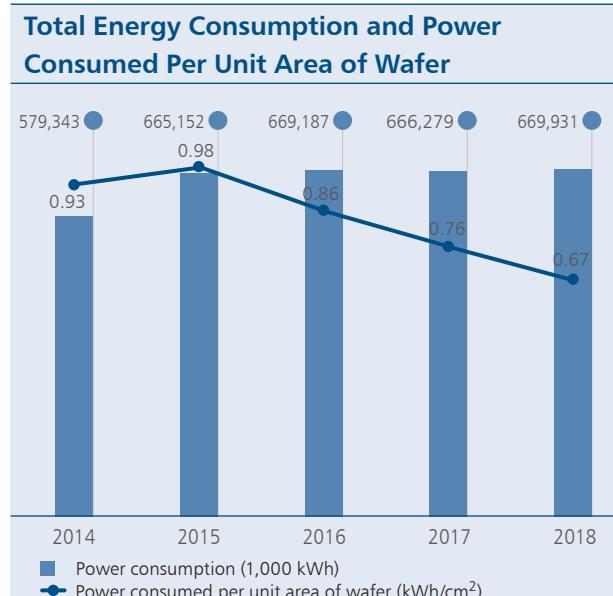


Furthermore, VIS continues to conserve energy within its public facilities. In response to government's ESCO plan, VIS has invested in replacement of large energy-conserving equipment, enhancing some of the UPS equipment efficiency from 94.4% to 99%, increasing energy utilization rate by 4.6% (Note); installed heat pumps on external air-conditioning box in the cleanroom; purchased energy-saving production equipment; and adopted variable-frequency control systems in vacuum pumps of manufacturing equipment to conserve energy. With respect to conserving natural gas, the external dew point temperature has been used to set the optimal operational level of boilers within each plant. All three fabs have obtained ISO 50001: 2011 certification in 2017, and continue to pass SGS third-party certification. The systematic management processes of ISO 50001: 2011 have enabled VIS to identify new opportunities for improving our energy-saving capabilities, thus enhancing the Company's energy conservation efforts. Through continuous implementation of multiple energy-conservation schemes, VIS invests in more energy-conserving measures and responds to national energy conservation goals. According to MOEA's No.10304603580 Announcement on August 1, 2014, "Goal of 1% Power Consumption Reduction by Energy Users," VIS has achieved power-saving rate of over 1% in each of the past five years.

Year	Annual Consumption (KWH)(A)	Energy Saved (KWH) (Note 1)(B)	Power-Saving Rate (%) (Note 2) (C)
2014	579,343,178	14,121,970	2.4%
2015	665,151,616	34,807,041	5.2%
2016	669,187,185	13,398,931	2.0%
2017	666,279,086	12,154,982	1.8%
2018	669,931,396	21,135,294	3.2%

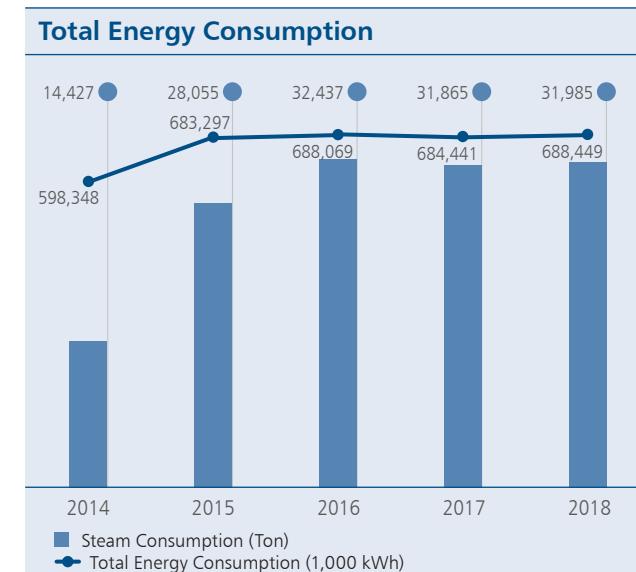
Note 1: Energy saved is the sum of all energy-saving results from the year's energy conservation measures

Note 2: Power-Saving Rate C=B/(A+B)x100%



Note 1: Diesel is not used for product manufacturing, and therefore is not included in the calculation

Note 2: Statistical boundary for energy consumption includes all fabs of VIS.



Note 1: Total Energy Consumption includes procured steam consumption

Note 2: Conversion unit is 1 m³ of natural gas=10.4 kWh; 1 kWh=3,600 KJ

## 2018 Primary Energy Conservation Measures and Their Effectiveness

The most efficient means of conserving energy and reducing carbon emission is by lowering power consumption. Through real-time equipment management, while maintaining proper usage/quality and normal equipment operations, optimal operating conditions can be achieved, which shortens power-usage time and reduces power consumption. Moreover, equipment efficiency can be increased by using high efficiency equipment (lighting, transformers, motors, air compressors, etc.), and by installing variable-frequency devices in electrical equipment



to reduce energy consumption and improve the power factor. VIS's energy-conservation measures in 2018 resulted in 21.13 million kWh in reduced electricity consumption, which was an energy conservation rate of 3.2% and translated to NT\$46.7 million in savings. The table below summarizes various practices employed by VIS in 2018 to conserve energy.

Category	Energy Conservation Practices
Energy conservation of utility equipment	<ol style="list-style-type: none"> <li>1. Switched off office air-conditioners 2 hours earlier</li> <li>2. Improved heat dissipation efficiency of cooling water tower by replacing heat-dissipating fillings</li> <li>3. Installed variable frequency converters for the water supply pump for the front-end filter in the ultrapure water system</li> <li>4. Reduced the flow speed of the air conditioners in office areas</li> <li>5. Conserved energy consumption of chiller pump during winter under energy saving mode</li> <li>6. Reduced the number of UPW reclaim water pumps</li> <li>7. Reduced the pressure of the ice-water supply pump</li> <li>8. Reduced air leakage rate inside the cleanroom and implemented the MAU air replenishment energy conservation operations</li> <li>9. Improved the DI Water Pump energy conservation measures in the UPW system</li> <li>10. Reduced the static pressure in the MAU fan</li> <li>11. Gas/Chemical/Dry Pump hot exhaust removal/GEX Exhaust energy conservation operations</li> <li>12. Replaced general lightings to LED</li> <li>13. Replaced malfunctioning motors with high-efficiency motors for energy conservation</li> <li>14. Replaced CDA dryer desiccant to increase operating efficiency</li> <li>15. Shut down PCW equipment for energy conservation</li> <li>16. Control and manage Sub FAB lighting for energy conservation</li> <li>17. Replaced MAU fan outlet with two-way outlet to reduce pressure loss and save energy</li> <li>18. Replaced CDA compressor rotors to increase operating efficiency</li> <li>19. Replaced CDA desiccant dryer with heating dryer for energy conservation</li> <li>20. Reduce the operations of the C/R MAU for energy conservation</li> <li>21. Use steam boilers to supply water and increase the temperature in the tank for energy conservation</li> <li>22. Increase UPW chilled water temperature by 0.5°C for heat exchange for energy conservation</li> </ol>
Energy conservation of production facilities	<ol style="list-style-type: none"> <li>1. Installed insulation layers in the CDO scrubber chamber to reduce heater usage</li> <li>2. Reduce P5K tool H.X temperature SP</li> <li>3. MK8 UPLA energy saving solution: Down Flow SPC</li> <li>4. Shut down and suspend the use of the VMB exhaust ventilation for energy conservation</li> <li>5. Reduce the PCW flow in the 2 FNC Polyimide Curing RCU</li> <li>6. Endura MOCVD scrubber (hot air type) scrubber change to (absorption type) scrubber</li> <li>7. Switched the coolant compressor in the HE Chiller to a heat exchange type</li> <li>8. Cease the use of the transferred auxiliary pump for the ULTM equipment</li> <li>9. Purchased energy efficient dry pumps for new manufacturing machines</li> <li>10. Replaced Alcatel with Ebara EVM-102N-BE pump</li> <li>11. Placed DRM auto season for online automatic operations</li> <li>12. Moved out the FNC pump test cabinet</li> <li>13. Reduced the yellow light chemical box damper</li> </ol>

### Energy Management Plans

VIS's energy management plans are as follows. We aim to conserve 10% less energy per unit area of wafer by 2020 than the amount consumed in 2015. As of the end of 2018, VIS has reduced energy per unit area of wafer to 31.6% lower than the level of 2015.

Project Name	Implementation Year
Replaced all facility lighting with LED lights to conserve energy and reduce carbon emission	2019
Replaced or added new variable-frequency air compressors	2019
Replaced heating dryer with adsorption dryers	2019
Replaced refrigerant oil in ice-water machines with polarized refrigerant oil to enhance the unit's operational efficiency	2019
Discarded uninterrupted power systems with poor efficiency, replaced them with high-performance equipment	2019
Replaced old manufacturing equipment or added high-efficiency motors	2020
Replaced uninterruptible power supply systems with new high-performance equipment	2020
Discarded transformers with poor efficiency, replaced them with high-performance equipment	2020
Installed CHP/CWP variable-frequency control in chillers	2020
Chiller energy conservation - Replacement of old machines	2021
Installed solar and wind power facilities to provide some electricity for lighting	2021

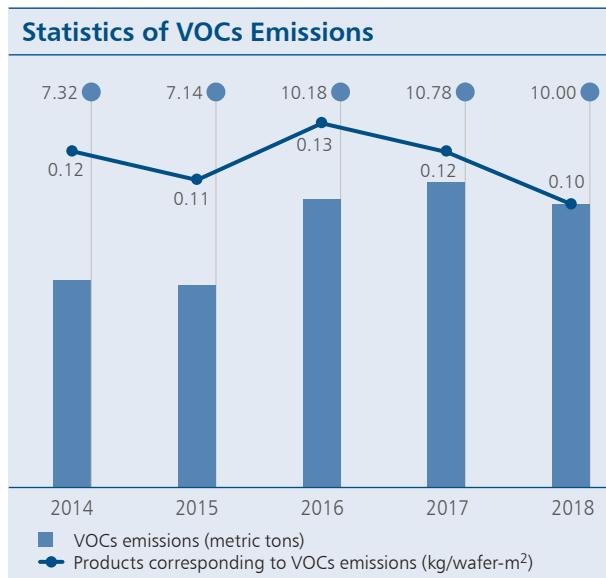
### 3.7.3 Air Pollution Control



The air pollutants generated by the semiconductor industry are VOCs and acidic or basic gases. VIS adopts classification at source, and best feasible technology in multiple phases to implement air pollution control. Then VIS processes the pollutant before effectively treating it using high-performance control equipment. The content of pollutant emitted into the atmosphere is less than (or conforms to) the amount specified in government regulations. Based on VIS's annual test results, the concentration and emission of air pollutants were substantially lower than the permitted amount allowed by the EPA of Executive Yuan.

Proper backup systems, including emergency power, have been setup to ensure normal operation in the event of equipment failure, thereby reduce the risk of abnormal discharge of pollutants. Equipment for processing VOCs uses clean, natural gas as fuel, but it is also equipped with other fuel supply systems. If problems arise with the supply of natural gas, backup fuel can be used instead to ensure the smooth operation of our pollution prevention facilities. According to the statistics of air pollution emissions, all VIS plants have VOCs systems that are equipped with rotor processing equipment. In 2018, the average removal efficiency of VOCs in plant areas was 93.43%, which was better than the 92% established by the environmental impact assessment best available control technology.

VIS has set the goal for 2020 to reduce VOCs emissions per unit area of wafer by 10% compared to the 2015 level. By 2018, VOCs emission per unit area of wafer has been reduced by 4.7% lower than the 2015 level.



At VIS, natural gas and minor amounts of diesel fuel are used (for power generators). According to estimated air pollutant emission coefficients of NOx and SOx formulated by the EPA with respect to the semiconductor industry, VIS reported NOx emissions of 19.8 metric tons and SOx emissions of 9.34 metric tons in 2018.

### 3.7.4 Water Resource Management and Water Pollution Prevention

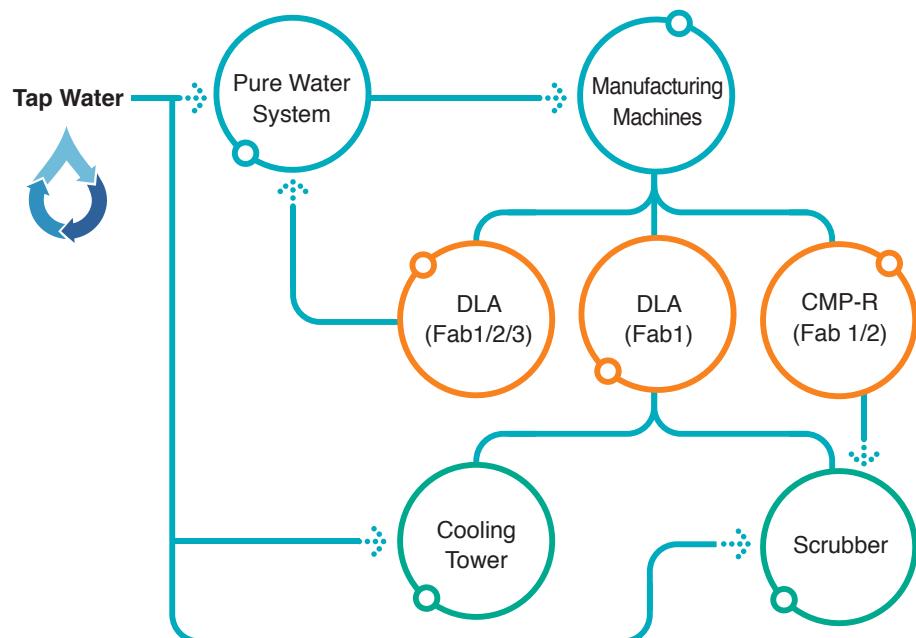
Located within the Hsinchu Science Park, the VIS's Fab 1 and Fab 2 typically use tap water supplied from the Baoshan Dam and Baoshan Dam No. 2. The wastewater generated within these two plants is preprocessed inside the plants in accordance with regulations, and then treated in the Hsinchu Science Park wastewater treatment facilities

before being discharged. Fab 3 is located in Taoyuan City, using water supplied from the Shihmen Dam as its water source; its wastewater is processed and verified to conform with the water discharge standards, then discharged into Taoyuan's Takeng River. The impact of climate change has increased the likelihood of droughts and floods in Taiwan, further increasing the risks of water shortages and floods. Therefore, the management of water resources, water recycling, and response measures during water shortages are critical.

In terms of water resource management, VIS has developed the "VIS water vehicle transportation contingency response plan during water shortages" based on the status and condition at each plant as well as the practices of other foundries in order to lessen the impact of water shortages on production processes during periods of low rainfall. This response mechanism can be activated in the event of water shortages to minimize impacts on production. VIS maximizes the reuse of water discharged from its manufacturing processes. Based on the characteristics of the discharged water, VIS has established over 10 types of water discharge pipes according to water quality and user demands. Recycling systems are used to reduce wastewater discharge and ease the burden on the environment, as well as prevent the use of tap water as refills, thereby conserve water resources.



### Schematic Diagram of Water Recycling



In addition to setting a manufacturing recycling rate of 85% required by the science park as our goal, VIS also selected water-conserving manufacturing machines, ensured effective diverting and discharging water drainage pipes, constructed various water recycling systems, and persisted in promoting water-conservation measures, in order to reduce our reliance on tap water. In 2018, VIS's Fab1 and Fab 2 plants recorded an average water recycling rate of 86.4% and 85.3%, respectively, which are both superior to the 85% in the standards set for Science Industrial Park in Taiwan. Fab 3 is located in Taoyuan and outside the Science Park; however, Fab 3, once acquired by VIS, started implementing plans for water recycling. The water recycling goal for Fab 3 in 2018 was 75%, and Fab 3 achieved 77.0% water recycling rate.

Note: The water recycling rate is calculated on the basis of each plant's water equilibrium diagram; therefore, company-wide water recycling rate was not calculated).

With regard to the volumes of water recycled from the production process between 2018 and 2015, Fab 1 increased by approximately 10.3%, Fab 2 increased by around 5.2%, and Fab 3 increased significantly by 133.7%. From 2015 to 2018, VIS has accumulated 31.55 million metric tons of recycled water.

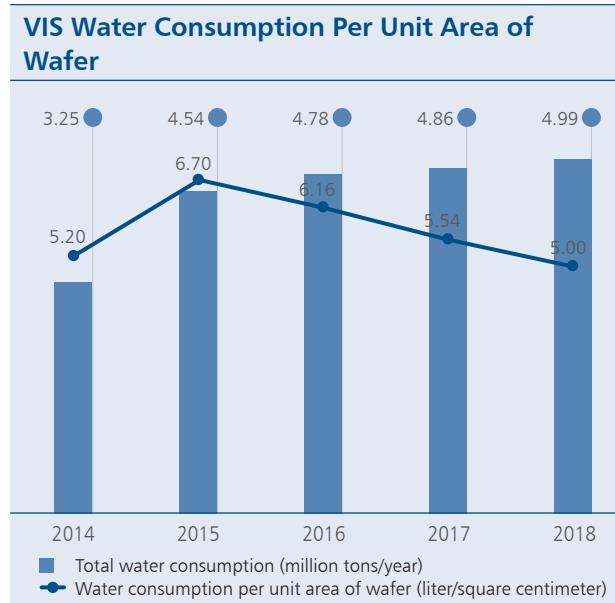
Year	2014	2015	2016	2017	2018
Fab 1 average water recycling rate (%)	87.8%	86.9%	86.8%	86.7%	86.4%
Fab 1 amount of recycled water (million metric tons)	2.69	2.51	2.69	2.71	2.77
Fab 2 average water recycling rate (%)	85.9%	85.5%	85.5%	85.4%	85.3%
Fab 2 amount of recycled water (million metric tons)	3.58	3.48	3.55	3.61	3.66
Fab 3 average water recycling rate (%)		70.5%	71.8%	76.7%	77.0%
Fab 3 amount of recycled water (million metric tons)		0.86	1.72	1.98	2.01
Total amount of recycled water (million metric tons/year)	6.28	6.85	7.96	8.31	8.43

Note: All water recycling rates at VIS Fabs are calculated based on Science Park Bureau's Water Balance Chart.

VIS has set the goal of reducing water consumption per unit area of wafer to 13% lower than the 2015 level by 2020. An examination of VIS's water consumption per unit area of wafer showed a rising trend in water consumption per unit area of wafer in 2015 due to the acquisition of Fab 3 in 2015. In the same year, Fab 3 also implemented the production water recycling improvement project. Therefore, the water consumption per unit area of wafer has dropped from 6.7L in 2015 to 5.00L in 2018, achieving approximately a 25.4% reduction of water consumption.



VIS's water conservation and recycling efforts are also reflected by the reduction of discharged wastewater. An examination of VIS's wastewater discharge per unit area of wafer showed a rising trend in wastewater discharge per unit area of wafer in 2015 due to the acquisition of Fab 3 in 2015. In the same year, Fab 3 also implemented the production water recycling improvement project, the outcome of which was reflected in a 34.2% reduction of wastewater discharge per unit area of wafer from 5.08L in 2015 to 3.34L in 2018 for every unit area of 8-inch wafer produced.



### VIS Wastewater Discharge Per Unit Area of Wafer



### 2018 Primary Water-Conservation Measures and Their Effectiveness

Due to the importance of water resources, aside from increasing its production capacity, VIS has also actively invested in and implemented various water conservation programs. The Company's 2018 water conservation measures are listed below.

Category	2018 Water-Conservation Measure
Water conservation at production facilities	Recycle and reuse 1B UPW UF concentrated water to original pool. Averaged 15 metric tons/day of water saved.

### Water Resource Management Plans

Water resource management plans of VIS are listed in the chart below. VIS has set the goal of reducing water conservation per unit area of wafer to 13% lower than the level of 2015 by 2020. By 2018, VIS has reduced water consumption per unit area of wafer to 25.4% lower than the 2015 level.

Category	Water-Conservation Measures	Implementation Year
Water conservation at public facilities	Altered WWTs sand filter tower backwash to ROR concentrated water to reduce the depletion of water resources	2020
	Recycled and reused water discharged from the west MAU	2020
	Adjusted the ROR recovery ratio	2021
Water conservation at production facilities	1B UPW UF concentrated water recycling	2018
	Water saving for change QDR idle	2019
	Recycled and reused discharged water from PB UF backwash	2020
	Adjusted the RO recovery ratio	2021

VIS's water pollution prevention strategy is focused on reducing the generation of pollutants, then recycling and treating water pollutants by using effective equipment to make sure that the quality of discharged water is better than or equal to the standards set by the government. VIS also continued to take measures in reducing the concentration of tetramethylammonium hydroxide (TMAH) and ammonia nitrogen (NH3-N) in water discharges in order to mitigate the harmful effects of water discharge.



VIS has installed water quality and quantity monitoring equipment at the discharge outlet of its wastewater treatment facilities to monitor and record changes in water quality and quantity. To prevent wastewater tanks from rupturing causing contamination of underground water, the Company also conducts sampling tests every year on the underground water within its plants, as well as the soil inside its facilities every 3 years. This ensures that wastewater discharge and underground water and soil conditions near the vicinity of the plant comply with monitoring standards.

The analysis results of discharged wastewater are shown in the table below, which indicates that the reliability of water treatment equipment at each plant was very high.

Regulated Items	Fab Location	Regulation Standards	2014	2015	2016	2017	2018
Concentration of suspended solids in wastewater (mg/l)	Within the science park (Fab 1/2)	300	9.7~185	8.2~114	9.0~50.5	6.8~170.0	5.9~44.5
	Outside of the science park (Fab 3)	30	-	1~15.8	1~15.9	2.3~18.3	2.3~18.4
Concentration of chemical oxygen demand in wastewater (mg/l)	Within the science park (Fab 1/2)	500	17.5~130.0	31.9~129.0	19.1~124.0	29.9~131.0	22.5~202.0
	Outside of the science park (Fab 3)	100	-	5.5~44.7	5.5~44.8	5.9~53.9	5.9~53.1
Concentration of TMAH in wastewater (mg/l)	Within the science park (Fab 1/2)	30	-	12.7	1.7~27.0	0.5~19.3	10.4~26.4
	Outside of the science park (Fab 3)	NA					-
Concentration of ammonia in wastewater (mg/l)	Within the science park (Fab 1/2)	50	-	42.77	25.2~72.4	8.3~46.1	12.7~37.5
	Outside of the science park (Fab 3)	75 (before 06/30/2015)	-	7.85~31.7	13.9~16.2	16.4~18.6	16.8~19.8
		30 (after 07/01/2015)		7.38~21.1			

Proper backup systems, including emergency power, of the wastewater treatment equipment at each facility have been setup to ensure normal operation in the event of equipment failure. The operation status of all VIS wastewater treatment facilities is closely monitored through a central monitoring system 24 hours a day, by personnel working in shifts. When abnormalities appear in water quality or exceed the predetermined threshold values, the system immediately issues a warning message, stops water discharge, and resumes operation only when the abnormality has been eliminated.

### 3.7.5 Waste Management

Waste management at VIS has shifted from the traditional approach of cleaning and disposing of wastes to an integration of resource management. VIS has designated professional technician for waste disposal management, and we consider waste as a valuable resource that must be recycled and reused. To facilitate sustainable utilization of resources, the primary principle of waste management is to reduce the use of processed chemicals, which in turn lowers waste output. Furthermore, we prioritize in the recycle and reuse of waste materials. We view other treatment methods such as incineration and burial of wastes as a last resort.

Our internal waste management has extended its focus from proper clearing and disposal of wastes to reducing waste at the source and recycling wastes. To reduce wastes production at the source, we adhered to the spirit of ISO 14001 to formulate detailed management regulations and encouraged employees to provide suggestions for reducing the use of resources in order to minimize waste production at the terminal end. In addition, VIS requires its employees to comply with requirements mandated for the classification, collection, storage, and clearance of wastes. VIS is committed to classifying and recycling the wastes it produces because wastes are valuable and reusable resources, which is why several waste treatment operators are willing to cooperate with VIS in handling our waste resources.

VIS has vigorously implemented multiple environmental protection programs in 2018 to recycle and reuse wastes.



#### ● Reduction in Waste Sulfuric Acid

Targeting the wet etching machines, VIS changed the chemicals used during pre-washing to water, reducing consumption of HF, ammonia water, hydrogen peroxide, hydrochloric acid, and sulfuric acid, resulting in reduction of sulfuric acid waste. VIS has reduced 4.38 metric tons of sulfuric acid waste annually, accounting for 0.5% of total volume.

#### ● Reduction in Waste Photoresists

Targeting the photolithography process, VIS changed frequency of spraying photoresists from once every 20 to 30 minutes to once every 2 hours, reducing the consumption of photoresists, and thus reducing amount of waste photoresists. VIS reduced an annual amount of 1.19 metric tons, accounting for 0.4% of total volume.

#### ● Reduction in Waste Filters

VIS water recycling systems use filter cartridges to filter impurities. In 2018, VIS adjusted the dosage and frequency of pesticide to prevent growth of organisms and blockage of filter cartridges, reducing a total of 3.87 metric tons of cartridge used annually.

#### Waste Reuse Methods

The waste we produce is mainly composed of acid waste, solvent waste, and sludge, most of which are physically or chemically treated into industrial raw materials or additives for cement or bricks for reuse. Containers that cannot be recycled are washed and reused. VIS employs waste disposal and recycling organizations to recycle usable metals (e.g., scrap metal, tin, aluminum). The

annual nickel-cadmium battery output volume follows the Basel convention specifications, which are then shipped to advanced countries by sea where they are recycled. No nickel-cadmium batteries were shipped by sea for recycling in 2018 due to limited volumes.

Concerning discarded computers, since 2009, VIS has worked in cooperation with Asus in the digital divide project to implement the "Renewable Computer Hope Project," with the hope of establishing a society that embraces resource recycling and cherishes the land we live on. In this Project, discarded computer products were recycled and repaired into operational computers, which were then donated to disadvantaged groups to reduce the digital divide in our society. To date, VIS has donated 6,176 computers and monitors, which is equivalent to the reduction of approximately 144 metric tons of carbon dioxide emissions or cutting down of approximately 12,062 trees. (Note) VIS will continue to monitor international legislations, customer demands, and potential future legal requirements to prepare for effective response measures.

#### Management of Waste Disposal Organizations

In the management of external waste treatment vendors, VIS conducts annual audits on cooperating vendors, completing auditing on 29 vendors in 2018. During the auditing process, we review the workplace safety and environmental protection practices, waste-related certifications, and onsite operations of our vendors' plants.

Moreover, the flow of their products and waste is also evaluated to ensure that material reuse, the products they sell, and their method of waste disposal conform to legal requirements. To strengthen the management system for waste disposal, we conducted "GPS tracking" to verify if there were irregular routes taken after each disposal. If abnormalities were identified, we contacted the waste disposal service provider immediately to find out the reason in order to prevent illegal dumping of waste material. VIS has teamed up with high-tech companies to formulate evaluation and audit regulations for waste treatment vendors, thus enhancing the quality of audits and facilitating selection of reliable waste treatment vendors.

#### VIS Waste Management Procedure



Note: The URL for the Asus Renewable Computer Hope Project is: <http://www.asusfoundation.org/recycling.aspx>



VIS Waste Disposal Organization Audit includes aspects of safety and health inspection, waste disposal/processing/recycling/reuse requirements, air pollution prevention and control, water pollution prevention and control, fire management audit, and onsite inspection. Main aspects of weakness include items under the categories of "Safety and Health Management," "Fire Safety and Fire Management," and "Onsite Inspection (see table below). Most of the organizations have weaknesses in the aspect of "Onsite Inspection": 8 vendors and 14 cases, which are shown in the table below. Some vendors did not have sufficient storage space, so that they could not resolve the issue of storing wastes in outdoor areas; other than that, all other weaknesses were improved and corrected in 2018. VIS will follow up on the issue of storing wastes in outdoor areas during audits in 2019.

Aspect	Weakness	No. of Cases
Safety and Health Management	Establishing workplace environmental monitoring report and improvement record	1
	Self-inspection of labor safety and health plan and record	1
	Special controls for high-risk operations, such as fire operation, high-elevation operation, and tank-entering operation not established or in the process of establishment	4
Fire Safety and Fire Management	No fire-prevention manager	2
Onsite Inspection	Inappropriate management of emergency response equipment or facilities	4
	Wastes stored in outdoor areas	3
	Fire safety system not open or not sufficiently managed	2
	Forklift equipment or operation deficiencies	2
	Waste labeling not meeting regulatory requirements	1
	Gas steel cylinders not fixed	1
	Erosion of platform railings	1

## Waste Management Goals

A waste reuse rate greater than 90% is required for all VIS plants. Monthly plant reuse rate reports are submitted to supervisors and environmental safety committee monitors to track our progress. In the future, we will continue to decrease our use of raw materials, seek qualified recycling organizations, and help these organizations develop advanced waste recycling technologies to achieve sustainable resource utilization, energy conservation, and carbon reduction.

To reinforce the validity of audits on waste treatment vendors, VIS signed the TSIA Convention for Waste Disposal and Reuse by High-Tech Industries in 2017 and participated in TSIA's auditing activities to reduce the risks of legal violations by waste disposal vendors.

VIS has continued to cooperatively develop technologies for recycling and reusing wastes, increasing the reuse rate to over 90%. Statistics up to 2014 included only Fab 1 and Fab 2, Fab 3 was not included until 2015. The reuse rate of wastes is determined by confirming the method of waste disposal when seeking waste treatment service vendors. If their method of waste disposal is by burial or incineration, then they are excluded from the calculation of reuse rate.

Category	2014	2015	2016	2017	2018
General industrial waste (metric tons/year)	2,589	3,215	3,117	3,302	3,660
Hazardous industrial waste (metric tons/year)	2,618	3,670	3,849	3,801	3,798
Amount of industrial waste recycled (metric tons/year)	4,842	6,216	6,302	6,421	6,749
Amount of industrial waste incinerated (metric tons/year)	363	667	647	675	677
Amount of industrial waste buried (metric tons/year)	2	2	17	7	32
Waste reuse rate (%)	93.00	90.28	90.47	90.39	90.49
Percentage of industrial waste incinerated (%)	6.97	9.69	9.29	9.51	9.08
Percentage of industrial waste buried (%)	0.03	0.03	0.24	0.10	0.43



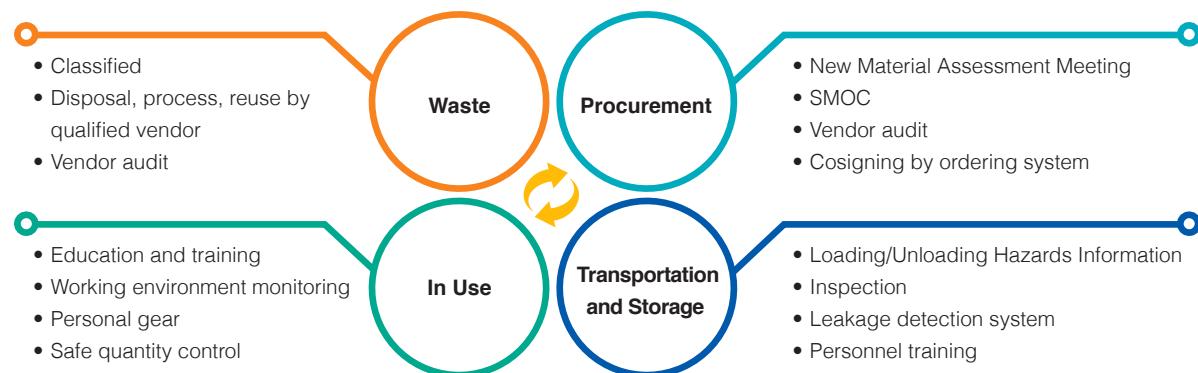
### 3.7.6 Safe Workplace

#### Safety and Health Management Practices

- Accident Investigation

VIS has established guidelines for reporting and investigation of accidents, so that all VIS employees and contractors can follow the procedures and report to related units within the shortest time after an accident occurs. Each unit, depending on their duties and responsibilities, will be responsible of dealing with the accident, and will work together to minimize the loss resulted from the accident. Accident sites of major incidents shall be maintained for accident investigation, in order to learn the causes and course of events to formulate necessary preventive measures, avoiding recurrence of same accidents and protecting the workplace safety of VIS employees and contractors.

#### Chemical Substance Management Framework



- Chemical Substance Management

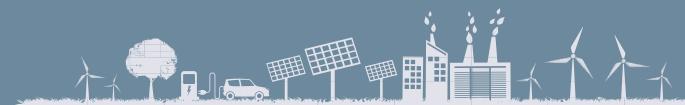
Whenever a new chemical is to be used, it must first be reviewed at the New Material Assessment Meeting to determine its hazardous characteristics and operational safety. All transportation, storage, and use of chemicals at the site of operation shall be monitored and controlled and exposure assessment shall be conducted according to Hazard Communication Plan, Hazardous Production Substances Management Regulations, Workplace Environmental Monitoring Regulations, and Personal Protective Gear Management Regulations. All new employees, upon reporting to the Company, will immediately attend a 3-hour hazard communication training, teaching them hazardous substance labels and SDS, and informing them characteristics of gases/chemicals, and important notices during operations.

- Process Changes Management

In the event of any changes to a process or machine/facility, the responsible unit completes a review of the changes by following the Safety Management of Change, and the Safety Management of Change Review Committee identifies the new risks that may arise from such change and implements prevention measures. The SMOC review results and safety checkpoint for each implementation stage are equipped with e-system auxiliary tools to facilitate control and tracking operations. In 2018, 81 applications for changes were submitted and reviewed; among them, 27 reviewed proposed changes required inspections before relaunch, which were all completed. This ensured that safety uncertainties resulted from the changes were all effectively controlled.

- Safety Control During Machinery Installation

When machines are purchased and installed, the Company adheres to the VIS Installation and Restarting Safety, Quality Inspection and Control Procedures, which require equipment suppliers to provide SEMI-S2 certificates in advance, and a key inspection to be conducted during the installation process in accordance with the Safety Level-1–3 inspection form for each stage. All newly purchased machinery must comply with SEMI-S2 standards, as well as any domestic regulatory requirements. The Company also takes the necessary steps to improve the safety of existing machinery based on the safety notices provided by equipment suppliers. When installing new equipment or testing/restarting equipment, the VIS Installation and Restarting Safety, Quality Inspection and Control Procedures will be followed to manage safety risks. Before



manufacturing equipment is delivered to the production line, equipment engineers are required to meet with engineers from the Environmental Safety Department to conduct equipment safety checks as described on the left column and complete relevant inspection forms for future reference.

#### • High-Risk Operation and Zone Control Procedures

Operations implemented at the plants, workplace safety, general affairs, laboratory, and equipment departments that may cause employee injury, electrical shock hazard, fire hazard, and hazardous gas/chemical leakage are defined as Level-1 high-risk operations. Operations that cause system shutdown and production interruption are defined as Level-2 high-risk operations. To implement operational management by zones, high-risk zones have been defined at each plant to strengthen control over the operational safety within these zones and the construction application procedure.

Before the execution of a key project during the implementation of Level-1 high-risk operations, environmental safety department and VIS project leaders and their supervisors as well as supervisors from the contractor must supervise the operations at the site to ensure that these operations conform to procedural and safety requirements. A total of 880 Level-1 high-risk operations were applied for and inspected onsite in 2018. Prior to the operations, all three parties jointly ensured that all safety related preparations were done onsite. This way, operators worked more diligently, and enabled the operations to be executed smoothly.

#### Disabling Injury Statistics

In 2018, there were 6 cases of employee injuries at VIS, all of which were minor injuries caused during operation. At the time of occurrence, employees were immediately cared for and asked to rest at home until full recovery before they can be reinstated. Furthermore, all aspects of the work site were managed and hardware facilities were inspected. There were no cases of work-related fatalities in 2018. It indicates that VIS had effectively educated its employees about hazard awareness, and to immediately report any unsafe conditions and help make improvements so that all employees could grow with the Company and have the right to work in a safe, worry-free environment. In addition, VIS's contractors continued to report "0" cases of workers suffering disabling injuries over the past five years.

	2014		2015		2016		2017		2018	
	Male	Female								
Number of Disabling Injuries	0	2	0	0	2	3	3	5	3	3
VIS Disabling Injury Frequency (Note 1)	0	0.22	0	0	0.20	0.30	0.27	0.45	0.26	0.26
VIS Severity of Disabling Injuries (Note 2)	0	1	0	0	1	5	2	2	2	3
Total Injury Index (Note 3)	0	0.02	0	0	0.01	0.04	0.02	0.03	0.02	0.03

	2014		2015		2016		2017		2018	
	Male	Female								
Number of Contractor Disabling Injuries	NA		0	0	0	0	0	0	0	0
Contractor Disabling Injury Frequency (Note 1)	NA		0	0	0	0	0	0	0	0
Contractor Severity of Disabling Injuries (Note 2)	NA		0	0	0	0	0	0	0	0
Contractor Total Injury Index (Note 3)	NA		0	0	0	0	0	0	0	0

The severity of the injuries was assessed by professional doctors based on laws and regulations; Total work days lost due to a disabling injury refers to the total number of days an employee is unable to work due to temporary or permanent disabling injuries; the total number of cases excluded traffic accidents occurred during commute to and from work.

Note 1: Disabling injury frequency = (Number of disabling injuries / Total work hours (including hours of overtime)) X 1,000,000.

Note 2: Severity of disabling injuries = (Total work days lost due to disabling injury / Total work hours (including hours of overtime)) X 1,000,000.

Note 3: Total injury index =  $\sqrt{(\text{Disabling injury frequency} * \text{Severity of disabling injuries}) / 1,000}$ .

#### Emergency Response

Newly hired engineers are required to attend emergency response skills training in order to be able to understand the Company's emergency response framework and the use of relevant equipment. Depending on the nature of their work, after completing initial training, engineers will also need to go through comprehensive follow-up training on suiting up and equipment operation with the rescue/support teams so that they can reinforce their emergency response skills. The Company conducts annual contingency drills within the Engineering Department at the section level as well as unannounced



composite drills at the division level. Moreover, nighttime and weekend unannounced emergency response team (ERT) drills are carried out to assess ERT readiness for regular and contingency responses as well as the ERT's assembly capabilities.

VIS conducted a total of 10 ERT drills/training sessions in 2018. New hire training, equipment training, practice fire-fighting skills, commanding officer and team leader training, post-earthquake evaluation drills, unannounced response drills, Engineering Department response drills, EMT-1 training, flood prevention training, and evacuation drills. The Company also implements regular commanding officer certification programs in order to strengthen the command system. A total of 299 sessions were held; 13,753 participants completed training.

Training items	Content Executed
1. New hire training	Practical training on emergency response equipment/apparel/equipment and the emergency response framework
2. Equipment training	Practice drills on the use of protective equipment enable employees to understand how to operate and use the equipment correctly
3. Practical fire-fighting training	Practice drills on the use of fire extinguishers and fire hydrants enable employees to understand how to operate and use the equipment correctly
4. Commanding officer and team leader training	Examples of actual cases are utilized to illustrate contingency procedures so as to enhance team members' capabilities in hazard analysis, decision-making and determination, as well as integration and coordination
5. Post-earthquake assessment drill	Members are assigned tasks to carry out post-earthquake building inspections and assessments following ERT assembly
6. Unannounced response drills	ERT assembly and task assignment
7. Engineering Department contingency training	Regular ERT exercises and ad hoc contingency handling drills are carried out under the scenario of single or multiple disaster events
8. EMT-1 training	Emergency medical technicians at the basic level (EMT-1) are available on standby to work with plant nurses to execute employee rescue operations at all times
9. Flood prevention drills	Drills involving ERT assembly for flood prevention and task assignments are completed before the start of the flood period
10. TE evacuation drills	Actual evacuations based on simulated disaster scenarios are carried out to familiarize employees with the escape routes



Engineering Department contingency training



Flood prevention drills



ERP drill



Unannounced response drill



Hazard and chemical disaster drill

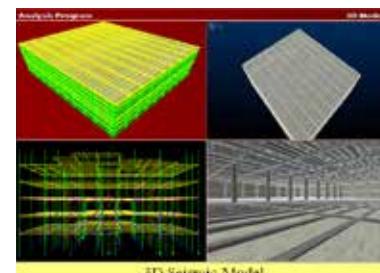


Administration area evacuation drill

## Loss Prevention

### ● Earthquake Prevention Management

In addition to establishing a comprehensive disaster management plan and emergency response procedures, VIS has taken steps to improve our earthquake safety and protection. In collaboration with National Taiwan University's Yen Tjing Ling Industrial Research Institute in 2007, we completed earthquake simulations on all existing buildings at Fab 1 and Fab 2 following the Building Code - Building Structure Section; and Building Earthquake Resistance Design Standards and Description; we also carried out seismic upgrades for building structures and equipment based on the simulation results (our main buildings can sustain a magnitude 7 earthquake). Our Fab 3 can sustain a magnitude 5 earthquake in compliance with building regulatory requirements. Evaluations began in 2017 and earthquake simulations





are expected to be carried out in 2018. In future, we will continue to carry out seismic upgrades in future constructions so that main Fab 3 buildings can withstand a magnitude 7 earthquake.

Concerning earthquake-resistant machines, in 2012, we worked with an insurance brokerage company to evaluate the earthquake resistance of machines and equipment at wafer plants using mechanical analysis. We also carried out reinforcement construction projects based on the evaluation results. VIS seeks to enhance the seismic resistance capabilities of our buildings and onsite equipment through making continuous improvements.

In 2016, we followed the Ministry of the Interior Building Earthquake Resistance Design Standards to establish a set of tools for evaluating the shock-proof foot piece of VIS machines/stock shelves, and to define the types and specifications of shock-proof foot pieces. We subsequently selected suitable shock-proof foot pieces for installation based on the evaluation results.

The shock-proof fixtures for existing machinery in Fab 1 and Fab 2 have been completed and shock-proof fixtures for new machinery shall be completed upon installation. As Fab 3 was newly acquired, the Company has continued



to install shock-proof foot pieces for machinery in the plant. In 2018, a total of 40 IMP foot pieces, 300 CVD foot pieces, 164 PVD foot pieces, and 364 ETCH foot pieces were installed. The installation is expected to be fully completed in 2020.

### Flood Prevention

VIS and a property insurance company have carried out flood inundation potential simulation for the plants. We completed the setup of floodgates for low-lying areas inside the plant in accordance with results of simulations. Installation for Fab 1 and Fab 2 have been fully completed. 10 floodgates have been installed in high-risk areas in Fab 3 (elevator shafts and basements) in 2017. VIS established the "Flood Prevention and Rescue Plan Implementation Regulations" with the hope that by taking early prevention, preparation, and emergency response measures, we will be able to lessen the potential impact on company operations and employee safety during a natural disaster.



Floodgate Installation

To accommodate the climate conditions in Taiwan, preventive measures are taken in a timely manner during rainy seasons (May–September) to ensure the safety of the Company's employees, equipment, and facilities. Matters pertaining to flood prevention drills are as follows:

- Flood prevention drills: Annual flood prevention training and drills are conducted for the benefit of ERT members

to ensure full and complete implementation of flood control procedures.

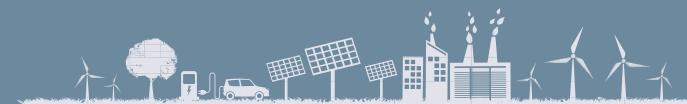
- Members of the drill: Plant managers act as the team leader and members are composed of the ERC as well as supervisors of plant management and human resources departments.
- Content of the drill: Various preventive measures and drills are implemented to ensure the conformance and effectiveness of the implementation

### Triple-A (Damage Prevention Certification Standard)

VIS has established certification standards for damage prevention, incorporating the Triple A system to provide a basis for compliance for equipment facility operations inside the plants. Employees' awareness on damage prevention is elevated through non-periodic audits and requirements for damage prevention are accounted for in the initial engineering planning for process machineries, compartmentalization, process supply, process production, and waste discharge.

A total 15 discrepancies were discovered in 12 non-periodic audits performed in accordance with Triple A standards in 2018. 14 discrepancies have been improved, whereas budget has been allocated for one discrepancy to be improved in 2019 to comply with regulations and requirements for damage control.

The Company purchased Fab 3 in 2014. To raise the safety of the old plants, we continued to install and upgrade damage prevention engineering structures



and simultaneously integrate the value of the Triple A certification system. Onsite inspections were carried out by insurance experts, thereby improving the following matters regarding damage prevention:

#### Continual Improvement

- Installed Very Early Smoke Detection Apparatus (VESDA) in the cleanroom and return air grilles
- Completed improvement projects for fire prevention sprinklers
- Automatic sprinklers construction for flammable pipes

#### General Pipeline Examinations

A pipeline is tantamount to the body's blood vessel system, and safety inspection of pipelines has always been a challenge for risk managers of technological plants. Operating guidelines for the regulation of high-risk pipeline connection operations have been established in the industry, including application for high-risk pipeline operations and onsite supervision of main pipeline operations.

To ensure the safety and management of pipelines, we have clearly defined the chemicals and materials needed for special gases in our regulations to facilitate pipeline examination projects. We continue to work with and learn from industrial experts, and constantly evaluate the pipelines of precision instruments. The procedure of a pipeline examination project is described as follows:

- Define pipeline risk value, with values 3 to 1 denoting high to low risk level.
- Refer to regulatory documents, such as those of Semiconductor Equipment and Materials International

(SEMI) and the National Fire Protection Association (NFPA).

- Establish testing methods for personnel operation, process supply, and post-processing discharge
- Inspect pipelines by using instrument testing
- Conducting pipeline examinations through instrumental tests
- Pipeline self-inspection mechanism was established in 2018: Through PDCA method, VIS continued to inspect and make improvements to reduce risks of pipeline abnormalities. For all identified abnormalities, true causes have been founded for analysis and improvement. In 2018, self-inspection founded 182 discrepancies, and improvements were made for 175; VIS will continue to allocate budgets for the remaining 7 discrepancies to complete improvements in 2019.

#### Business Continuity Plan

Since 2007, we have established a business continuity plan (BCP) for manufacturing plants in order to establish improvement strategies through risk evaluation. Meanwhile, we performed operation impact evaluations through periodic drills and took preventive initiatives accordingly. We have also developed a crisis communication mechanism and a manpower backup plan. Through well-planned risk and crisis management, we hope to minimize uncertainties while ensuring the continuity of business operations in case of an emergency. In addition, we have established a VIS management system suitable by following the ISO 22301 Continuity Business Management System.

In addition to regularly examining the validity of the response process, VIS conducts BCP drills at the company level once every two years, depending on the potential impacts. In 2017, VIS conducted BCP drills for Virus Attack (WannaCry). Through the drills, we inspected recovery strategies and horizontal communication procedures after the occurrence to verify effectiveness of BCP strategy.



BCP Drill

#### 3.7.7 Contractor Management

Contractor management is one area VIS highly regards, and the Company has always been strengthening the safety, health, and environmental awareness of its contractors, and implementing supervision, management, and audit system, to not only protect safety of contractors, but also avoid losses of the Company. All VIS contractors must sign "Contractor Construction and Safety Management Affidavit," to fully understand necessary safety measures of the environment of contracted constructions, be responsible for all the safety and health related matters during the construction period, and commit to conducting self-inspections. All contracted personnel must also sign "VIS Contracted Personnel Safety, Health, and Environmental Management Form" to learn VIS workplace ESH rules and regulations.



Currently, VIS has a number of ESH mechanisms in place, such as accident reporting/investigation, patrol and inspection by units, and process observation, which also include all contractors; all employees are responsible for the overseeing of ESH related matters, and when a contractor is found to have any discrepancies, it must be immediately reported to Emergency Response Center. Every desktop phone in the Company had the extension number of ERC labelled, and once ERC receives a report, it will immediately gather related units to verify the situation onsite, and correct any unsafe behaviors, and follow up on and make improvement to the situation through various ESH mechanisms.

Operational hazards for all contracted works must be informed in advance. In addition to signing the aforementioned documents, contractors must also conduct risk assessment and job safety analysis (JSA), to identify possible hazards and preventive measures before, during, and after the operation. Risk assessment and JSA results must be promoted during the safety meeting before the construction and daily toolbox meetings, so that all personnel involved understand clearly the hazards and important safety reminders relating to the construction.

VIS strictly controls the qualification of contracted operational personnel. All contracted operational personnel must have labor insurance and complete 6 hours of workplace safety training as required by laws. For those engaged in Level-1 high-risk operations, all personnel must have more than 2 years of related experience. For general

constructions, contracted personnel must have at least one year of experience before obtaining long-term worker certificate. High-risk operational personnel must be over the age of 20 and recognized by contractors. Contractors engaged in legal operations must possess related and valid licenses. Contractor supervisor (for constructions requiring over 5 people) and ESH personnel (for constructions over 30 people) must have Class 3 Labor Safety and Health Manager qualification. VIS has established online management systems, such as contractor management system, contractor hazard reporting system, and construction safety permit application system; information of contractors that are to enter the fabs for constructions, such as company information, personnel information, and hazard information (such as safety meeting minutes), must be first established and approved by designated personnel. In addition to verification of the aforementioned qualifications, contracted operational personnel must also complete "VIS Contractor Safety and Health Education Training". All the online systems are integrated, and only the names of those supervisors and safety and health personnel meeting the qualifications will appear on the list of "Construction Safety Permit Application System" for applicants to select and appoint.

In addition to conducting trainings for its contractors, and informing them various operational hazards, safety reminders, and related rules and regulations, so that every contracted worker understand how highly VIS regards safety and human lives, VIS also requires all the employees of its contractors to complete "Supervisor Training" and

attend retraining every two years. The purpose is for them to fully understand the responsibilities of supervisors, how to better supervise, and safely complete their tasks. To ensure safety for all operations, all high-risk operations and dangerous operations must be first applied; when the applications are approved, Inspection Sheet should be printed for the contractor supervisors to inspect the working environment, and re-inspected by responsible VIS personnel. Before high-risk critical operations, contractor supervisors, responsible VIS unit heads, and safety personnel should make sure that there is no problem; depending on the degree of risk, contracting unit may monitor and supervise the constructions using dash cams. VIS ERC will monitor the progress and inspection (during and after construction) of all high-risk and dangerous operations. All fab directors, engineering unit heads, and labor safety representatives shall conduct inspections irregularly; if they discover any issues, they must make immediate correction and include the issues for follow-up improvement. VIS conducts contractor evaluation every year, and the results will be reported at each fab's ESH Committee Meeting and the Company's ESH Committee Meeting, and submitted to procurement units as future procurement references.

The Company also values contractor health management. VIS has established medical care unit (including qualified nurses), qualified emergency rescue personnel, EMT-1 technician, and emergency rescue equipment, to offer immediate medical assistance during emergencies. For contractors that station in VIS for an extended period of



time, with their permission, VIS medical care unit will regularly conduct health examination for their employees, and monitor and provide health instructions to those found to have abnormal outcomes.

VIS plans to launch the "Hand in Hand" program in 2019 to enhance performances of contractor ESH management, expanding ESH audit and guidance system from partners to all contractors (such as construction/on-site contractors), and normalize "Contractor Audit System," to narrow the gap between the level of ESH management at VIS and its contractors, and prevent construction accidents to achieve win-win situation.

## 2018 VIS Contractor Management Performances

Dangerous Operations: 10,132 Cases High-Risk Operations: 880 Cases		
Before	During	Annual Achievement (Safe)
1. VIS employee supervisor training: 18 sessions/316 participants 2. Contractor education and training: 51 sessions/approximately 4,500 participants 3. Hazard Information: <ul style="list-style-type: none"> <li>• Safety meeting 794 sessions</li> <li>• Daily toolbox meeting 11,012 sessions</li> </ul> 4. Contractor personnel qualification review: Over 20,000 (over the years) 5. Pre-construction check: 11,012 6. Confirmation by three parties (supervisor + head + labor safety) prior to high-risk critical operations: 880	1. Supervisor inspection: every time (11,012) 2. Inspection by all levels of employees (supervision by all employees) <ul style="list-style-type: none"> <li>• Discovered and corrected 14 issues.</li> </ul> 3. Confirmation by three parties (supervisor + head + labor safety) prior to high-risk critical operations: 880. <ul style="list-style-type: none"> <li>• Discovered and corrected 23 issues.</li> </ul>	1. 0 injuries and fatalities due to contractor operations. 2. 0 incidence of loss of asset due to contractor operations.

## VIS Contractor Management—Shield of Safety





### 3.8 Friendly Workplace

#### 3.8.1 Talent Recruitment

##### Talent Recruitment Guidelines

- Strategy

Through fair and open recruitment channels without discrimination, VIS seeks talented individuals who share a common goal with the Company regardless of their race, gender, age, religion, nationality, or political views. We focus on an individual's character and skills; all employees must conform to the Company's four core values: integrity, customer oriented, value oriented, and commitment.

- Commitment

Since its inception, VIS has always considered "talented workers" to be the Company's most valuable asset. VIS has created a challenging, fun, and learning-oriented work environment to attract outstanding professional talents from various fields, thereby enabling the Company to become a diverse, innovative organization with stable growth.

- Vision

To Be The Specialty IC Foundry of Choice



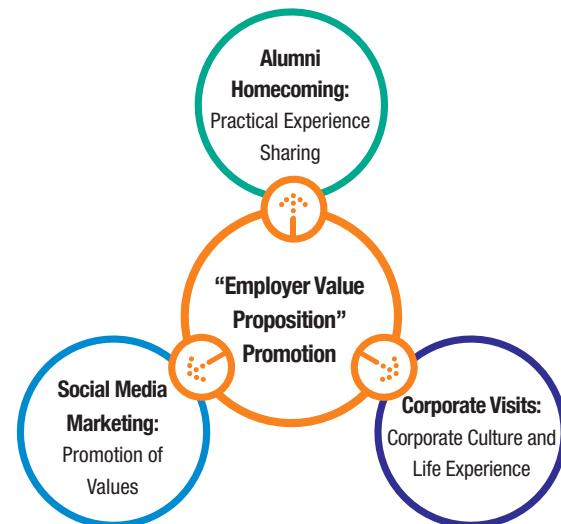


## Recruitment Results and Goals

2018 Result	2019 Results	2019 Plan
Turnover Rate 6.5%	Turnover Rate <6.3%	<ul style="list-style-type: none"> <li>Creating a challenging and fun working environment The Company will continue to learn employee opinions through various communication channels, and respond to employee feedbacks; create employee cohesion through Family Day, year-end party, fab activities, and journal publication. In 2019, VIS will produce videos on 10 business principles to further educate the employees the Company's business philosophy.</li> <li>Comprehensive enhancement of executive management knowledge and skills To enhance management capability and inspire team potential, the Company plans to open 5 management classes in 2019 targeting entry-level, mid-level, and high-level executives, to enhance management skills in different aspects. The objectives of the classes: strengthen team communication, incubation of subordinates, project management, and problem analysis, so that the executives can become better leaders.</li> </ul>

## Employer Brand Diverse Marketing

Employer brand is a major factor influencing talent recruitment, VIS is actively managing employer brand via various channels to explore the talent market, nurturing future employees in the next 3 to 5 years.



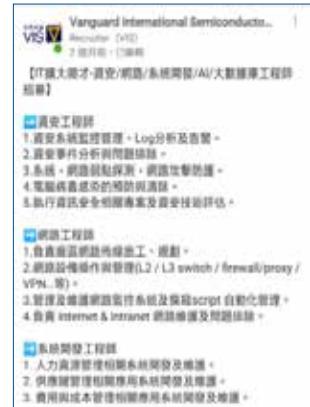
Methods adopted by VIS include homecoming by VIS executives to alma maters to promote the Company and share practical industrial experiences; inviting students of universities and graduate institute to visit the Company; gathering fans of recruitment fanpages via social media.

VIS set up a VIS Fanpage on Facebook in 2014 to share company news, various employee activities, and recruitment information; by 2018, the fanpage has accumulated 2,371 fans, and every post reached an average of 1,500 people. The main audience was between ages 18 to 44.

Furthermore, the LinkedIn page, "Vanguard International Semiconductor Corporation," set up in 2017 has accumulated 3,478 people in network, and each post is viewed by an average of 5,439 viewers. Both social media have become main channel of employer brand that reached out to job seekers and the public.



VIS facebook fanpage



VIS LinkedIn fanpage

VIS adopts diverse employer brand marketing strategy, so that students, potential job seekers, and the public can understand the Company's business philosophy and corporate culture through various types of information, in aim to attract talents who share our vision.



### Practical Industrial Experience Sharing

Since 2018, VIS cooperated with Chung Yuan Christian University and Yuan Ze University to organize alumni homecoming activities. Outstanding VIS employees who were alumni of the schools shared knowledge on semiconductor supply chain and experiences at work. A total of 189 students participated in the project, and 46% of them proactively submitted resumes and expressed willingness to join VIS upon graduation.



Alumni Homecoming – Yuan Ze University

### Corporate Culture and Life Experience

Since 2018, VIS cooperated with National Tsing Hua University, National Central University and Yuan Ze University to organize corporate visits, encouraging students to go beyond campus and visit the Company's clean rooms to explore the operations within and understand the future development and trends of the semiconductor industry. Through sharing by high-level executives, the Company's core values and spirit are conveyed.

The activity was well-received in 2018, and was participated by 120 students. Over 90% expressed willingness to join VIS upon graduation.



Corporate Visit

### 3.8.2 Talent Recruitment and Retention

Through performance review, VIS awards outstanding employees promotions and raises; moreover, VIS offers competitive benefits to recruit and retain competitive talents. In terms of benefits, VIS advocates balance between work and life, and by organizing diverse company

activities and health seminars, VIS establishes a friendly working environment. VIS also provides employees diverse channels to reflect their opinions, and holds trainings and classes to encourage employees to continuously enhance own capability and further develop personal career.

### VIS Workforce

Complying with international human rights conventions, and human rights and employment related laws and regulations, VIS conducts hiring process: no child labor, and no discrimination against races, religions, skin colors, nationalities, ages, genders, sexualities, marital status, looks, disabilities, and other situations protected by laws.

By the end of 2018, VIS had 5,579 total employees. As high as 99.61% of VIS employees were official employees, with less than 1% unofficial employees. In terms of job positions, 388 were executives, 2,597 were professional workers, and 2,594 were technicians. Due to factors such as nature of the industry and supply and demand of the job market, the majority of executives and professional workers were men, whereas most of the technicians were female. Gender ration was relatively balanced, with 48.22% male and 51.78% female.

As for age distribution, employees between ages 30 -50 accounted for the biggest population at 71.05%, followed by 30 and below at 22.5%, and then 50 and older at 6.45%. The average age of VIS workforce was 36.91.



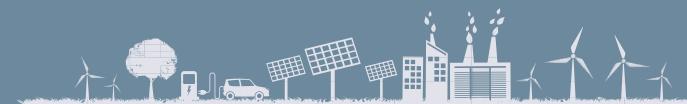
As for educational background, most of VIS employees were university graduates, accounting for 45.62%, followed by those with a master's degree at 26.90%, and then senior high school (or lower) at 26.67%. The smallest group was employees with PhD.

As for nationality, since operational and manufacturing headquarters were all in Taiwan, 93.39% of VIS employees were Taiwanese, with 6.61% foreign employees, and most of these foreign employees were technicians from the Philippines.

## VIS Workforce

Category	Employment Type	Male		Female		Group Subtotal and Percentage	
		Number of People	Percentage of Group	Number of People	Percentage of Group	Number of People	Percentage of Total Workforce
Subtotal by Gender		2,690	48.22%	2,889	51.78%	5,579	-
Nationality	Taiwanese	2,671	51.20%	2,546	48.80%	5,217	93.39%
	Foreign	19	5.25%	343	94.75%	362	6.61%
Position	Executives	325	83.76%	63	16.24%	388	6.95%
	Professional workers (indirect labor)	1,959	75.43%	638	24.57%	2,597	46.55%
	Technicians (direct labor)	406	15.65%	2,188	84.35%	2,594	46.50%
Number of Employees Protected by Labor-related Laws	Full-time employees	2,664	48.10%	2,874	51.90%	5,538	99.27%
		10	52.63%	9	47.37%	19	0.34%
	Part-time employees	16	72.73%	6	27.27%	22	0.39%
Age	30 and below	701	55.86%	554	44.14%	1,255	22.50%
	30-50 years old	1,824	46.01%	2,140	53.99%	3,964	71.05%
	50 and above	165	45.83%	195	54.17%	360	6.45%
Education Background	High school or below	228	15.32%	1,260	84.68%	1,488	26.67%
	University / College	1,177	46.25%	1,368	53.75%	2,545	45.62%
	Master's Degree	1,245	82.94%	256	17.06%	1,501	26.90%
	PhD	40	88.89%	5	11.11%	45	0.81%

Note: Full-time employees include 4 part-time employees.



## Domestic and Foreign Recruitment

In 2018, 891 new employees were hired and the employment rate was 16.6%. Of the new recruits, 47.9% were men and 52.1% were women. In terms of age distribution, most of the new recruits were 30 and below at 62.7%, followed by those aged 30-50 at 36.9%, while new recruits 50 years old or older accounted for the lowest percentage at 0.3%.

Note: Rate of new hires = Total number of new employees hired during 2018 / {(number of employees at the beginning of the year) + (number of employees at the end of the year) / 2}.

## 2018 New Employees by Nationality and Age

Category	Group	Male		Female		Group Subtotal and Percentage	
		Number of People	Percentage of the Group	Number of People	Number of People	Percentage of the Group	Number of People
Nationality	Taiwan	409	67.6%	196	32.4%	605	67.9%
	Philippines	14	5.0%	268	95.0%	282	31.6%
	Other	4	100%	-	-	4	0.5%
Age	30 and below	280	50.1%	279	49.9%	559	62.7%
	30-50 years old	145	44.1%	184	55.9%	329	36.9%
	50 and above	2	66.7%	1	33.3%	3	0.3%
Total		427	47.9%	464	52.1%	891	-

Note: New recruits refer to non-fixed term full-time employees who have completed the initial registration process.

## 2018 Rate of New Hires of New Employees by Gender and Age

Category	Group	Number of New Recruits	Ratio of New Recruits in Each Group
Gender	Male	427	15.5%
	Female	464	17.9%
Age	30 and below	559	54.0%
	30-50 years old	329	8.3%
	50 and above	3	0.8%
Total		891	16.6%

Note: Rate of new hires of each group = Total number of new employees in each group hired during 2018 / {(number of employees in each group at the beginning of the year) + (number of employees in each group at the end of the year) / 2}.

## Employment of Persons with Disabilities

VIS employs persons with disabilities. In 2009, VIS began employing massage therapists with disabilities, and actively established quality and diverse job opportunities. In 2018, VIS offered 47 positions, 2 more than 2017. In addition to current jobs, VIS is also developing jobs such as "office cleaning" for the future.

## Turnover Rate

In 2018, 363 employees had resigned and the turnover rate was maintained at 6.6% to 7.5% in the last three years. For a company that exhibited continued performance growth and substantial increase in the number of employees, the results remained relatively stable and healthy. To examine the 2018 turnover rates more closely, the average turnover rate was 9.1% among male employees and 4.6% among female employees. By age group, the average turnover rate was 10.3% among employees under age 30, 5.7% among those between 30 to 50 years old; and 5.6% for employees at 50 years of age or higher (including 11 retired).

## Turnover Rate – Gender

Year	2016		2017		2018	
	Gender/Item	Number of People	Turnover Rate	Number of People	Turnover Rate	Number of People
Male	178	7.7%	254	10.3%	237	9.1%
Female	143	5.7%	127	4.9%	126	4.6%
Total	321	6.6%	381	7.5%	363	6.7%

Note 1: Turnover rate for the year = Number of employees resigned during the year / {(Number of employees at beginning of the year) + (Number of employees at year-end) / 2}.

Note 2: The turnover rate was calculated based on former full-time employees, and did not include employees that are on unpaid leave or retired employees.

## Turnover Rate – Age

Year	2016		2017		2018	
	Age/Item	Number of People	Turnover Rate	Number of People	Turnover Rate	Number of People
30 and below	138	14.4%	105	9.9%	129	10.3%
30-50 years old	178	4.9%	268	7.2%	214	5.7%
50 and above	5	1.9%	8	2.6%	20	5.6%
Total	321	6.6%	381	7.5%	363	6.7%



To protect workers' employment rights and interests, the Company follows the Labor Standards Act and clearly states workers' rights in the Company's employee handbook. Employers seeking to terminate labor contracts must do so in accordance with the laws and regulations, and an advanced notice must be given:

- 10 days of advanced notice for employees who have worked continuously at the Company for 3 months to 1 year.
- 20 days of advanced notice for employees who have worked continuously at the Company for 1 to 3 years.
- 30 days of advanced notice for employees who have worked continuously at the Company for more than three years.

In recent years, the Company has not terminated any labor contracts due to major operational changes.

### Overall Compensation

VIS regards its shareholders and employees as the Company's most crucial member, and is committed to provide its shareholders with an above-average return on investments and its employees with above-average benefits compared to our competitors.

Compensation is determined based on the employee's professional skills, understanding of responsibilities, job performance, and long-term dedication. To maintain the overall competitiveness of the Company's compensation system, VIS conducts annual salary surveys to evaluate the market compensation standard and overall economic indicators, making appropriate adjustments for the employees. This allows employees to share the fruits of the Company's operations. VIS allocates no less than 10% of the

Company's annual profit for employee compensation, and the recipients include employees meeting certain criteria.

In 2018, there were 7 managers at VIS, and 5,208 non-managerial full-time employees. Annual average salary was NT\$1,211,800. (In accordance with Taiwan Stock Exchange Corporation Rules Governing Information Filing by Companies with TWSE Listed Securities and Offshore Fund Institutions with TWSE Listed Offshore Exchange-Traded Funds) The information above have been audited by Deloitte Taiwan on April 30, 2019.

Employee compensation in 2018 was around NT\$1.17 billion, which was distributed after decision by the Board of Directors and approval of the Shareholders Meeting, to encourage employees to continue contributing to the Company.

The overall compensation will not differ due to gender, age, race, religion, political view, and marital status, and all employees are treated equally and fairly. VIS respects the principle of equal pay for both genders. In 2018, the ratio of compensations of basic level employees was nearly 1:1.

### Ration of Total Compensations of Male and Female Employees

Position	Male	Female
Executives	1.05	1
Professional Workers (Indirect)	1.19	1
Technicians (Direct)	0.97	1

### Benefits System

The Company offers benefits and leave policies superior to legal requirements, including insurance, flexible leave days, pension, emergency aids, wedding and child subsidies, funeral aids, birthday coupons, year-end party subsidies, discount stores, irregular group vacations, and club activity subsidies. Also, foreign and local employees enjoy the same benefits. There is no differential treatment to employees of different nationalities.



FTE Participating in Year-End Party



FTE Participating in Year-End Party and Winning Group and Individual Awards



### ● Comprehensive Insurance

As specified by laws and regulations, the Company provides all employees with labor and national health insurances to protect their basic rights and interests. Starting from their first day of work, employees are enrolled in the Company's high-premium group comprehensive insurance policy, which includes life, accident, medical, and cancer insurances. The policy also covers the employee's spouse and children. The accidental insurance coverage can be extended to cover an employee's parents, so that employees enjoy full protection and can focus on their jobs.

### Leave Policies Superior to Legal Requirements

Type	Legal Requirement	VIS Policy
Leave	12 holidays annually	In addition to the 12 days, another 7 days of leave are given for flexible arrangement by employees
Special Holiday	Three days leave for those who have served over six months but less than a year	To care for new employees who have been with the Company for less than a year, one day of special holiday is given to employees who have worked at VIS for at least two months

### Compensations and Benefits of Non-Managerial Employees

Unit: NT\$ thousand

Item	2014	2015	2016	2017	2018
Employee Compensation and Benefits	5,701,159	5,812,567	6,453,548	6,437,992	7,590,795
Average Employee Compensation and Benefits	1,146	1,236	1,291	1,238	1,366

Note 1: Average number of employees is calculated by averaging the number of employees in the year (Annual average number of employees = sum of employees at the end of each month/12)

Note 2: Employee compensation and benefits refer to compensation, bonus, and benefits

### ● Balance between Home and Work

When a VIS employee needs to take extended leave to take care of young child, they can apply according to means listed in employee manual or HR regulations; in addition, the Company also provides consultation to help employees apply for extended leave in compliance with "Act of Gender Equality in Employment," and "Regulations for Implementing Unpaid Parental Leave for Raising Children".

In 2018, a total of 69 VIS employees submitted applications and were all approved. In 2018, 64 employees return from parental leave, and the reinstatement rate was 68.09%. Male employee reinstatement rate was 81.82%, and female employee reinstatement rate was 66.27%. The main reason for female employees not returning after unpaid parental leave was the need to take care of family (83%), whereas the main reason for male employees not returning was that they found another job (67%). Furthermore, the retention rate for those who had returned from unpaid parental leave and stayed for more than a full year was 89.86%: 83.33% for male employees and 90.48% for female employees.

### Unpaid Parental Leave and Reinstatement

Item	Total	Male	Female
2018 Number of Applications	69	4	65
2018 Number of Actual Reinstatements (A)	64	9	55
2018 Number of Supposed Reinstatements (B)	94	11	83
2018 Reinstatement Rate (A/B)	68.09%	81.82%	66.27%
2017 Number of Actual Reinstatements (C)	69	6	63
2017 Number of Reinstatements and Stayed for more than a Year (D)	62	5	57
2017 Retention Rate (D/C)	89.86%	83.33%	90.48%



### **Retirement System**

- **Comprehensive Pension System**

VIS complies with related laws and regulations to protect the retirement rights of its employees, regardless of old or new retirement systems.

For employees who opt for the new system, the Company allocates 6% of their salary into their personal Labor Insurance account every month; for employees who choose the old system, or those who choose the new system but still has seniority calculated in the old system, VIS has established a pension supervision committee according to related laws, and allocates 2% pension reserve every month. In 2018, 11 employees applied for retirement, and were all approved. Male retirees accounted for 54.55%, and female retirees 45.45%.

In addition to allocating pension reserve in accordance with the law, the Company also consults with professional accounting consultants to calculate and verify the amount of allocated reserve in order to safeguard the rights of our employees in the future.

### **3.8.3 Human Resource Development**

#### **Comprehensive HR Development and Incubation**

To incubate professional talents meeting the Company's needs and discover employee potentials, VIS has established a comprehensive talent development system according to VIS vision and strategic goals, providing learning resources such as training management system (Learning Passport), knowledge management platform and online learning platform, in order to tailor for each and every employee personal learning plan, providing them with comprehensive incubation class and diverse learning resources to further develop skills and enhance company competitiveness.

#### **Performance-oriented Management and Development**

The Company's performance management and development system is aimed to develop our employees' potential and strengthen the quality of our talents. Through cooperative participation, cooperation, on-going interactions, and communications between supervisors and their subordinates, we create an environment conducive to learning for continuous

development of employees, and the Company's strategic goals can be integrated with the employees' career objectives, thereby elevating an employee's individual performance as well as the overall organizational performance.

In 2018, we arranged lectures by instructors from the Company to provide employees with a deeper understanding of the spirit and process of performance management and development. We also help employees draft performance management plans and help supervisors conduct performance interviews. We trained 36 supervisors and 326 employees and we guide their goal setting and implementation. The class guided employees to understand the importance of setting goals, and they continue to make adjustment in annual performance evaluation to ensure consistency between organization business and personal development goals.

#### **Strengthen Employees' Interdisciplinary Capabilities**

VIS established the Individual Development Plan (IDP) with mandatory and optional courses. Supervisors also provide training resources for employees based on the requirements in their current roles and continue to improve employees' expertise and skills in different periods. In addition, the Company also supports employees' personal career development and expertise in their development.

#### **Rich and Diverse Learning Resources**

To cultivate the right professional talents needed by our Company, VIS has established a comprehensive talent development system that focuses on orientation training, management, competence, profession, external, and self-development training programs. Furthermore, The Company offers an e-Learning website, which includes almost 760 courses. Teaching materials are constantly being updated and includes topics on engineering technology, professional competence, management, and other professional courses. Through a complete learning mechanism with rich and innovative content, employees are able to expand their knowledge without limits on time and location. By learning at their own pace, employees can increase their competitiveness and create an autonomous learning culture for the company. By the end of 2018, 71,000 persons/times have participated in the e-Learning courses.



In 2018, the total time allocated for internal training was 152,171 hours, and the total number of attendees was 128,964. On average, each employee received approximately 27.28 hours of training, and the total training cost was nearly NT\$7 million.

### 2016 – 2018 VIS Training Index

Year	Number of Employees (individuals)	Total Training Hours (hours)	Average Training Hours	Total Number of Participants (Times)
2016	5,009	142,304	28.41	114,871
2017	5,215	178,769	34.28	138,881
2018	5,579	152,171	27.28	128,964

### 2018 VIS Training Index (By Employee Type)

Year	No. of Employees	Hours of Training	Average	Times
2018	5,579	152,171	27.28	128,964
Female	2,889	46,161	15.98	45,753
DL	2,188	30,233	13.82	30,597
IDL	701	15,928	22.72	15,156
Male	2,690	106,011	39.41	83,211
DL	406	5,818	14.33	5,716
IDL	2,284	100,193	43.87	77,495

Note: Hours of Training is rounded to the nearest integer.

VIS implemented "Internal Lectures" in all regions in 2018 and 31 trainees from all regions (including 16 professional lecturers and 15 management training lecturers) participated in the training program to expand the education scope and quality, and track seed lecturers' progress. As for engineering training for new engineers series was launched in all fabs; the intensive training responded to the large number of new employees and those serving

alternative civilian service. In 2018, a total of 2,749 people attended the training, which was a 140% increase from 2017 (1,143). A wide variety of environmental, safety, and health courses were held, in addition to emergency medical technicians (EMT-1) courses so that employees of all units are equipped with first aid capability. In total, 184 employees have received certification, and this number is still increasing, as a total of 250 is projected for 2019. The Company has arranged training courses on quality improvement practices, such as two sessions of the Six Sigma Course, through which 78 participants received training and are expected to obtain green belt certification in 2019.

The Company also continued to improve knowledge management (KM) by hosting internal KM activities. Our team participated in the MOEA Industrial Development Bureau's "Knowledge Management Competition" and brought home silver (2016) and bronze (2017) medals. The organizer of the project was also invited by the China Productivity Center, Taiwan Semiconductor Industry Association, and other institutions to share related measures on knowledge management and exchange opinions with other companies in the industry. The Company also hopes to share the introductory experience to other companies as references to cultivate more talents for Taiwan and increase the country's competitiveness.

In terms of management courses, the Company uses the "management competency models" to plan courses for supervisors on all levels. A total of 711 attendances were recorded for the supervisor training for courses for 7 different management competencies including talent development, personnel management, and customer-oriented measures. The Company has also invited Professor Shih-Chang Hung from the EMBA program of National Tsing Hua University to serve as the lecturer for "Strategic Innovation" to let employees learn to adopt the perspective of the strategic management and analyze how companies should respond to changes in industries and technologies.

In addition, the Company also invited Mr. Roger Kung, former president of Motorola's Asia operations, to hold a workshop again this year. The workshop delves into topics such as growth in adversity and improving the efficiency of teams (a total of 152 people attended this workshop). To strengthen customer-oriented ideals, the Company also organized 2



sessions of “customer-orientation sharing sessions” and targets were expanded to include 67 basic level executives at the fabs. The exercises and case studies were provided to improve the skills of first-line supervisors in interacting with customers to satisfy customer expectations and requirements.



Management internal lecturer training: using practical experience and examples to make class more interesting



Professional executive lecturer training: through diverse examples and methods, professional knowledge can be acquired more easily



Mid-level executive management class—enhancing leadership skills through scenario management training



Workshop—examines management issues such as team communication and paradigm shift

### 3.8.4 Human Rights

VIS has always complied with or go beyond the requirements of laws and related international human rights regulations when it comes to employment, appointment, hours, compensation, and benefits, including: all employees are working at VIS voluntarily and have the right to terminate the employment any time, and no child labor. Hours, minimum wage, overtime pay, labor insurance, health insurance, group insurance, employee benefits and severance pay/pension are all in compliance with local laws and regulations.

Also, VIS supports humane treatment of employees, including: dignity and respect with no discrimination, no sexual harassment in any form, physical penalty, mental or physical threats and verbal abuse, and VIS respects employees' right of association according to local laws.

#### Human Rights Policy

VIS complies with local laws and regulations of all sites of operations, and has formulated human rights protection policy to treat all employees with respect in accordance with “Corporate Social Responsibility Best Practice Principles for TWSE/GTSM-Listed Companies,” “The UN Global Compact,” and “RBA Code of Conduct”.



## Human Rights Topics and Measures

Human Rights Topics	Actions	2018 Results
Provide safe and healthy working environment	<ul style="list-style-type: none"> <li>“Zero accident, and no occupational disease” are goals of management. VIS complies with laws and regulations, and international conventions, in building a safe and healthy working environment.</li> <li>All employees participate in safety and health related works. Control ESH risks from the sources to facilitate safety and health.</li> <li>Enhance safety and health responsibility and awareness through communication and education to foster culture of safety and health.</li> <li>Through health examination and lifestyle survey analysis, employees are categorized for follow up and management, in aim to prevent potential health risks and enhance overall wellbeing.</li> <li>Combining Corporate Values, health examination analysis, and employee health needs, VIS launches health promotion activities and employee assistance plan, encouraging employee participation and creating joint goals of healthy workplace.</li> </ul>	VIS promoted free flu shots in order to provide safe and healthy working environment. A total of 2,400 employees received flu shots in 2018, accounting for 43% of all employees.
Eliminate illegal discrimination to ensure equality of employment opportunities	<ul style="list-style-type: none"> <li>VIS supports that employees shall enjoy human rights as advocated internationally, and shall be treated with dignity and respect, and no discrimination. VIS does not tolerate any inhumane treatments, such as sexual harassment, physical penalties, mental threats or verbal abuse.</li> <li>Promote and implement internal control procedure, respect local labor laws. When reviewing job applications, VIS will not discriminate against anyone based on race, class, language, thought, religion, political view, nationality, birthplace, gender, sexuality, age, marital status, look, facial features, and disabilities.</li> </ul>	Starting from recruitment, VIS complies with all laws and regulations for its employment procedure and eliminates all discriminations. In 2018, zero employee made discrimination related complaint.
No child labor	<ul style="list-style-type: none"> <li>VIS obeys labor laws and does not hire child labor. Interviews are conducted to make sure that employees are at least 18 years of age. All documents and personal information will be reviewed when new recruits report to VIS.</li> <li>VIS has never employed any child workers.</li> </ul>	Starting from recruitment, VIS complies with all laws and regulations for its employment procedure and does not hire children. In 2018, no child was hired.

Human Rights Topics	Actions	2018 Results
No forced labor	<ul style="list-style-type: none"> <li>VIS respects local labor laws and regulations, as well as employees' free will to work. VIS never forces or coerces any employee for labor.</li> <li>All employees are voluntarily working at VIS, and can terminate the employment anytime.</li> </ul>	In 2018, VIS received no appeal of forced labor.
Help employees to maintain physical and mental health and balance work and life	<ul style="list-style-type: none"> <li>Offer employees diverse art and culture, health, parent-child, and group activities, to facilitate interpersonal interactions and enrich the idea of “work-life balance”.</li> <li>Publish journal to report all activities and serve as communication channel between the Company and employees.</li> <li>Provide open communication channels, and care hotline, and respect employee opinions, and care for employees to create harmony in employer-labor relation.</li> </ul>	VIS has established 21 clubs. 2018 Family Day was held at Lihpao Resort in Taichung, and a total of 3,928 employees and family members participated in the event. The year-end party was held in two separate sessions at Hsinchu Gangnan Restaurant. A total of 5,532 people participated

The aforementioned human rights topics have passed 2016 NXP audit and 2017 Dialog audit, and have earned OHSAS 18001 and TOSHMS/CNS 15506 certifications.

## Human Rights Evaluation

All human rights related measures of VIS are in line with international rules and regulations, including “UN Universal Declaration of Human Rights,” and “RBA Code of Conduct”. VIS commits to ensure workplace safety, and all current, contracted, and temporary employees are treated with respect and maintain ethical practices. VIS also puts emphasis on employee benefits and shareholder interests, and gives back to the society. VIS establish positive employer-employee relationship and creates highly participatory working environment, ensuring that VIS code of conduct meets international standards.

## Employee Communication

VIS strives to establish proactive and positive employee relations, and values two-way communication. VIS offers executives and employees an environment for open communication, in order to build harmony employer-employee relationship. VIS has also established diverse channels for employees to reflect opinions, which have been clearly and effectively informed to all employees for access. VIS responds to, deals with, and follows up on every case swiftly and confidentially. Executives responsible for every channel, including



independent directors, chairman, president, vice president of ADM, vice president of finance, CLO, and directors of the fabs, showing how much VIS values the opinions of its employees.

### Employee Opinion Channels & Ombudsman System

Channel	(TE Only) Speak Out	Employee Opinion Mailbox	Ombudsman Mailbox	Anti-sexual Harassment Mailbox	Audit Committee Mailbox Chairman Mailbox President Mailbox
Object	All TE	All Employee	All Employee	All Employee	All Employee Stakeholder (External)
Scope	Working Environment Leadership Management Cooperation	Working Environment Management/ Regulations Emergency Working/ Psychological Counseling	Major Management Workplace Bullying	Sexual Harassment	Bribery, Fraudulence, Coercion Other Illegal Behaviors
Path	My Vanguard→Speak Out	My Vanguard→ Speak Out Dial Caring-dedicated Line: 1317 Line Add Friend→Search ID: @myvis	My Vanguard→ Speak Out	My Vanguard→ Speak Out	audit_committee@vis.com.tw vis_chairman@vis.com.tw vis_president@vis.com.tw
Owner	Fab 1: Senior Director, I.S. Goh Fab 2: Director, Ching-Ying Lee Fab 3: Director, Roy Yu QRA: Director, Marty Chiang	Vice President, Tommy Liu	Vice President, D.L. Tseng	General Counsel, Ellen Lin	Independent Directors Chairman, Leuh Fang President, Leuh Fang

From all the appeal channels, internal communication channels received 492 cases in 2018, including: 242 from "Speak Out," 234 from Employee Opinion Mailbox, 14 from Ombudsman Mailbox, and 2 from Anti-Sexual Harassment Mail box. All reported cases have been assigned to responsible units.

Cases from Employee Opinion Mailbox will be first investigated by HR, and then handed over to related units based on the reflected issues and recommended directions. Methods

and results will be communicated with employees in order to properly respond to their opinions and issues, before finally closing the cases. The proactive method has won recognition and support of all employees.

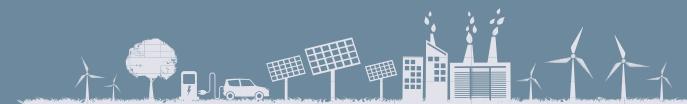
In 2018, employee feedback channel was fully systemized, to ensure that issues were monitored and dealt with. The level of the person responsible has been raised to show the Company's high regard for employee opinions. After the systemization of the employee feedback channel, the cases increased from 423 in 2017 to 492 in 2018, an increase of 16.3%.

Channel	2018		2017	
	No. of Cases	Percentage	No. of Cases	Percentage
Speak Out	242	49.2%	195	46.1%
Employee Opinion Mailbox	234	47.6%	223	52.7%
Ombudsman Mailbox	14	2.8%	5	1.2%
Anti-Sexual Harassment Mailbox	2	0.4%	0	0.0%
Total	492	100.0%	423	100.0%

After systemization of "Speak Out," the communication channel for technicians, in 2018, the cases received from the channel increased from 46.1% to 49.2%, an increase of 3%.

Furthermore, the system will issue daily reminders to all units dealing with the cases, to make sure that personnel responsible will continue follow up on the issues, and related matters will not be delayed or set aside. All links of the channels are published on the homepage of the Company's website for employees to access, and introduced in employee manual to inform new and current employees.

VIS aims to build harmonious employer-employee relationship, and complies with the Labor Standards Act. Since 2010, the Company has held at Labor-Management Conference at least once a quarter, where labor representatives elected by the workforce communicate with the management. Prior to the conference, employees will be given time to submit proposals. In 2018, employees at all three fabs submitted 11 proposals via the platform of



Labor-Management Conference. Related units compiled and collected information on the proposals, and officially reported and responded at the conference, so that both parties can discuss disputes and resolve any issues. All 11 proposals in 2018 have been replied, showing the Company's high regard for employees' proposals, and effective two-way communication.

When VIS acquired Sumpro's 8-inch fab in 2014, the union of Sumpro became VIS union, offering employees diverse communication channels. Furthermore, VIS holds two Chairman Communication Meetings every six months, including manager meeting for employees above grade 35, and Town Hall Meeting for all employees. Four Chairman Communication Meetings were held in 2018, with a total of 1,200 attendants. During the meetings, Chairman not only shared on company operations and future outlooks, but also replied to a total of 31 issues raised by employees prior to the meetings, in order to respond to their suggestions while conveying the thoughts of management.

### Frequency and Content of Diverse Communication Channels

Item	Frequency	Content	2018 Performance
Labor-Management Conference	Quarterly	Held at each FAB	VIS held a total of 12 sessions at 3 fabs. There were 11 proposals, and were all addressed.
Employee Feedback Channels	Irregular	Speak Out, Employee Opinion Mailbox, Ombudsman Mailbox, Anti-Sexual Harassment Mailbox, Audit Committee mailbox, Chairman mailbox, and President mailbox	Received 492 cases, and reply rate of 100%.
Chairman Communication Meeting	Semi-annualy	Two meetings are held every six months, inviting executives and employees from each fab to attend.	Held 4 Chairman Communication Meetings, and around 1,200 people attended. 31 proposals were responded at the meetings.

### Human Rights Risk Mitigation Measures

VIS promises to ensure workplace safety throughout the supply chain; all employees are treated with dignity and respect, and VIS operations promote environmental protection and adhere to ethics, constantly innovating and improving the programs. To reduce human rights risk, VIS actively launches improvement plans to build quality working environment,

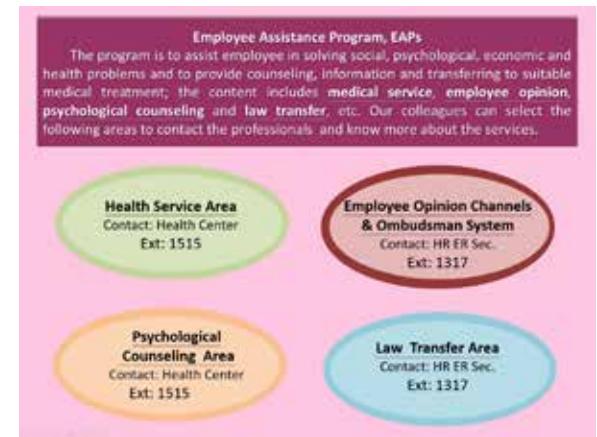
and create a more challenging, safe, and enjoyable workplace. To implement related human rights education. VIS provides employees human rights protection training so that they understand more about their own rights.

### Human Rights Protection Related Courses and Contents

Training	Course	Content	2018 No. of Trainees	2018 Total Hours	Percentage
Provide related promotions of laws and regulations at new recruit training and as materials of e-learning	VIS CSR	Prohibit forced labor, child labor, discrimination, and sexual harassment. Promotes hours management, humane treatments, and healthy and safe environment.	5,212	3,609.94	93.42%

### 3.9 Workplace Health Management

Complying with laws and regulations, VIS has employed professional medical staff and onsite doctors to jointly promote the comprehensive health management program including special care, health care, health promotion, and psychological consulting. VIS also offers comprehensive health care for its employees, and has won various government awards over the years. In 2018, VIS won "Dynamic Workplace Creativity" award from Health Promotion Administration, Ministry of Health and Welfare, Healthy Workplace certificate, Taiwan iSports Certification by Sports Administration, Ministry of Education, and Model Friend Enterprise Award by Taiwan Centers for Disease Control.



Employee Assistance Program, EAPs



### 3.9.1 Special Care

VIS offers special operations health examination every year, so that all employees can feel safe working. In 2018, 211 were engaged in special hazardous operations, and the examination rate was 100%. 32 people participated in the work-related cardiac and cerebrovascular diseases prevention management program, where nurses arranged for visit to fab doctors to offer personalized consulting and suggestions, so employees could proactively establish healthy lifestyle. Also, VIS regularly conducts muscle and bone surveys to proactively offer employees related care, ensuring workplace safety.

"Maternity Health Care" Management Project assessed maternity health of employees who were pregnant or had just had a baby, and adjusted their workloads and positions. VIS also offers exclusive parking spaces for mothers, as well as nursing rooms, so that pregnant or nursing employees could find balance between work and life.

### 3.9.2 Health Care

VIS offers employees health examination every year, which is more frequent than required by laws. In 2018, the overall health examination rate was 91.6%, and 4,156 people attended. For those who discovered abnormalities, nurses would make arrangement for them to visit the fab doctors to offer personalized health consulting, helping those with mid/high risk with medical



Pap Smear Test



Self-Paid Blood Test



Self-Paid Liver Screening

aids. VIS also conducts graded health management for hours management depending on the medical conditions of employees. In 2018, a total of 1,043 people visited fab doctors. Also, the Company organized irregularly health promotion activities, such as liver check, cancer screening, quitting tobacco, fitness test, and blood donation. In 2018, a total of 917 employees participated in these activities.

Disease prevention is also an important key to safety and health. VIS began offering employees free flu shots in 2004. To increase the vaccination rate, VIS invited directors of the fabs to serve as disease prevention ambassadors in 2017, and organized flash quiz campaign, educating employees accurate information and enhancing vaccination rate. In 2018, VIS held a flu prevention seminar tour to all departments, and total vaccinations increased to 2,349. Therefore, VIS won the recognition of Taiwan Centers for Disease Control for the third straight year, winning the "Model Friend Enterprise Award". VIS will continue marching forward on the journey of disease prevention, and join forces with our employees to build a healthy workplace.



Award of Quarantine Excellence

### 3.9.3 Health Promotion

Creating a challenging and fun workplace is one of the ten articles of VIS business philosophy. Since its inauguration in 1994, the Employee Welfare Committee has promoted sports and exercise, establishing a number of sports clubs, including cycling, basketball, badminton, running, and mountain hiking. To promote convenient and regular exercises in the company, VIS established the "Sports Class," where Chairman Fang was also a member, leading all employees to enjoy the class and exercise.



Sports Class



Through innovative methods, VIS helps employees to exercise and manage weight. Through technical weight-loss methods, VIS offers fitness tests, interactive App, sports wristband, and body fat measurement, and upload all data to the cloud, striving for team victory at the virtual race around Taiwan. Also, employees on shift could be part of the activity. A total of 69 employees participated, losing a total of 201kg. The innovative method of exercising and weight management have won VIS the iSports Certification by Sports Administration, and Dynamic Workplace Creativity award from Health Promotion Administration.



Fitness Tests

bulletin system, and online quizzes, VIS further educates employees on healthy diet. For ingredient tests, VIS regularly works with SGS and adheres to the highest standards, in order to take care of the Company's most important assets, so that our employees can enjoy safe and healthy meals.



Healthy Diet Labelling

As for stress relief, during the annual health exam, employees' will be assessed on their level of stress using a fatigue questionnaire as required by laws and regulations. VIS also provides massage services by blind therapists twice a week.

In 2018, the three fabs totalled 5,954 sessions. VIS works with professionals for psychological consulting, offering employees free consulting to safeguard both their mental and physical health.



Sports Affairs Council Active Enterprise Award

### Health Promotion Related Awards

- 2006 Sports Affairs Council Active Enterprise Award
- 2007 Bureau of Health Promotion Workplace Health Promotion – Sustainable Health Award
- 2009 Bureau of Communicable Disease Control-Non-Governmental Organization Excellence Award
- 2010 Bureau of Communicable Disease Control-Non-Governmental Organization Excellence Award
- 2011 Bureau of Health Promotion – Special Contribution Award
- 2012 Bureau of Health Promotion Self-Certification – Fab 1 Health Promotion
- 2013 Bureau of Health Promotion Self-Certification – Fab 2 Health Promotion 2014 Happy Enterprise Award
- 2014 Bureau of Health Promotion Workplace Exercise – Best Team Award
- 2016 Hsinchu Science3 Park Administration Workplace Equality Award
- 2016 Centers for Disease Control-Comprehensive Prevention Award
- 2017 Hsinchu Science3 Park Administration Workplace Equality Award
- 2017 Centers for Disease Control-Comprehensive Prevention Award
- 2017 Health Promotion Administration Dynamic Workplace Creativity Award
- 2017 Ministry of Labor National Occupational Safety and Health Awards – Enterprise Benchmarking Awards



Dynamic Workplace Creativity Award from Health Promotion Administration



iSports Certification by Sports Administration Award Ceremony



Bureau of Health Promotion Sustainable Health Award



Fab 3 Healthy Workplace Certification and Health Facilitation Mark



## 4/ Charity and Social Participation





## 4.1 Social Welfare and Donation

VIS has long cared for underprivileged groups by gathering different company resources and working with its employees collectively to actively participate in social welfare and charity activities. VIS has also launched internal charity fund raisings for donations to social welfare organizations, giving back to our society through concrete actions.

### Smangus Kindergarten

Located in Jianshi Township, Hsinchu county, the Smangus is a remote tribal village. Having no access to public transportation system, the village is secluded, and is known as the "Dark Tribe". An employee of VIS regularly climbed the mountains alone and carried supplies into the village over 20 years ago when Smangus was still the Dark Tribe, and therefore has become close friends with the indigenous people in the village. Through turns of events, VIS has established long-term mutual trust and friendship with Smangus since several years ago.

During a visit led by the Chairman with some colleagues to the village chief and elders, they talked about education for the children in the village, and realized that they were in desperate need of a kindergarten for pre-school children in the village, so that parents had a place to send their children to as they went to work during the day. A kindergarten would also better prepare pre-school children for elementary education outside the tribal village in the future.

Thus, VIS gathered the resources of the company and collective strength of the employees to launch the "Kindergarten for Smangus" Fundraising in January 2017. Within a few months, VIS raised approximately NT\$1.22 million. Combined with a donation of NT\$780,000 by the Company, VIS donated a total of NT\$2 million to help Smangus build a kindergarten, realizing the dream of the tribal children. VIS also recruited volunteers to visit the tribal village once a month, and spend time with the children; VIS also donated books and computers to the kindergarten.

In 2018, VIS volunteers continued to visit Smangus regularly to keep the children in the kindergarten company.



VIS volunteers read stories for children at the kindergarten in Smangus



The kindergarten classroom donated by VIS (Top Left 1) is the best place for classes and games



## Charity Year-End Party/Charity Donation

VIS has held year-end parties and made charity donations in five consecutive years. Every year, VIS invites underprivileged groups sponsored by social welfare organizations to dine together at the Company's year-end party, where our colleagues prepare exciting performances to share the joy. During the party, VIS also donates money raised by VIS employees to the social welfare organizations to help them provide services to more people in need.

To make it more convenient for the employees to donate money, VIS has established an internal charity donation platform, allowing employees to make donations by way of "deduction from monthly salary," and the Company will deliver the fund to social welfare organizations, as a way to encourage our employees to contribute back to our society through charity works.

At the end of 2018, VIS organized a banquet of 33 tables, and invited over 300 senior citizens living alone, who were aided by Old Five Old Foundation, Huashan Social Welfare Foundation, and Eden Social Welfare Foundation, to join the charity banquet. Under the theme of "Celebrating Chinese New Year with Elders," VIS called for its employees to donate money and partake in the charity activities, such as delivering foods to or spending time with the elders on New Year's Eve, organized by the aforementioned foundations. VIS employees responded to the fundraising with much enthusiasm, raising a total of



VIS Family Day donated a total of NT\$ 600,000 to three social welfare organizations

NT\$1,995,879, which was donated to the social welfare organizations at the year-end party by the Chairman on behalf of all VIS employees. At the party, in addition to the charity donation by employees, the Company also donated NT\$20,000 each to Syin-Lu Social Welfare Foundation, World Peace, and Sunshine Social Welfare Foundation. VIS also donated NT\$200,000 each to Children Are Us Foundation, St. Joseph Social Welfare Foundation, and Taiwan Fund for Children and Families on Family Day held in November 2018. In total, VIS and its employees donated to 9 social welfare groups in 2018, with a total amount of NT\$4 million, helping underprivileged groups including children of low-income families, children with disabilities, abused children, children with Down syndrome, children with intellectual disabilities, and people suffering from facial deformity.



At the charity year-end party, VIS not only donated a total of NT\$2.6 million to six social welfare organizations, Chairman Leuh Fang also invited senior citizens living alone from Huashan Social Welfare Foundation to join him on stage and sing together



## **Sponsoring “Focus on Taiwan” Broadcast Program on IC FM97.5**

To promote social harmony and in consideration of the future prospects of Taiwan, beginning in 2015, the Company provides annual sponsorship of NT\$2 million to IC Broadcasting Co., Ltd. to produce a series of broadcast program focusing on Taiwan, through which topics such as current global trends, education in Taiwan, talented individuals, social livelihood, energy resources, and environmental protection are discussed. There have been passionate responses since the program first aired.

From 2015 to 2017, the program was titled “The Future of Taiwan & Taiwan in the Future,” and was hosted by Professor Zong-ping Peng. In 2018, the program was renamed to “Focus on Taiwan,” and is now hosted by former news anchor Chun-hua Shen. In 2018, the topics covered by the program included: AI applications, air pollution, rise of women, mobile banking, and international volunteering. Also, the show invited guests to discuss competitiveness of Taiwanese youth and Taiwan’s soft power. A total of 52 episodes were produced annually, available not just on IC FM97.5, but also Apple Podcast and Google Podcast, allowing more people to freely download and access to maximize the influences of the program.

As Taiwan enters aged society, and the ever-more-serious environmental issues resulted from global warming, the program will discuss issues such as “elderly healthcare” and “climate change,” in 2019, where the host and guests will join the audience to focus on the future of Taiwan.

Furthermore, the issue of climate change coincides with one of the UN SDG’s. Through the broadcast program it sponsors, VIS invites experts for discussions as a way of answering to the UN SDG’s and doing its part as a world citizen.

## **Sponsoring Art and Cultural and Academic Activities**

In addition to supporting underprivileged children, VIS also sponsored National Tsing Hua University’s “Sunrise Program” by providing an annual scholarship of NT\$200,000 to two students who each come from a disadvantaged family background, enabling these low-income students to concentrate on their schooling without having to worry about financial concerns. Senior executives of VIS also served as mentors to two students, so that they could seek advice when they needed.

Also, to give back to the community and promote art and culture, VIS also sponsored a total of NT\$ 100,000 to two programs—“Romance Beyond Time” by National Symphony Orchestra and “Little Hunchback” by Chun-Ming Huang’s Children Theatre—during the “TSMC Hsinchu Arts Festival” for the promotion of arts education.

## **4.2 Volunteer Activities**

VIS has engaged in volunteer services for over a decade. In 2006, VIS responded to TSMC Volunteer Program, and participated in TSMC volunteer services including tour guide and community services, explaining scientific knowledge related to semiconductors to visitors at “The

World of Semiconductor” at National Museum of Natural Science in Taichung, and accompanying elders at Hsinchu Veterans’ Home.

In 2015, embracing the spirit of “From the Society, For the Society,” VIS founded VIS Volunteer Program, and set the objective of making the world a better place through “chosen themes and long-term investment”. VIS Volunteer Program chose the Unique Atayal College in Hsinchu County as the first recipient of its services, and the sponsorship included: book raising for children, having employees volunteering as reading companions, inviting children to partake in the Company’s Family Day activities, and taking the children to the National Palace Museum.

After the Unique Atayal College, VIS volunteers have entered the Smangus Tribal Village in Jianshi Township, Hsinchu County, since 2017; after the kindergarten donated by the Company was built, the volunteers also raised books for pre-school children, and read the books with them. Through monthly visits, VIS volunteers have accompanied the children to make crafts, tell stories, and play games; the program has continued until today.

During 2018 winter break, VIS Volunteer Program invited 14 children from Smangus to National Tsing Hua University, to participate in the two-day camp, “Small Insects, Big Secrets,” organized by Tze-Chiang Foundation of Science & Technology. All the children responded to the activities with much enthusiasm. Smangus Sunday School Principal Wuli believed that, to the children of Smangus, the mountains



and forests were their home, and insects were the best friends they grew up with. Participating in the camp not only enhanced their knowledge on insects, but also facilitated interactions between the children of Smangus and those in urban areas.



Children from Smangus participated in insect camp and enjoy MacDonald's Happy Meal with VIS volunteers

In addition to laying the foundation for education of indigenous children, VIS volunteers have also demonstrated selfless love at the Company's two main charity events, Family Day and Charity Banquet, inviting elders, people with disabilities, and underprivileged children, to join the activities and share a fund time with VIS employees at a theme park. They also had the opportunity to partake in the Company's year-end party, creating wonderful memories to savor.

Furthermore, VIS Volunteer Program has launched the "Employee Assistance Program" in 2016, targeting VIS employees or their families who encounter hardship in life due to accidents or unexpected events; their superiors may submit applications on their behalf, and after the head of the VIS Volunteer Program learns their situations and approves the applications, the Company's donation platform will launch fundraising campaigns. The program has been set up for three years, and has helped 9 employees to overcome difficult times in their lives.

#### 4.3 Community Building

VIS has two fabs within Hsinchu Science Park, and VIS Fab2 is actively building community friendly relationship with the community for the betterment of our community and the environment.

#### Adopting Cherry Blossom Park

On Arbor Day 2019, VIS Fab2 Director led all colleagues to plant trees at Cherry Blossom Park in Jinshan Village, and jointly unveiled the plaque of the adopted park with Deputy Mayor Hui-hung Shen and Jinshan Village Chief Ching-chieh Wu. In the future, all Fab2 employees and the Company's suppliers and contractors will regularly clean up and maintain the park, turning Cherry Blossom Park into the beautiful backyard of the community and VIS employees.

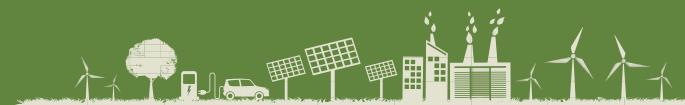
Currently, there are 80 cherry trees in the park, which is surrounded by Ke-Tzu-Hu Creek, right next to Fab2

within walking distance. Village Chief Wu remembers that, Jinshan-Mian, where the park is situated, used to be covered by Japanese blue oaks; however, the trees have been cut down for development. After discussion with the municipal government and the Village Chief, Arbor Day event decided to plant 61 Japanese blue oaks and 10 cherry trees.

On Arbor Day, around 700 VIS employees, students, and local residents, participated in the tree-planting activity. Hsin Ke junior High School's Drum Team opened the day with robust beats, and Section Chief Chen of Ecology Section shared tree-planting tips. Deputy Mayor Hui-hung Shen and VIS Fab2 Director Ching-ying Li gave opening remarks, and both mentioned the importance of trees and environmental protection to mankind, as well as adoption of park by private enterprises and the general public was an activity worth promoting and encouraging. After the



Deputy Mayor Hui-hung Shen presents Director Ching-Ying Lee of VIS Fab 2 the adoption certificate of the park



opening remarks, Deputy Mayor Shen presented Director Li of VIS Fab2 the Adoption Certificate of the Park, and jointly planted the saplings of Japanese blue oak.

The participants of the activity ranged from kindergarten children to grandparents who brought their grandchildren with them. Everyone planted saplings to not only make the environment more beautiful, but also pass down the torch to the future generations. In addition to hoping all the tree saplings would grow and thrive, we also hope that our children would grow up to be as strong as the trees.



**Big Hand and Small Hands**, VIS employees enthusiastically participate in adopting of cherry blossom park to plant the seeds of hope

### Helping Disadvantaged Small Farmers

To help the survival of small farmers who were unable to sell their produces, VIS launched a campaign to help disadvantaged small farmers, receiving much support from the Company's employees. Village chiefs of nearby communities would introduce small farmers to VIS, whose farm produces would then be sold to VIS employees. VIS Fab2 employees even established a team of volunteers, and through talking with the farmers, they discovered that small farmers were usually older than average, and standing for a long period of time to sell their produces was not a feasible option. The team discussed and decided to sell the small farm produces by cooperating with coffee bar inside the fab, while also helping with poster designs and online promotions, so that VIS employees could buy fresh and affordable organic fruits, creating a new all-win charity model.

Within half a month, VIS successfully sold for the small farmers as many as 180 kg (or above) of citrus tankans, achieving wonderful results.



The passion and sincerity of VIS can be truly felt through their assistance

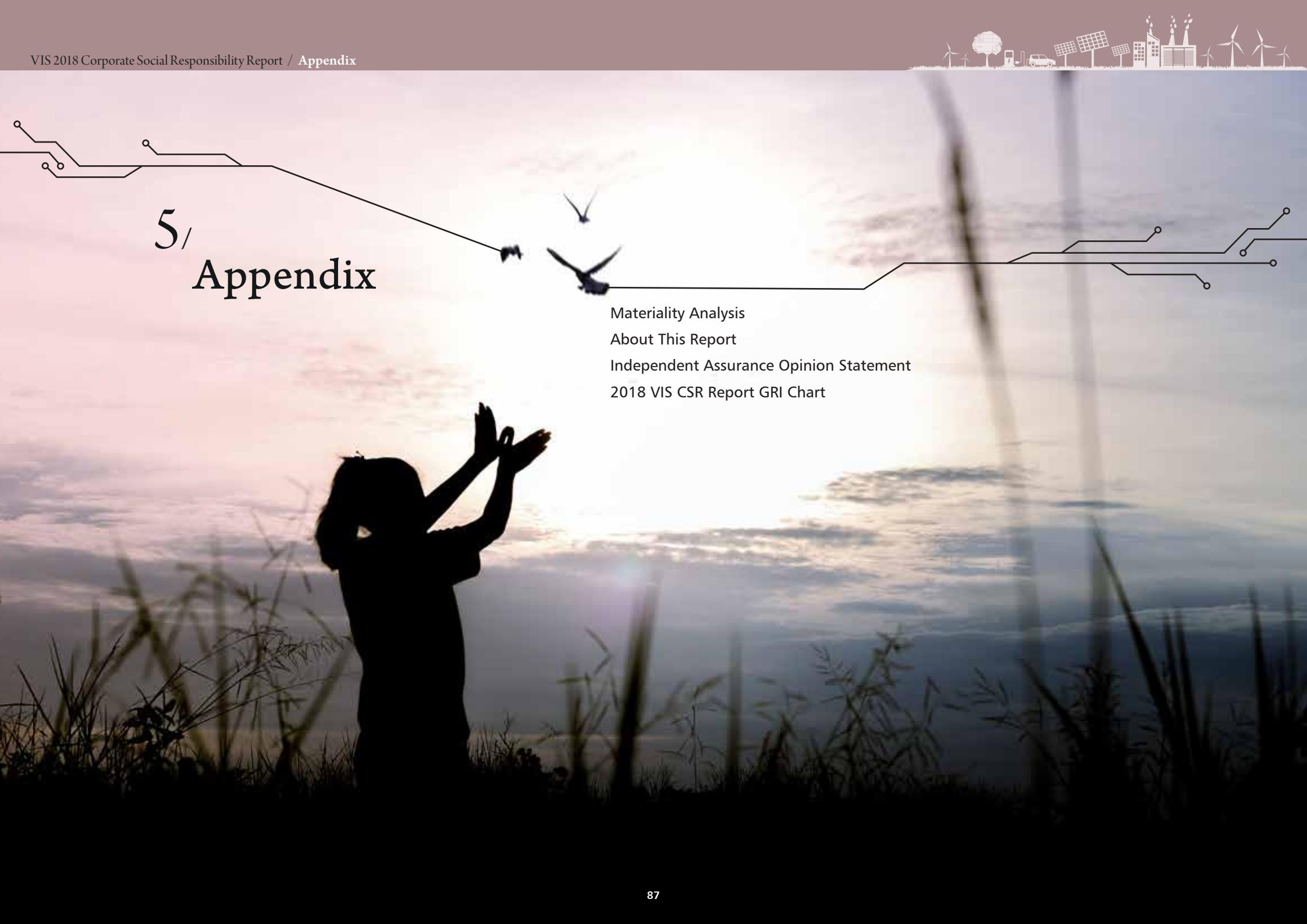
Kehu Village Chief Chien-Hung Lu

Thanks to VIS for its help, offering us an alternative channel. They also helped me with documents and registrations, and followed up on me constantly. I truly appreciate their help.

Kehu Village Small Farmer Mr. Yang



## 5/ Appendix

A large, semi-transparent background image shows a silhouette of a person from behind, standing in a field of tall grass and reaching their arms upwards towards a bird in flight against a cloudy sky.

[Materiality Analysis](#)  
[About This Report](#)  
[Independent Assurance Opinion Statement](#)  
[2018 VIS CSR Report GRI Chart](#)



# Materiality Analysis

## Sampling

In 2018, VIS distributed and collected 239 VIS CSR Questionnaires; among them, 234 questionnaires were valid. The questionnaires were sent to all stakeholders, including our employees, customers, suppliers, institutional investors, media, and related public and private agencies. To properly listen to the opinions of our employees, VIS collected 128 valid questionnaires from VIS employees of different positions, divisions, and nationalities, in order for the samples to better represent and reflect the thoughts at different levels.

## Valid Questionnaires Sample Distribution

Stakeholders	Employees	Customers	Suppliers	Institutional Investors	Media	Government Authorities	Total
Number of Samples	128	26	31	27	8	14	234

## Weighting

VIS values the voices of all stakeholders, and equally regards the feedbacks of different stakeholders. When analyzing the materiality of the topics, the same weight was assigned to different types of stakeholders, so that when a group of stakeholders had a higher number of samples, it would not be given a greater weight; on the other hand, when a group of stakeholders had a smaller sample size, their opinions would not be overlooked.

## Categorization and Selection of Topics

The steps undertaken by VIS for the definition and selection of CSR topics are: 1. Formulate the questionnaire by referencing topics identified by other semiconductor companies; 2. Distribute CSR Questionnaires to stakeholders and collect their responses and opinions; 3. CRS Committee discusses internally to determine the 14 CSR Topics of VIS based on the results of the questionnaire.

## Questionnaire Design

VIS CSR Committee referenced other semiconductor companies' topics and based on three dimensions, "economic, social, and environmental," to design the 25 questions and corresponding responses of degree of concern in the "VIS CSR Major Topics" questionnaire. The questionnaire was then distributed to all stakeholders. Each question was given an explanation to ensure full understanding of the question and that a proper response was given. Responses of degree of concern, from highest to lowest, were: Very Concerned, Concerned, Fairly Concerned, Not too Concerned, and Not at All Concerned.

When calculating the degree of concern of each question, the scores assigned to Very Concerned, Concerned, Fairly Concerned, Not too Concerned, and Not at All Concerned, were 5 points, 4 points, 3 points, 2 points, and 1 point respectively. Finally, average scores were used to present the degrees of concern of different stakeholders regarding the various topics' influences on VIS operation; the higher the degree of concern, the greater the materiality of the topic.

## Contents and Materiality Ranking of 14 Major Topics

According to the results of the survey, 25 questions in three dimensions were categorized into 14 major topics, which are ranked in according to each question's materiality in the following chart:



Dimension	VIS Major Topic	Content	Materiality
Economic	Business Ethics	Financial information in revenue, expenses, employee benefits, tax expenses, dividends, etc.	4.32
		Development of the Company's major investments	4.32
	Sustainable Management of Suppliers	Procurement strategies and management.	4.09
	Customer Service / Sustainable Products	Property of customer satisfaction survey, frequency and objects, practices that enhance customer satisfaction.	4.01
		Customer privacy policies and performance beyond compliance.	3.99
		R&D expenses, product or process innovation, etc. Development of win-win products that reduce environmental impact and increase company revenue.	3.94
		Product labeling and quality matching customer expectations, product information service, and related performance of compliance.	3.8
	Sustainable Management of Suppliers	Do criteria of new supplier selection include environmental requirements? Measures taken for supplier that causes negative environmental impact	3.74
		Evaluation of supplier's actions on labor affairs, human rights, or social impact	3.74
	Legal Compliance	Violations of environmental protection regulations	3.51

Dimension	VIS Major Topic	Content	Materiality
Environmental	Energy Management	Statistics of energy consumption in the manufacturing phase, energy-saving performance, product energy-saving regulations	4.25
	Occupational Safety	The Company's management and statistical records of working environment safety and employee health	4.06
	Climate Change	GHG emissions, emission intensity, carbon reduction, and ODS emissions	3.93
	Air Pollution Prevention	Emissions of NOx and SOx	3.93
	Water Management	Water source, impact assessment on water source, and amount of recycled and reused water	3.84
	Water Management	Waste water: quality and destination of discharge water, major leaking events, impact assessment of discharge water	3.84
	Waste Management	Amount of raw materials used, method of reuse, recycling method of product and packaging	3.84
	Waste Management	Wastes: types and processing method of wastes, removal and transportation of hazardous wastes	3.66



Dimension	VIS Major Topic	Content	Materiality
Social	Talent Recruitment and Retention	HR structure, talent recruitment and flow, implementation of parental leave, employee compensation system, insurance and benefits	4.02
	Talent Development	Results of the Company's planning, management and execution of employee development and educational training	4.01
	Human Rights	Results of the Company's planning, management, and execution of employee development and educational training Employer-employee communication channel and frequency, dispute resolution	3.98
		The Company protects employee human rights, freedom of association and right to collective bargaining, as well as issues including no discrimination, no hiring of child workers, no forced labor, and sexual harassment prevention	3.91
		Appeal mechanism, number of accepted cases, and resolution of socially impactful incidents relating to labor conditions and human rights	3.85
	Social Engagement	Composition of governance bodies and breakdown of employees per category according to indicators, such as gender and age group, and fair and equal compensation for employees of both genders	3.81
	Social Engagement	The Company's strategy and investment at significant locations of operation and social engagement	3.7





## About This Report

With CSR strategy as the core, this report describes Vanguard International Semiconductor (VIS) Corporation's perspectives and appropriate responses concerning topics that include the following areas during our continuous development: corporate governance, customer relations, a happy workplace, environmental protection, community involvement, etc.

### Period of Report

Data contained within this report are from the year 2018 (01/01/2018 to 12/31/2018).

### Parameters and Scope of this Report

The scope of disclosure in this report is based on the business activities of Vanguard International Semiconductor Corporation. The 2018 report and that of the preceding year exhibit no differences in scope of disclosure. All financial figures in this report are presented in New Taiwan Dollars (NTD). Units used for calculating environmental safety and community involvement figures are customary units commonly used internationally.

### Reporting Principles

This report conforms to the Sustainability Reporting Framework (GRI Standards) of Global Report Initiative (GRI), the Rules Governing the Preparation and Filing of Corporate Social Responsibility Reports by TWSE Listed Companies, and the AA1000 Accountability Principles Standard (AA1000APS).

### Report Verification

All information and numerical data presented in this report have been verified by the British Standards Institution (BSI) Taiwan branch office, according to the AA1000 AS: 2008 Assurance Standards, its 2018 Appendix, and the requirements of GRI Standards, to comply with the three primary accountability principles of inclusivity, materiality and responsiveness. This report adheres to the "Core" option of GRI Standards, and conforms to AA1000 Type II high-level accountability. Please refer to the Appendix for the BSI independent assurance declarations.

### Release Schedule of Report

VIS published its first CSR report in 2015. In the future, VIS will publish CSR reports on a yearly basis.

Current release: Published in June, 2019

Previous release: Published in June, 2018

Subsequent release: Published in June, 2020

### Contact Information

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# Independent Assurance Opinion Statement

## INDEPENDENT ASSURANCE OPINION STATEMENT

### 2018 Vanguard International Semiconductor Corporation Corporate Social Responsibility Report

The British Standards Institution is independent to Vanguard International Semiconductor Corporation (hereafter referred to as VIS in this statement) and has no financial interest in the operation of VIS other than for the assessment and verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of VIS only for the purposes of assuring its statements relating to its corporate social responsibility (CSR), more particularly described in the Scope below. It was not prepared for any other purpose. The British Standards Institution will not, in providing this independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person by whom the independent assurance opinion statement may be read.

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by VIS. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate. Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to VIS only.

#### Scope

The scope of engagement agreed upon with VIS includes the following:

1. The assurance scope is consistent with the description of 2018 Vanguard International Semiconductor Corporation Corporate Social Responsibility Report with the following exceptions:
  2. The evaluation of the nature and extent of the VIS's adherence to AA1000 AccountAbility Principles (2018) and the reliability of specified sustainability performance information in this report as conducted in accordance with type 2 of AA1000 Assurance Standard (2008) with 2018 Addendum sustainability assurance engagement.
- This statement was prepared in English and translated into Chinese for reference only.

#### Opinion Statement

We conclude that the 2018 VIS Corporate Social Responsibility Report provides a fair view of the VIS CSR programmes and performances during 2018. The CSR report subject to assurance is materially correct without voluntary omissions based upon testing within the limitations of the scope of the assurance, the information and data provided by the VIS and the sample taken. We believe that the 2018 economic, social and environmental performance information are correctly represented. The CSR performance information disclosed in the report demonstrate VIS's efforts recognized by its stakeholders.

Our work was carried out by a team of (CSR) report assures in accordance with the AA1000AS (2008) with 2018 Addendum. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that VIS's description of their approach to AA1000AS (2008) with 2018 Addendum and their self-declaration in accordance with GRI Standards: Core option were fairly stated.

#### Methodology

Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:

- a top level review of issues raised by external parties that could be relevant to VIS's policies to provide a check on the appropriateness of statements made in the report
- discussion with managers on VIS's approach to stakeholder engagement. Moreover, we had sampled two external stakeholders to conduct interview
- interview with 35 staffs involved in sustainability management, report preparation and provision of report information were carried out
- review of key organizational developments
- review of the extent and maturity of the relevant accounting systems for financial and non-financial reports
- review of the findings of internal audits
- the verification of performance data and claims made in the report through meeting with managers responsible for gathering data
- review of the processes for gathering and ensuring the accuracy of data, followed data trails to initial aggregated source and checked sample data to greater depth during site visits
- the consolidated financial data are based on audited financial data, we checked that this data was consistently reproduced
- review of supporting evidence for claims made in the reports
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000AP (2018)

#### Conclusions

A detailed review against the Inclusivity, Materiality, Responsiveness and Impact of AA1000AP (2018) and sustainability performance information as well as GRI Standards is set out below:

#### Inclusivity

In this report, it reflects that VIS has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for economic, social and environmental information in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the VIS's inclusivity issues and has demonstrated social responsible conduct supported by top management and implemented in all levels among organization.

#### Materiality

The VIS publishes material topics that will substantially influence and impact the assessments, decisions, actions and performance of VIS and its stakeholders. The sustainability information disclosed enables its stakeholders to make informed judgements about the VIS's management and performance. In our professional opinion the report covers the VIS's material issues.

#### Responsiveness

VIS has implemented the practice to respond to the expectations and perceptions of its stakeholders. An Ethical Policy for the VIS is developed and continually provides the opportunity to further enhance VIS's responsiveness to stakeholder concerns. Topics that stakeholder concern about have been responded timely. In our professional opinion the report covers the VIS's responsiveness issues.

#### Impact

VIS has identified and fairly represented impacts that were measured and disclosed in probably balanced and effective way. VIS has established processes to monitor, measure, evaluate and manage impacts that lead to more effective decision-making and results-based management within an organization. In our professional opinion the report covers the VIS's impact issues.

#### Performance information

Based on our work described in this statement, specified sustainability performance information such as GRI Standards disclosures disclosed in this report, VIS and BSI have agreed upon to include in the scope. In our view, the data and information contained within 2018 VIS CSR Report are reliable based on procedures undertaken by means of vouching, re-tracking, re-computing and confirmation.

#### GRI Sustainability Reporting Standards (GRI Standards)

VIS provided us with their self-declaration of in accordance with GRI Standards: Core option (For each material topic covered by a topic-specific GRI Standard, comply with all reporting requirements for at least one topic-specific disclosure). Based on our review, we confirm that social responsibility and sustainable development disclosures with reference to GRI Standards' disclosures are reported, partially reported or omitted. In our professional opinion the self-declaration covers the VIS's social responsibility and sustainability topics.

#### Assurance level

The high level assurance provided is in accordance with AA1000AS (2008) with 2018 Addendum in our review, as defined by the scope and methodology described in this statement.

#### Responsibility

This CSR report is the responsibility of the VIS's chairman as declared in his responsibility letter. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

#### Competency and Independence

The assurance team was composed of Lead auditors experienced in relevant sectors, and trained in a range of sustainability, environmental and social standards including AA1000AS, ISO 14001, ISO 45001, ISO 14064 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:

  
Peter Pu

Managing Director BSI Taiwan

2019-05-30

 bsi.

AA1000  
Licensed Assurance Provider  
000-4

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BSI Taiwan is a subsidiary of British Standards Institution.



## 2018 VIS CSR Report GRI Chart

<sup>\*\*</sup>GRI Core Disclosure; <sup>\*\*\*</sup>Major Topic Disclosure of the Year

GRI Disclosure	CSR Report Section
102-1*	1.1 Company Profile
102-2*	1.1 Company Profile
102-3*	1.1 Company Profile
102-4*	1.1 Company Profile
102-5*	1.1 Company Profile
102-6*	1.1 Company Profile
102-7*	1.1 Company Profile
102-8*	3.8.2 VIS Workforce
102-9*	1.1 Company Profile
102-10*	1.1 Company Profile
102-11*	2.2 Corporate Social Responsibility Committee
102-12*	2.4 Response to UN SDGs
102-13*	2.7 Foreign and Domestic Associations
102-14*	Letter from Chairman
102-16*	3.1.1 Code of Conduct and Ethical Corporate Management Practice Principles
102-17	3.1.1 Code of Conduct and Ethical Corporate Management Practice Principles
102-18*	2.2 Corporate Social Responsibility Committee 2.5.1 Corporate Governance Structure
102-20	2.1 Corporate Social Responsibility Policy 2.2 Corporate Social Responsibility Committee
102-21	2.1 Corporate Social Responsibility Policy 2.2 Corporate Social Responsibility Committee
102-22	2.5.2 Organization of the Highest Level Governing Body

GRI Disclosure	CSR Report Section
102-23	2.5.2 Organization of the Highest Level Governing Body
102-25	2.5.3 Regulations and Prevention of Conflict of Interest
102-26	2.1 Corporate Social Responsibility Policy 2.5.2 Organization of the Highest Level Governing Body
102-29	2.3 Major Topics and Sustainable Performances
102-30	2.2 Corporate Social Responsibility Committee
102-31	2.2 Corporate Social Responsibility Committee
102-32	2.2 Corporate Social Responsibility Committee 2.3 Major Topics and Sustainable Performances
102-33	2.2 Corporate Social Responsibility Committee 2.3 Major Topics and Sustainable Performances
102-34	2.2 Corporate Social Responsibility Committee 2.3 Major Topics and Sustainable Performances
102-35	3.8.2 Overall Compensation
102-36	2.5.2 Organization of the Highest Level Governing Body
102-40*	2.6 Engagement of Stakeholders 3.8.4 Union
102-41*	3.8.4 Employee Communication 3.8.4 Union
102-42*	2.6 Engagement of Stakeholders
102-43*	2.6 Engagement of Stakeholders 3.8.4 Employee Communication
102-44*	3.8.4 Employee Communication
102-45*	1.2 Financial Performance
102-46*	Appendix: About This Report
102-47*	2.3 Major Topics and Sustainable Performances Appendix: Materiality Analysis
102-48*	Appendix: About This Report



GRI Disclosure	CSR Report Section
102-49*	Appendix: About This Report
102-50*	Appendix: About This Report
102-51*	Appendix: About This Report
102-52*	Appendix: About This Report
102-53*	Appendix: About This Report
102-54*	Appendix: About This Report
102-55*	Appendix: GRI Index
102-56*	Appendix: Independent Assurance Opinion Statement
103-1	2.3 Major Topics and Sustainable Performances 3.7.1 ESH Policies and Management System Appendix: Materiality Analysis
103-2	2.3 Major Topics and Sustainable Performances 3.1.1 Code of Conduct and Ethical Corporate Management Practice Principles 3.7.1 ESH Policies and Management System
103-3	2.3 Major Topics and Sustainable Performances 3.1.1 Code of Conduct and Ethical Corporate Management Practice Principles 3.7.1 ESH Policies and Management System
201-1	1.2 Financial Performance
201-3	3.8.2 Benefits System 3.8.2 Retirement System
201-4	1.1 Company Profile 1.3 Tax Policy
204-1**	3.6.1 Green Supply Chain 3.6.6 Supply Chain Localization Strategy
206-1**	3.2.1 Establishment and Implementation of Policies and Rules 3.2.2 Legal Compliance Education and Training 3.2.3 Laws and Regulations Tracking and Policy Promotion 3.2.4 Reporting Illegal Activities
302-1**	3.7.2 Energy Management
302-2**	3.7.2 Energy Management

GRI Disclosure	CSR Report Section
302-3**	3.7.2 Energy Management
302-4**	3.7.2 Energy Management
302-5**	3.3.1 Green Products
303-1**	3.7.3 Water Resource Management and Water Pollution Prevention
303-2**	3.7.3 Water Resource Management and Water Pollution Prevention
303-3**	3.7.3 Water Resource Management and Water Pollution Prevention
305-1**	3.7.2 Climate Change
305-2**	3.7.2 Climate Change
305-3**	3.7.2 Climate Change
305-4**	3.7.2 Climate Change
305-5**	3.7.2 Climate Change
305-6**	3.7.2 Climate Change
305-7**	3.7.3 Air Pollutin Control
306-1**	3.7.3 Water Resource Management and Water Pollution Prevention
306-2**	3.7.5 Waste Management
306-3**	3.7.3 Water Resource Management and Water Pollution Prevention
306-4**	3.7.5 Waste Management
306-5**	3.7.3 Water Resource Management and Water Pollution Prevention
307-1**	3.2.1 Establishment and Implementation of Policies and Rules 3.2.2 Legal Compliance Education and Training 3.2.3 Laws and Regulations Tracking and Policy Promotion 3.2.4 Reporting Illegal Activities
308-1**	3.6.1 Green Supply Chain 3.6.2 Supplier Management Cycle
308-2**	3.6.2 Supplier Management Cycle 3.6.4 Supplier Operation Management



GRI Disclosure	CSR Report Section
401-1**	3.8.2 Domestic and Foreign Recruitment 3.8.3 Rich and Diverse Learning Resources
401-2**	3.8.2 Benefits System 3.8.2 Retirement System 3.9 Workplace Health Management 3.9.1 Special Care 3.9.2 Health Care 3.9.3 Health Promotion
401-3**	3.8.2 Benefits System
403-1**	3.7.1 VIS ESH Management System
403-2**	3.7.1 VIS ESH Management System 3.7.6 Safety and Health Management Practices
403-3**	3.9 Special Protection
403-4**	3.7.1 VIS ESH Management System
403-5**	3.7.1 VIS Educatin and Promotion
403-7**	3.7.7 Contractor Management
404-1**	3.8.3 Strengthen Employees' Interdisciplinary Leaerning Ability
404-2**	3.8.3 Rich and Diverse Learning Resources 3.8.3 Strengthen Employees' Interdiciplinary Learning Ability
404-3**	3.8.3 Comprehensive HR Development and Incubation
405-1**	3.8.2 VIS Workforce 3.8.2 Employment of Persons with Disabilities
405-2**	3.8.2 Overall Compensation
406-1**	3.8.4 Human Rights Policy
407-1**	3.8.4 Union 3.8.4 Human Rights Policy
408-1**	3.8.4 Human Rights Policy
409-1**	3.8.4 Human Rights Policy
412-2**	3.8.4 Human Rights Risk Mitigation Measures

GRI Disclosure	CSR Report Section
412-3**	3.8.4 Human Rights Evaluation
413-1**	4.1.3 Community Building
414-1**	3.6.2 Supplier Management Cycle
414-2**	3.1.2 Code of Conduct Training and Promotion 3.6.3 No Child Labor
416-1**	3.3.2 Hazardous Material Management 3.4.1 Strengthening Quality Culture 3.4.2 Enhancing Quality Capability 3.4.3 Realizing Quality Application 3.5.3 Customer Satisfaction and Methods of Filing a Complaint
416-2**	3.5.3 Customer Satisfaction and Methods of Filing a Complaint
418-1	3.5.4 Realizing Confidential Information Protection 3.5.5 Strengthening Patent Portfolio
419-1**	3.2.1 Establishment and Implementation of Policies and Rules 3.2.2 Legal Compliance Education and Training 3.2.3 Laws and Regulations Tracking and Policy Promotion 3.2.4 Reporting Illegal Activities