

2017  VIS

# Vanguard International Semiconductor Corporation

Corporate Social Responsibility Report



## 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 2017 (1/1/2017 to 12/31/2017).

## 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 2017 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 Global Report Initiative's G4 Sustainability Reporting Framework (GRI G4), 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 and the requirements of GRI G4, to comply with the three primary accountability principles of inclusivity, materiality and responsiveness as well as the reliability of specific performance information for CSR reports. This report adheres to the "Core" option of GRI G4, 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, 2018

Previous release: Published in June, 2017

Subsequent release: Published in June, 2019

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## Message from the Chairman

Despite the global economy has continued to grow, the unprecedented extreme weather, changes of geopolitical factors, and forces opposed to globalization has resulted in disruptive impact on the global supply chain and the sustainable development of the global business. However, the efforts which have been made in fulfilling corporate social responsibility and implement global sustainable development have made some progress and never stopped in VIS.

Regarding Corporate governance, VIS has stipulated "The impeach and handling procedure for breaching ethical conduct" to strengthen the core concept of integrity, transparency and responsibility. In addition, VIS has been well recognized by achieving the honor of top 5% listed company at TPEx for three consecutive years in the corporate governance evaluations conducted by Taiwan Stock Exchange.

Regarding the economic activities, VIS has continued to provide customers with more competitive technologies and services. In large panel driver IC (particularly in Point to Point Transmission Interface product), VIS provided to panel makers outperformed our competitors. In the power management IC, we have completed the development of second-generation 0.5um ultra low Rdson, simplified ultra-high-voltage process and 0.25um SOI process has successfully entered into mass production. And the optical sensing finger print IC process has been adopted and integrated in the smart phone by customers which successfully demonstrated the brand new functions of optical sensing finger print IC. In the development of gallium nitride (GaN), we have achieved preliminary progress including for providing special base substrate and completing the development of epitaxial wafers. To adapt to the advent of IoT era, we've been allocating lots of resources in developing non-volatile memory (Embedded flash) in order to provide customers with even wider array of options.

In relation to environmental protection, we've participated "The energy management demonstration and counselling project" sponsored by Industrial Bureau of Ministry of Economic Affairs in implementing ISO 50001 energy management system and have obtained third party verification as well. Besides, fab3 also obtained EPA's silver award of the "ROC Enterprise Environment Protection Award" and "Taoyuan Department of Environment Protection Award" for reduction of air-borne pollutants in public and private spaces. We've continued investing resources implementing greenhouse gas reduction, energy saving and anti-pollution project to minimize the impact of the environment.

Regarding to community involvement and employee benefit enhancement, the construction work of preschool classroom of Smangus tribe donated by the employees and VIS has been completed and the children education service has been provided by VIS employees. Furthermore, the broadcast program which was sponsored by VIS continued for the three consecutive years aimed at exploring social issue and concerns. And various charity events were also arranged to continue caring for the disadvantaged groups. In order to build a safe, comfortable and friendly working environment and maintain work-life balance, various enhancement projects have been arranged including employee interest, compensations, welfare benefits, working environment, management systems as well as employee communication etc...

Looking to the future, VIS will continue to take actions in implementing global sustainable development and make efforts to create values for all the stakeholders and the society.

Chairman of VIS

Leuh Fang

## CSR at VIS

## 2.1 CSR Management

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 and established a CSR management system in 2012 in accordance with the Corporate Social Responsibility Best Practice Principles for TWSE/GTSM-Listed Companies and the Responsible Business Alliance (RBA, formerly known as EICC: Electronic Industry Code of Conduct).

The Company established its CSR Committee in 2012; under the leadership of Chairman Leuh Fang, various divisions of the company have designated representatives to convene meetings on a quarterly basis, promote relevant events, review implementation outcomes, and work towards continued improvements. These divisions 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.



Organizational profile of the CSR Committee



## 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.

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. Business books 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 labor.

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

VIS, as a global citizen, 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.

## VIS Corporate Social Responsibility DNA

The five major aspects, as well as implementing corporate governance, managing customer relationships and supply chains, maintaining a happy workplace and protecting the environment, and community involvement represent the DNA of our corporate social responsibility.

Specific approaches include "Honesty and Integrity", "Implementation of Legal and Regulatory Compliances", "Implementation of Risk Management", "Environmental Protection, Climate Change, Green Products", "Internal Control and Audit System", "Information Transparency", "Customer Satisfaction and Methods for Filing a Complaint", "Excellent Returns for Shareholders", "Providing an Excellent Work Environment", "Physical and Mental Healthcare of Employees", and "Encouraging Employees to Actively Participate in Volunteer Services".

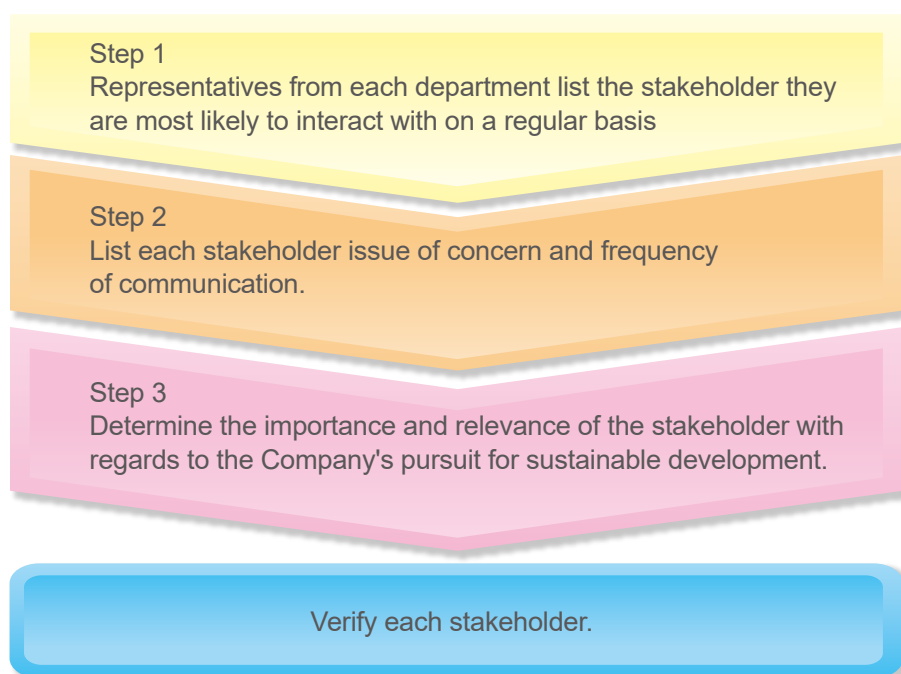
VIS Corporate Social Responsibility's DNA makeup are listed in the following table

VIS DNA	Corporate governance	Customer Relations & Supplier Management	A Happy Workplace	Environmental Protection	Social Engagement
Tangible Actions Taken					
Honesty and integrity	v	v			
Implementation of Legal and Regulatory Compliances	v	v	v	v	
Implementation of Risk Management	v	v		v	
Environmental protection, climate change, green products		v	v	v	v
Internal Control and Audit System	v	v			
Information transparency	v				
Customer Satisfaction and Methods for Filing a Complaint		v			
Providing an Excellent Work Environment			v		
Excellent returns for shareholders	v		v		
Physical and Mental Healthcare of Employees			v		
Volunteer services					v

## 2.2 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, clients, employees, suppliers, communities, government authorities, and the media. The identification process for stakeholders is as follows:



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](mailto:vis_chairman@vis.com.tw), [audit\\_committee@vis.com.tw](mailto: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

must be consistent with the issue of sustainability; do not exceed the scope of issues of concern

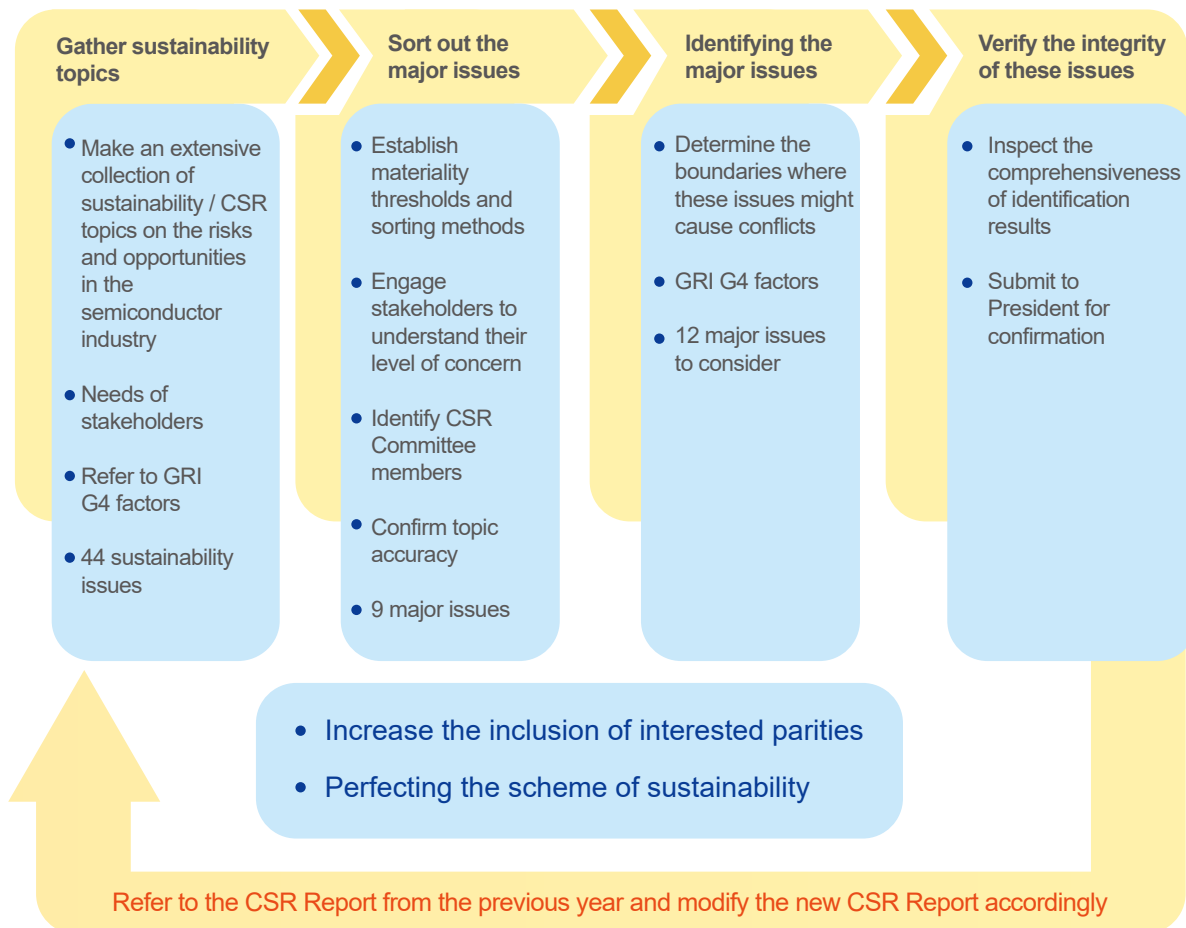
Groups of stakeholders	Primary target	Issue of concern	Method and frequency of communication
Shareholders and investors	Major shareholders Institutional shareholders General investors	Business strategy Business performance Corporate governance Innovation management	Annual meeting of shareholders Quarterly meetings of the Board of Directors and investors conference Monthly business revenue announcements Immediate update of material information on the corporation website and the Market Observation Post System
Customers	Customers	Service quality and customer satisfaction Managing customer relations and methods for filing a complaint Customer privacy Child labor Forced labor	Real-time online customer communication system Quarterly business meeting Regular project discussion meetings Unscheduled customer visits
Employees	Employees	Talent recruitment and retention Labor-Management Relations Employee communication and satisfaction Human resources development Employee diversity Method for filing a labor condition complaint Human rights policy Forced labor Discrimination Child labor Occupational health, safety, and sanitation	Internal network and telephone communication platform Employee Assistance Program (EAP) hotline Quarterly meeting between employer and employees Quarterly meeting of factory directors President communication meeting Mailbox of the executives, mailbox of the Audit Committee, mailbox of the chairman
Government authority	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	Compliance with environmental protection regulations Occupational health, safety, and sanitation Energy efficiency Energy management Waste management Anti-corruption Water resource management Greenhouse gas emissions Climate Change Direct impact of goods and services on the environment Compliance with product regulations Carbon management	Instant communication according to law Periodic reporting

Groups of stakeholders	Primary target	Issue of concern	Method and frequency of communication
Supplier	Supply chain vendor	Management of conflict minerals Green procurement Compliance with environmental protection regulations Raw materials Compliance with product regulations Management of supply chains Waste management Hazardous substance management Carbon management Anti-corruption Conflict minerals Assessment of suppliers' human rights policies Local procurement and local recruitment Child labor	Semi-annual joint review of qualified suppliers Annual audit of major suppliers Scheduled yearly communication with suppliers E-Supply supplier communication platform
Community	Corporation location, neighboring schools, and disadvantage minority group	Charitable events Compliance with environmental protection regulations Water resource management Waste management Hazardous substance management Greenhouse gas emissions Carbon management Environmental investment Direct impact of goods and services on the environment Climate Change Charitable events Community impact assessment Green construction Biodiversity Community investment	Hold randomly scheduled events and makes donations Sponsor regular regional broadcast shows to discuss social concerns Provide scheduled volunteer services to care for those in need
Media	Printed media Online, radio, and television media	Business performance Corporate governance Compliance with environmental protection regulations Compliance with product regulations	Quarterly conferences Monthly business revenue announcements Immediate update of material information on the corporation website and the Market Observation Post System

## 2.3 Identifying Material Aspects

### Identifying major issues

VIS follows international AA1000 standards and the GRI G4 guideline as references for the CSR Committee in identifying major factors; these standards and guidelines assist committee members in identifying major issues and their corresponding factors. The process for identifying major factors includes the collection of sustainability topics, sorting out major issues, identifying major factors to consider, and confirming the integrity of topics.



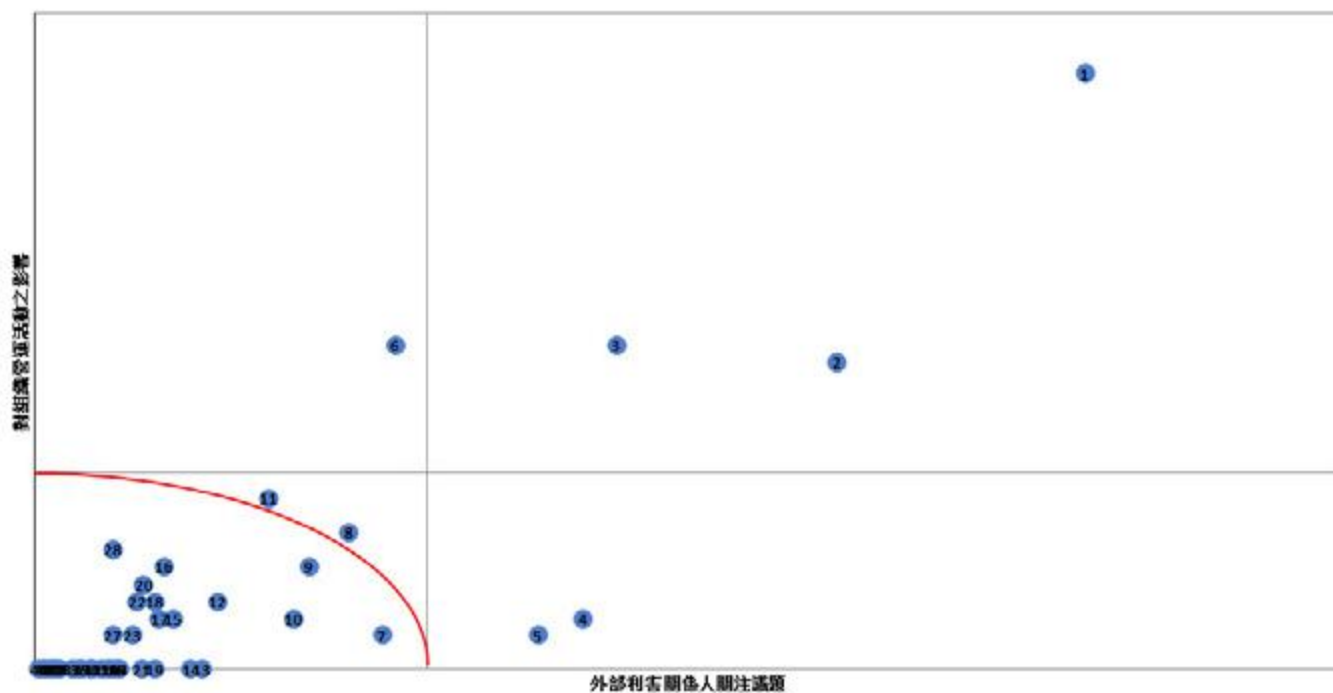
### Process of identifying major issues

The VIS CSR Committee starts by compiling the governance, economic, environmental, and social issues that concern the Company's stakeholders; it then takes into account the Company's philosophy of sustainable development and uses the G4 guidelines as a reference to identify 44 sustainability issues in which stakeholders are concerned.

2017, the VIS CSR Committee sent a questionnaire to its external stakeholders including institutional investors and shareholders, customers, suppliers, employees, and government authorities. In total, 247 questionnaires were sent out to stakeholders requesting them to rank a list of issues by order of importance and select the top five key issues. Responses to the questionnaire were based on a five-point scale, and results were collected and calculated. Key issues were ranked to provide a basis for the Company in formulating its sustainable development strategy.

The CSR Committee members discuss, rate, and rank the effects of each sustainability issue with respect to the company's business activities or products. Finally, materiality evaluations and analysis are conducted based on the potential impact and degree of concern, and the scope of such issues is inspected before including them on the list of key tasks for the current year. The results are shown in the materiality matrix and table of material aspects and boundaries.

對組織營運活動之影響



Nine issues were identified as issues of concerns: business performance, service quality and customer satisfaction, talent recruitment and retention, occupational health, safety, and sanitation, labor-management relations, compliance with environmental protection regulations, employee communication and satisfaction, supply chain management, and development of human resources.

## Identified major factors to consider

Important issues	Scope of impact		Major factors to consider	Corresponding GRI G4 indices
	Within the organization	External		
Business performance	VIS	Shareholders Investors Media	Economic performance	G4-EC1, EC2
Compliance with environmental protection regulations	VIS	Government authorities Supplier Community Media	Wastewater and waste Legal compliance	G4-EN22, G4-EN23, G4-EN25, G4-EN29
Talent recruitment and retention Employee communication and satisfaction	VIS		Relationship between employer and employees	G4-LA1, G4-LA2, G4-LA3
Occupational health, safety, and sanitation	VIS	Government authorities	Occupational health and safety	G4-LA5, LA6, LA7
Service quality and customer satisfaction	VIS	Customers	Labeling of goods and services	G4-PR5
Labor-Management Relations	VIS		Labor-Management Relations	G4-LA4
Management of supply chains	VIS	Supplier	Supplier evaluation (environment, labor, human rights, society)	G4-EN32, G4-LA15, G4-HR11, G4-SO10
Human resources development	VIS		Training and education	G4-LA9

## 2.4 2017 Sustainable Management Performance

In order to maintain sustainable business operations, VIS will fulfill the responsibilities of a good corporate citizen

In terms of economic activities, VIS will continue to provide competitive manufacturing process technologies and services, and enhance its business performance to maximize the economic value for its shareholders, employees, and society.

### Economically

Due to the appreciation of the NTD in 2017, VIS's business revenue was approximately NT\$24.91 billion, a decrease of approximately 3.6% from 2016; however, profit remained stable with NT\$4.51 billion in net income, an EPS of NT\$2.73, and a return on equity of approximately 15.93%.

### Environmentally

As for environmental protection, 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 (increase from 70% in 2016 to more than 75% in 2017 for Fab 3); greater than 92% waste recycling rate (more than 87% for Fab 3); zero accidents. The table below summarizes the overall environmental, safety and health performance of the Company in 2017:

Corporate Social Responsibility Issues	Goals	Performance Indicator or Criteria	2017 Outcome	Future Direction/ Continual Action Plan
Energy Conservation	Reduce electricity consumption per unit wafer <ul style="list-style-type: none"> <li>In 2017, the electricity consumption per unit area of wafer is reduced by 3% compared with 2016.</li> </ul>	Kwh/cm <sup>2</sup>	5.7% less electricity per unit area of wafer was consumed in 2017 compared with 2016.	<ul style="list-style-type: none"> <li>Continue to introduce ISO 50001 Energy Management System</li> <li>Continue to install energy-efficient and energy recycling systems</li> </ul>



Corporate Social Responsibility Issues	Goals	Performance Indicator or Criteria	2016 Outcome	Future Direction/ Continual Action Plan
Water Conservation	Fab1/Fab2: Greater than 85% water recycling processing rate	Water recycling processing rate (%)	Fab1/Fab2: Greater than 85% water recycling processing rate	<ul style="list-style-type: none"> <li>Continue to promote process optimization for reduction of water consumption</li> <li>Continue to introduce product carbon and water footprint verification</li> </ul>
	Fab3: Greater than 75% water recycling processing rate		Fab3: Greater than 75% water recycling processing rate	
Waste management	Increasing recycling rate of industrial waste(%) <ul style="list-style-type: none"> <li>In 2017, the recycling rate of industrial waste exceeded 90%</li> </ul>	Recycling rate of industrial waste (%)	<ul style="list-style-type: none"> <li>In 2017, the recycling rate of industrial waste exceeded 92%</li> <li>In 2017, 0% of industrial wastes were buried</li> </ul>	<ul style="list-style-type: none"> <li>Continue to promote waste reduction and waste recycling/reuse</li> <li>Cooperate with vendors to develop new waste recycling technologies</li> </ul>
Prevention and Control of Pollution	Achieve zero pollution (e.g., waste gas, wastewater, underground pollution)	Inspection pass rate (%)	100% pass rate achieved in 2017	<ul style="list-style-type: none"> <li>Continue to promote ISO 14001 Environmental Management System</li> </ul>
Occupational Health and Safety	<ul style="list-style-type: none"> <li>Provide safe and clean work environments for employees</li> <li>Reduce disabling injury frequency and severity of disabling injuries</li> </ul>	<ul style="list-style-type: none"> <li>Number of catastrophic occupational hazards</li> <li>Disabling injury frequency and severity of disabling injuries</li> </ul>	<ul style="list-style-type: none"> <li>There were no incidents of catastrophic occupational hazards (including injuries and occupational diseases)</li> <li>Employee disabling injury frequency and severity of disabling injuries were lower than the average value of the domestic semiconductor industry for three consecutive years and were lower than the average value of the domestic electronic component industry for five consecutive years</li> </ul>	<ul style="list-style-type: none"> <li>Ensure workplace safety and prevent the occurrence of occupational diseases</li> <li>Become a world-class benchmark with the lowest disabling injury frequency and severity of disabling injuries</li> </ul>

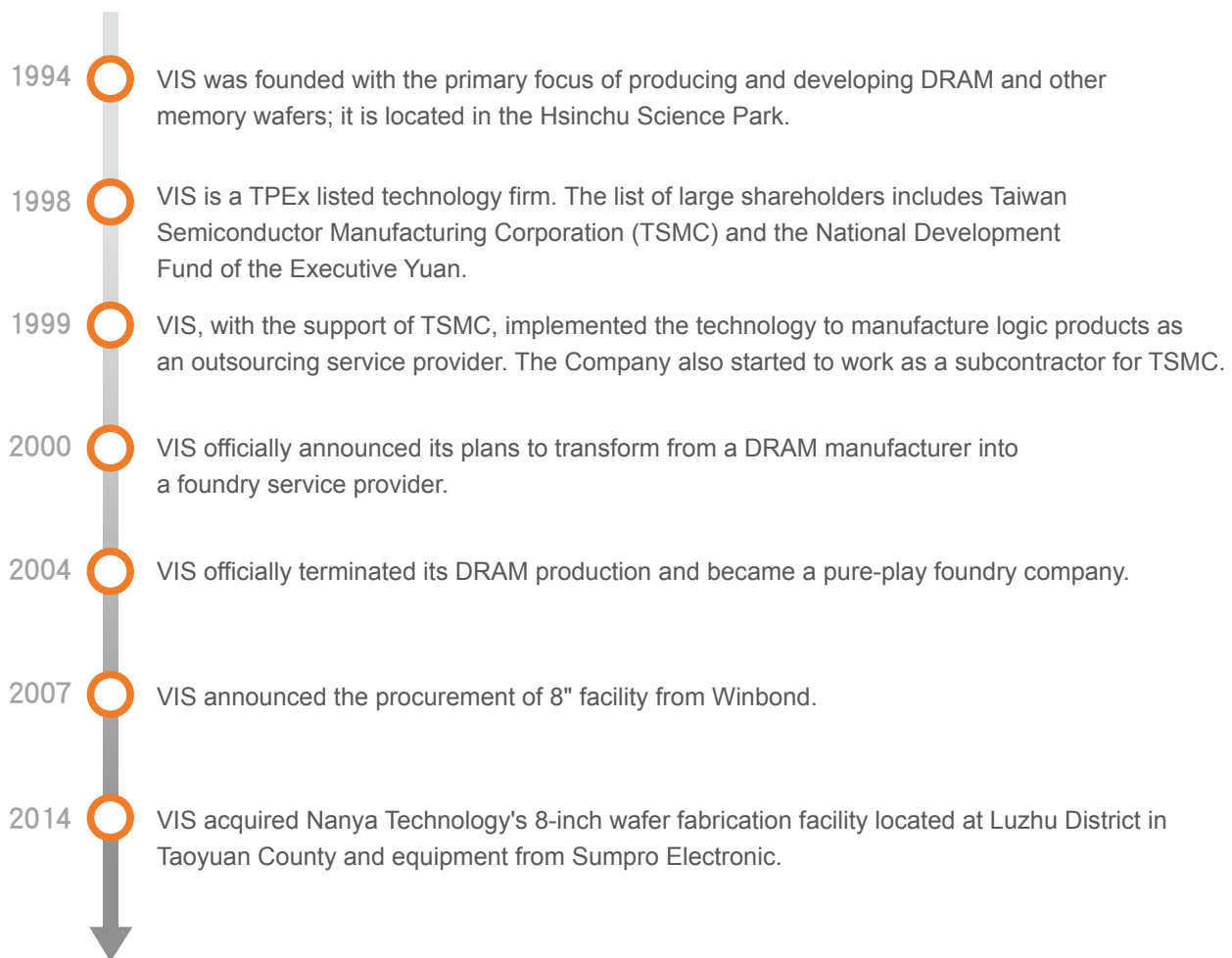
Corporate Social Responsibility Issues	Goals	Performance Indicator or Criteria	2016 Outcome	Future Direction/ Continual Action Plan
Loss Prevention and Control	Reduce property losses caused by accidental incidents (including natural disasters)	<ul style="list-style-type: none"> <li>Number of fire disasters</li> <li>Amount of property losses caused by fire disaster</li> </ul>	<ul style="list-style-type: none"> <li>There were no accidental incidents arising from fire disasters</li> <li>There were no property losses caused by fire disaster</li> </ul>	<ul style="list-style-type: none"> <li>Prevent fire-related accidental incidents and become the benchmark company that achieved the best damage prevention performance in the industry</li> <li>Reduce property losses caused by earthquake</li> </ul>
International convention compliance	EU RoHS	Regulatory compliance	Full compliance in 2017	<ul style="list-style-type: none"> <li>Continue to promote QC080000 Hazardous Substance Process Management</li> </ul>

### Social justice

In terms of social justice, the Company will do its best to contribute to the community by allocating more resources, sponsoring charity events, promoting cultural education, and participating in arts/cultural activities. VIS has integrated volunteer groups formed by its employees and established activity groups based on the requirements of care recipients. In addition, VIS will effectively utilize its resources to efficiently promote various charity events and provide services to those in need. In 2017, VIS gave back to the community by donating NT\$4,852,000 to disadvantaged groups. Regarding employee benefits, the total cost of employee benefits in 2017 grew to NT\$6.38 billion; this increase reflected the Company's continued efforts in caring for and rewarding its employees. The CSR Committee will continue to hold regular meetings, during which committee members will discuss and plan relevant activities that are beneficial to society or charitable causes.

## About VIS

### 3.1 Corporation Profile



Milestones of VIS

### CORPORATE OVERVIEW

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 195,000 wafers in 2017. 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 Corporation (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 Taiwan Semiconductor Manufacturing Corporation (TSMC), National Development Fund and other institutional investors.

In 1999, VIS started to work as a subcontractor for TSMC for the manufacturing of logic and mixed signal products. 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. In 2007, VIS announced the procurement of 8" fabs 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.

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), SOI (Silicon on Insulator), 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 relationship with its IP provision partners. Currently available IPs is 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.

VIS has 5,215 employees (as of the end of December 2017). 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.

Besides the display-related ICs, analog ICs (especially power management) and mixed-signal ICs are in the core of VIS competence. As the customer base spreading from fabless semiconductor companies to Integrated Devices Manufacturers, our business in high-voltage analog, power management, and discrete power devices will expand accordingly. VIS will continue to focus on technology development to secure our position as the leading specialty IC foundry service provider while partnering with our customers.

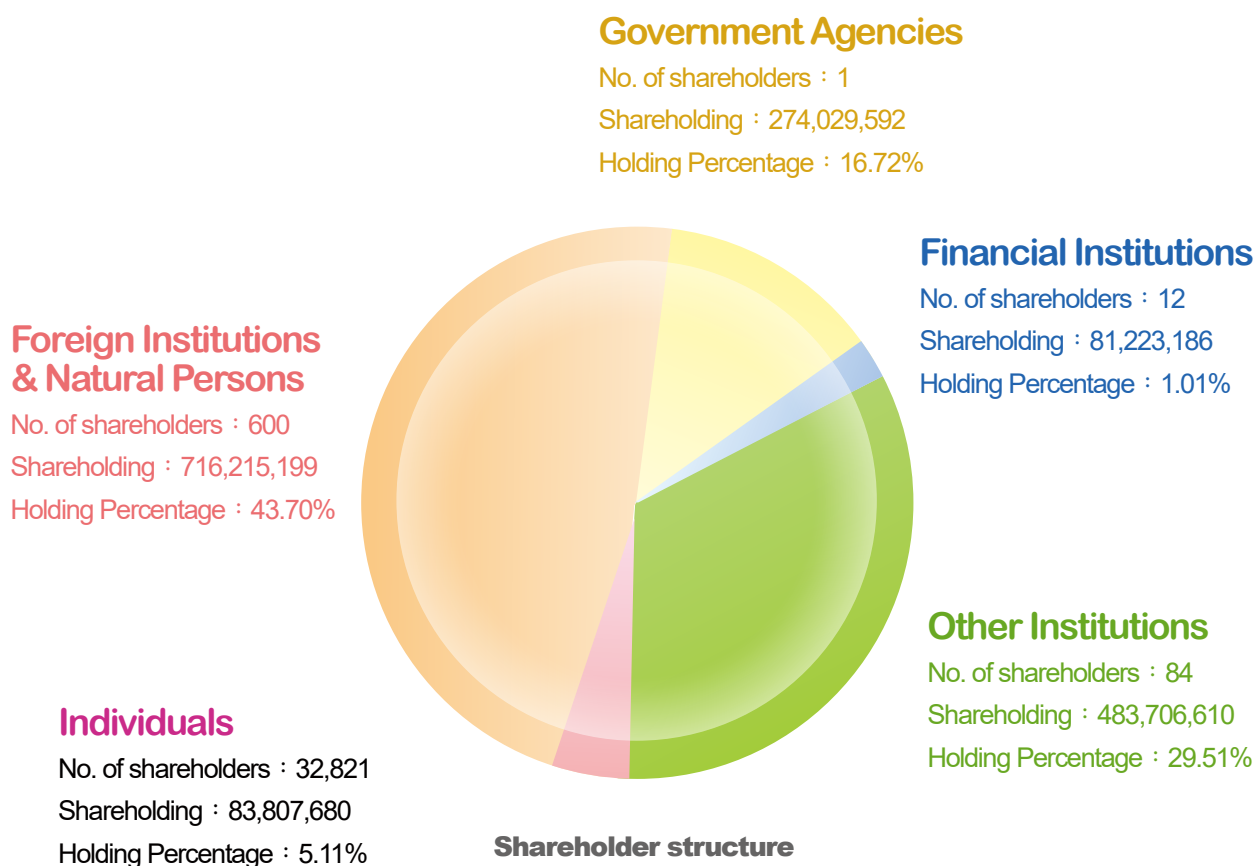
VIS's production of display driver ICs, power management ICs, and discrete components have exhibited distinctive operational performances. In order to diversify product and market centralization, reduce operating risks, and simultaneously extend its reaches in the high-profit market, in addition to our 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.

Basic Corporation Information			
Corporation Name	Vanguard International Semiconductor Corporation		
Stock Symbol	5347	Date Of Establishment	December 5 <sup>th</sup> ,1994
Chairman	Leuh Fang	Total Number of Employees	5,215 employees
President	Leuh Fang	Independent Director	Chintay Shih W.C. Liu Benson Kenneth Kin
Capital	NT\$16,39 Billion		
Total Assets	NT\$34.30 Billion		
Net Income	NT\$45,10Billion		
Corporation Tel	03-5770355		
Corporation Address	123, Park Ave. 3, Hsinchu Science Park, Hsinchu, Taiwan 30077, R.O.C.		
Corporation Website	www.vis.com.tw		

## Shareholder Structure

In 1994, the Ministry of Economic Affairs decided to create a spinoff company in order to realize the results of this project. In December of 1994, Taiwan Semiconductor Manufacturing Corporation (TSMC) and 13 other companies founded the Vanguard International Semiconductor Corporation. In March of 1998, VIS became a TPEX listed technology firm. The list of large shareholders included Taiwan Semiconductor Manufacturing Corporation (TSMC) and the National Development Fund of the Executive Yuan. The current shareholder structure is shown in the table below :

February 29, 2017



### 3.2 Business Overview

Due to the appreciation of the NTD, VIS's annual revenue reached NT\$24.91 billion in 2017, marking a decrease of 3.6% compared with the NT\$25.83 billion of the previous year. The company's average gross profit ratio for the year was approximately 32% with NT\$4.51 billion in net income, an EPS of NT\$2.73, and a return on equity of approximately 15.93%.

#### Business performance

Unit: NT\$100 million

Item	2013	2014	2015	2016	2017
Revenue	211.4	239.3	233.2	258.3	249.1
Operating costs	112.7	119.0	127.9	131.3	131.2
Employee salaries and welfare	50.1	58.0	59.0	65.7	65.4
Tax expenses	7.1	10.8	8.0	7.4	8.0
Net income	43.7	54.4	41.6	55.4	45.1

Note 1: Operating costs = cost of goods sold + operating expenses – employee salaries and welfare - (property tax + stamp tax + vehicle tax)

Note 2: Tax expenses = corporate income tax + property tax + stamp tax + vehicle tax

Note 3: Year 2014 figures have been restated in accordance with the 2013 version of IFRSs

Note 4: Above financial information is based on the consolidated financial statements which contains VIS and its subsidiaries including 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.



#### Scope of business sales



## Dividend policy

VIS' Articles stipulate that all profits may be distributed after taking into consideration to financial, business and operational factors. Dividends are in cash and/or in the form of stock. Due to the steady growth currently experienced by VIS, the amount of cash dividends distributed shall be no less than 60% of the gross amount of stock dividends. If there is no profit for distribution, or the profit is far less than the profit actually distributed by VIS in the previous year or other reasons so require, all or part of the capital surplus may be distributed in accordance with relevant laws or regulations of the authorities in charge.

Since 2005, VIS distributed cash dividends every year. Current five years distributed dividends as follows:

Item	2013	2014	2015	2016	2017(Note 1)
Distributed dividends	28.7	42.6	42.6	49.2	49.2
Per share amount (NT\$)	1.8	2.6	2.6	3.0	3.0

Note1:

The distribution of earnings for year 2017 are subject to the resolution of the shareholders' meeting to be held on June 14<sup>th</sup>, 2018.

## Tax policy

Tax payments made to the government by VIS primarily encompasses corporate income tax, property tax and stamp tax. In 2017, total tax amounted to NT\$800 million; and actual amount paid to the government was NT\$690 million. Tax credits and tax exemptions in 2017 are as follows:

Unit: NT\$1 million

Legal basis	Tax exemptions	Amount
Article 10 of the Statute for Industrial Innovation	Tax credit for Research and Development expenditure	179

## Profitability

Legal basis	2013	2014	2015	2016	2017
Return on total assets	16.30%	17.37%	12.57%	16.44%	13.00%
Return on equity	19.26%	20.93%	15.13%	19.74%	15.93%
Pre-tax profit to capital stock	30.93%	39.63%	30.13%	38.19%	32.21%
Net margin	20.68%	22.73%	17.82%	21.44%	18.08%
Earnings per share(NT\$)	2.71	3.30	2.50	3.35	2.73
Average revenue per employee (NT\$, in thousands)	5,606	5,422	4,785	5,323	4,884
Average profit per employee (NT\$, in thousands)	1,159	1,232	853	1,141	883

Note 1: The average number of employees is calculated based on the average number for that year

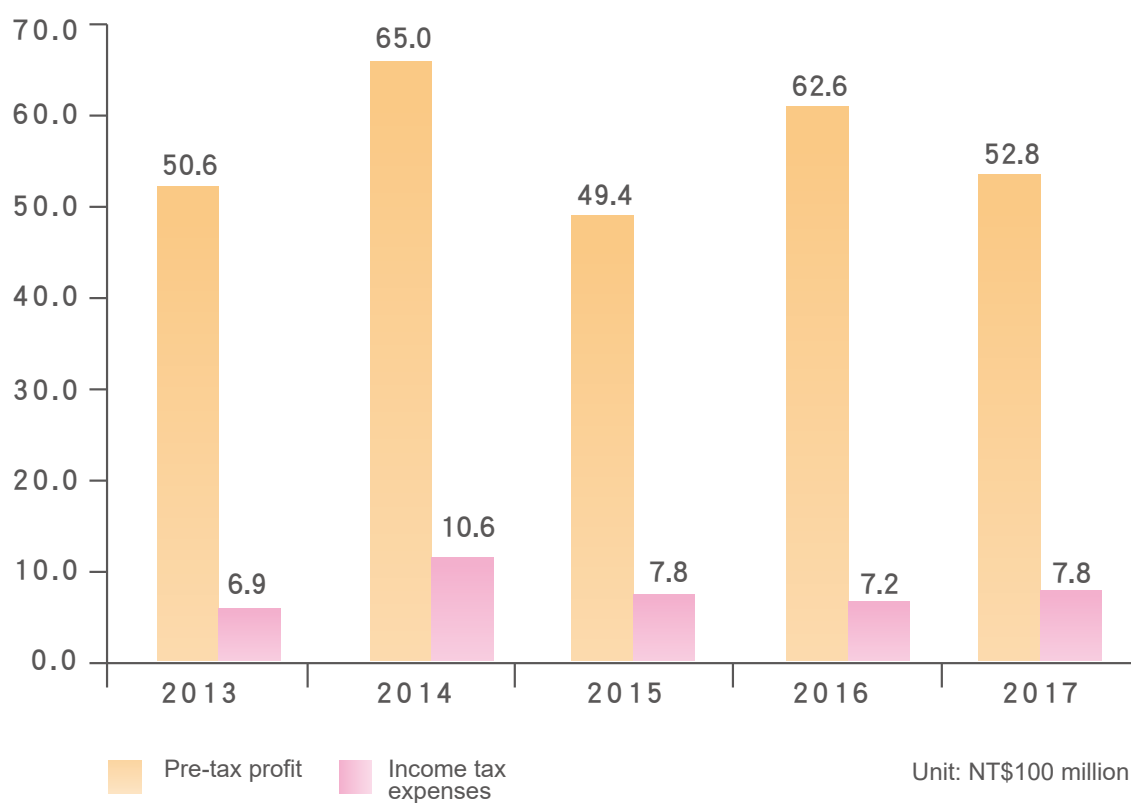
Note 2: Year 2014 figures have been restated in accordance with the 2013 version of IFRSs

Unit: NT\$100 million except for cash dividends

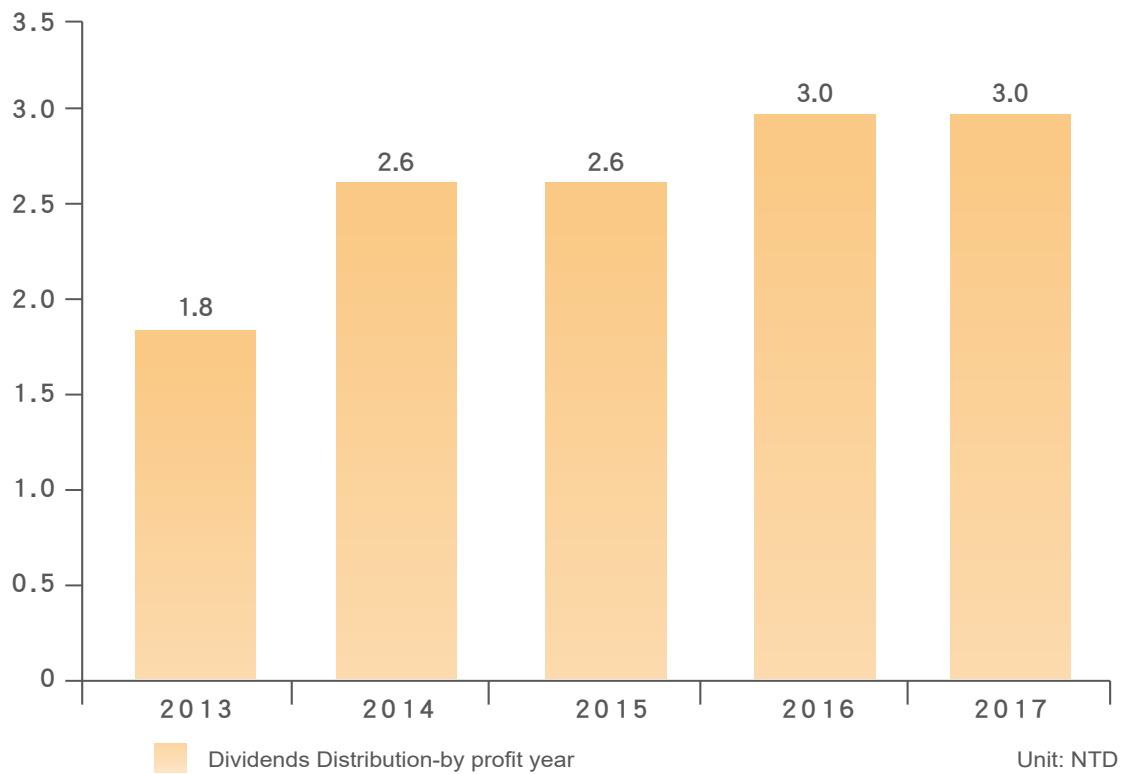
Item	2013	2014	2015	2016	2017
Pre-tax profit	50.6	65.0	49.4	62.6	52.8
Income tax expenses	6.9	10.6	7.8	7.2	7.8
Cash dividends (NT\$)	1.8	2.6	2.6	3.0	3.0
Revenue	211.4	239.3	233.2	258.3	249.1
Net Income	43.7	54.4	41.6	55.4	45.1
Total assets	288.5	337.5	323.8	349.8	343.0
Equity	244.3	275.5	274.1	287.0	278.8
Capital expenditure	7.1	32.2	15.0	13.0	17.7
R&D expenditure	9.8	11.9	12.4	15.6	15.5

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

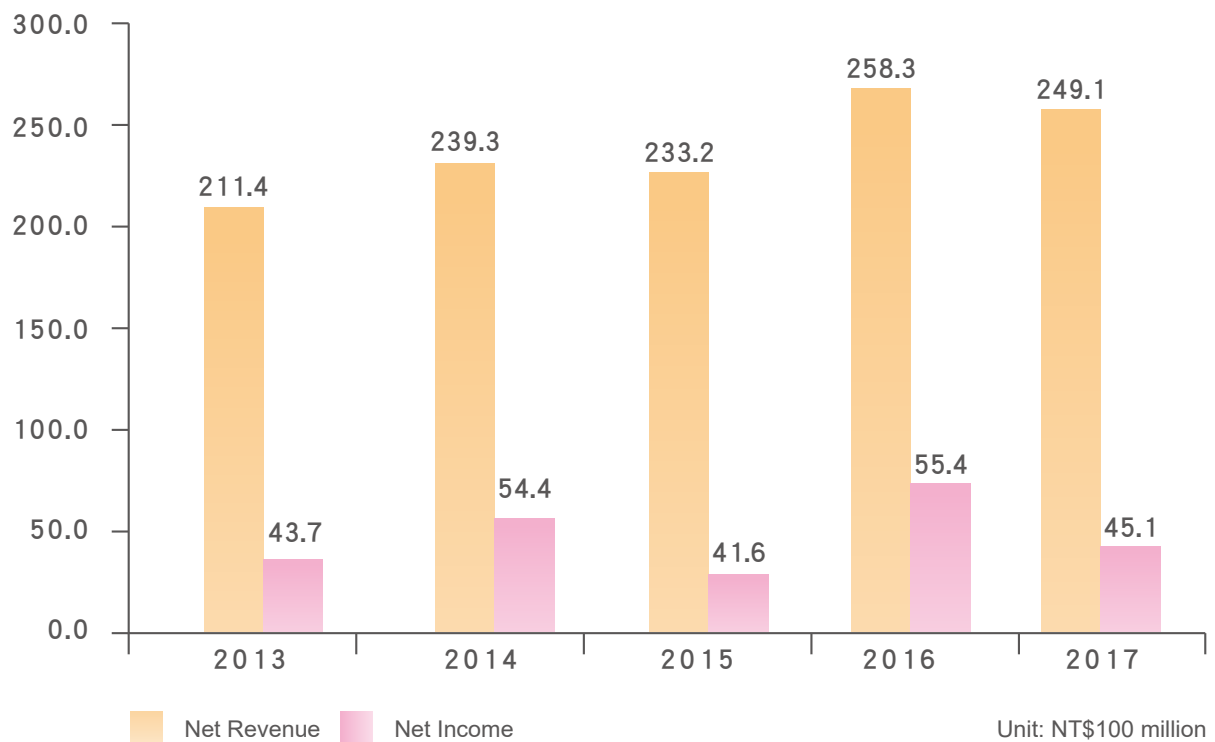
## Pre-tax profit and Income tax expenses



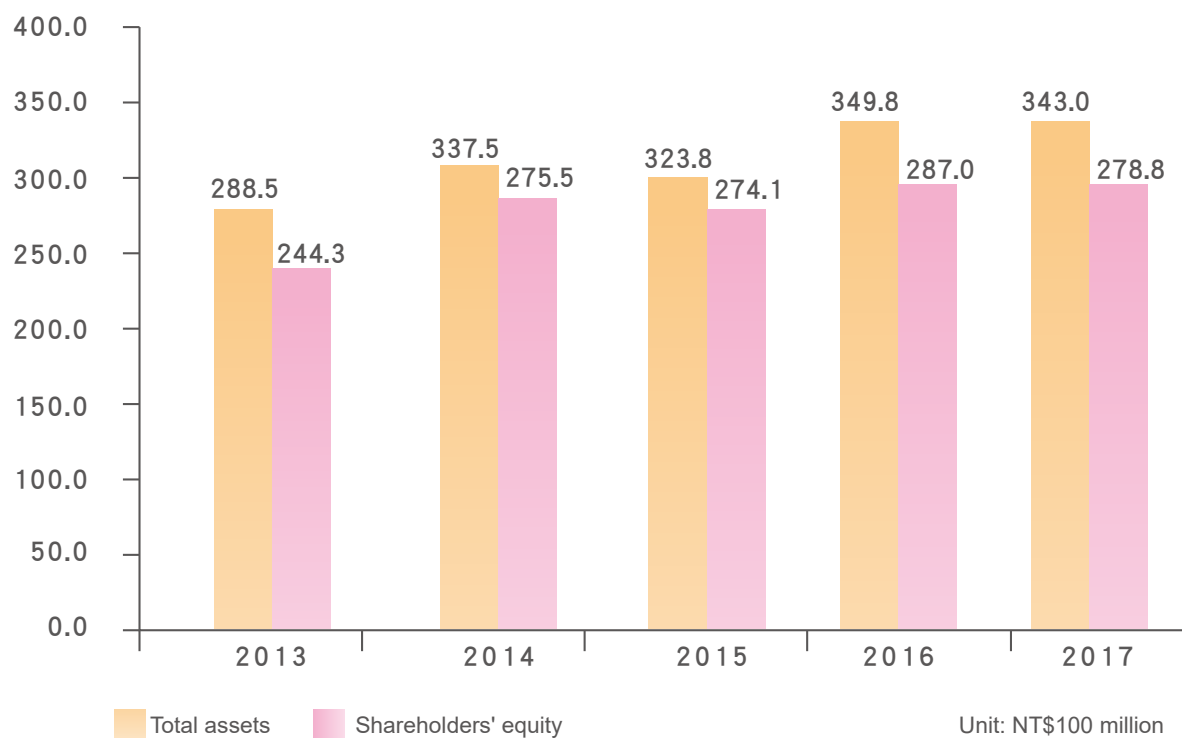
Dividend Distribution-by profit year



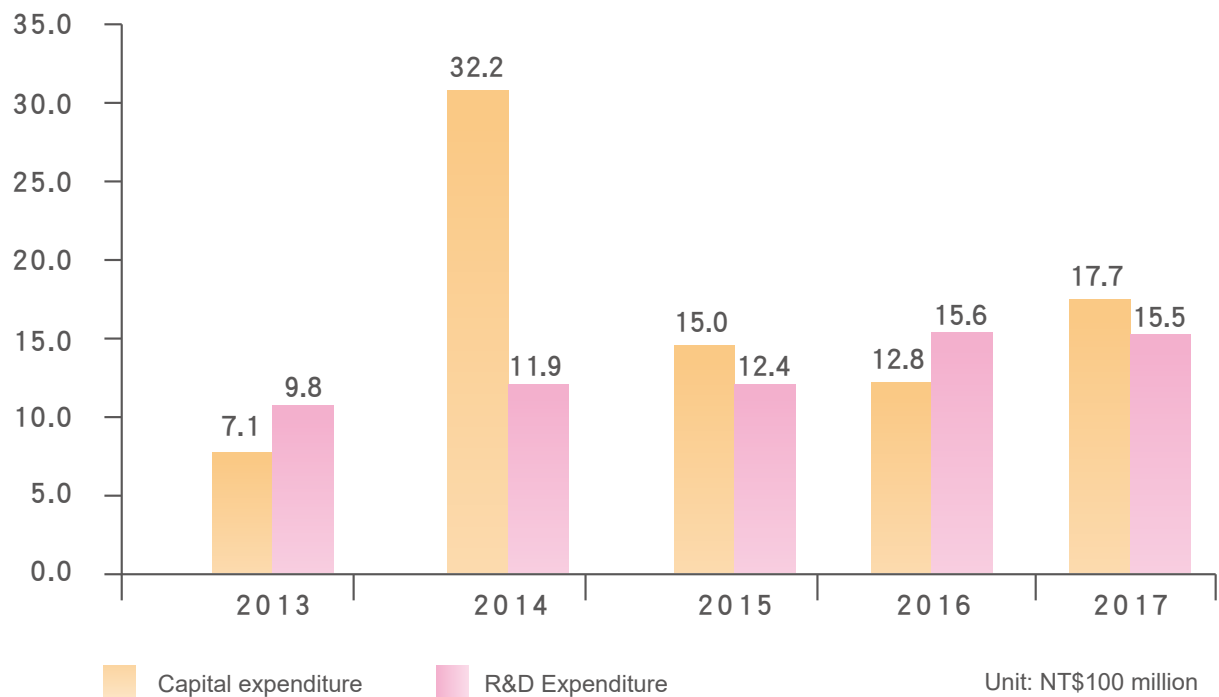
Net revenue and Net Income



## Total assets and Shareholders' equity (Year-end Balance)



## Capital expenditure and R&amp;D Expenditure



## VIS R&D strategies for 2017

1. Based on market and customer demands, we are developing customized UHV technology for motor driver IC and LED driver IC products.
2. VIS focused on the research and development of 0.15um/ 0.11um and the integration of 120V power management IC process technology platform, which are used for smart phones, tablet, desktop, and notebooks. Currently, this platform is also widely used in automotive and electronic products.
3. Based on market demands, develop customized and diversified LCD driver IC process platform for large size ultra-high resolution TVs (8K4K, 4K2K), tablets, smartphones, touch panels, and automotive panel displays.
4. Research and develop a fingerprint IC technology platform that fulfills the requirements of customization and industry's latest product applications.

## 3.3 Business Policies

### Business philosophy

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 and established a CSR management system in accordance with the Corporate Social Responsibility Best Practice Principles for TWSE/GTSM-Listed Companies and the Responsible Business Alliance (RBA, formerly known as EICC: Electronic Industry Code of Conduct). To implement CSR policies and promote relevant activities, VIS has established a Corporate Social Responsibility Promotion Committee which is responsible for conducting meetings on a quarterly basis to review implementation outcomes and make continuous improvements.

Since its inception, the Company has honored the principle of good faith, abided by an exacting code of professional ethics, and created a practical, cooperative work environment. Regarding business operations, we focused on our core businesses of "semiconductor design, manufacture, and sales" to provide competitive process technologies and services, with the goal of becoming the leading manufacturer in "Specialty IC foundry services". Regarding business development, VIS advocates globalized management by looking at the global market. We also uphold a customer-oriented business management philosophy to continuously strengthen long-term partnerships with our customers, and to create mutually beneficial outcomes for VIS and its customers. To provide excellent products and services, we focused on building up quality in our manufacturing processes and procedures, supply chain management, and service processes, and exert our utmost effort in achieving the goal of constantly improving our quality to surpass customer requirements. VIS aimed to satisfy customers' diverse needs, provide advanced processes, and reduce the time to market for customers. In technological developments, we continue to innovate, research, and develop process technologies and strengthen the development of special devices and intellectual property rights. Furthermore, we expect to create a challenging, exciting, communicative work environment that will attract and retain outstanding talents who share the same values.

In the long run, the Company will continue to implement corporate governance, uphold business integrity, adhere to the operating principles of professional ethics, provide care for the community and its people, protect environmental resources, and increase shareholders' equity and employee benefits. In addition, VIS will fulfill its social responsibilities to achieve a sustainable balance between "economic development, environmental protection, and social justice."

### 3.4 Foreign and Domestic Organizationl Members

	Enterprise member	Director and supervisor
WBCSD Global Network Partner	•	
EICC- On	•	
Taiwan Semiconductor Industry Association	•	VIS Chairman was the director of the Association
The Allied Association for Science Park Industries	•	
Taiwan Electrical and Electronic Manufacturers' Association	•	

### 2017 Member Activities

- VIS was actively involved in activities organized by the WBCSD Global Network Partner, and devoted great efforts in learning the practice of sustainability activities promoted by CSR benchmark companies
- VIS provided sponsorship for the Taiwan Semiconductor Industry Association (TSIA), funded academic researches projects and promoted the invention of semiconductors by the country's PhD graduates and postdoctoral researchers, as well as industry cooperation
- VIS sponsored TSIA in the promotion of industrial development seminars
- VIS sponsored TSIA in improving the effectiveness of its Environmental Safety and Health Committee
- VIS sponsored the Very-large-scale Integration (VLSI)
- VIS frequently participated in the "annual industrial safety and environmental protection month" events hosted by the Hsinchu Science Park Administration in order to make contributions to the community, and organize environmental safety and health activities
- Supervisors from various VIS divisions are active members of the Allied Association for Science Park Industries, and were elected as representatives of the Association to participate in the promotion of industrial development

The Company did not sign any relevant regulation forms and campaign activities in 2016.

### 3.5 Awards and Achievements

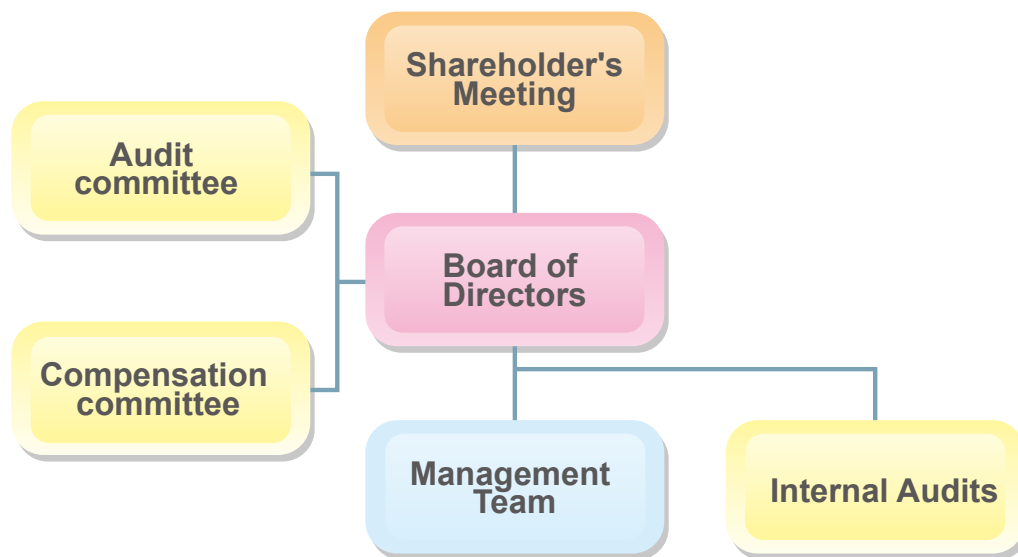
- 2012 Received the "Energy Conservation & Carbon Production Action Emblem" from the Environmental Protection Administration, Executive Yuan.
- 2012 Winner of the "Outstanding Waste Management Award" from the Environmental Protection Administration, Executive Yuan.
- 2012 Winner of the "Outstanding Environmental Protection Award" from the Hsinchu Science Park Administration.
- 2012 Received the Health Promotion Emblem for Self-Certification of a Healthy Workplace" from the Bureau of Health Promotion, Department of Health.
- 2013 Received the Health Startup Emblem for Self-Certification of a Healthy Workplace" from the Bureau of Health Promotion, Department of Health.
- 2013 Received the award of excellence in the Science Park Administration's "Science Park Outstanding Carbon Reduction Enterprise Awards."
- 2013 Received EPA's "2013 Energy Conservation & Carbon Production Action Emblem."
- 2013 Received the 3<sup>rd</sup> in the Hsinchu Bureau of Environmental Protection's "2013 Hsinchu Science Park Mobile Emissions Source Assessment" program.



- 2013 Finalist in the 7<sup>th</sup> "Outstanding Atomic Energy Safety Achievement Award" offered by the Atomic Energy Council, Executive Yuan.
- 2014 Received the award of excellence in the Science Park Administration's "Science Park Outstanding Carbon Reduction Enterprise Awards."
- 2014 Received the "Science Park Enterprise with Outstanding Achievement in Environmental Protection Award".
- 2014 Received the "Hsinchu Department of Health Outstanding Breast-Feeding Room Certification".
- 2014 Bronze medal winner of Hsinchu City's Preliminary Healthy Workplace Exercises Contest.
- 2014 Received the Best Team award in the National Regional Semifinals for Healthy Exercises at a Workplace.
- 2014 Received the highest rating (A<sup>++</sup>) in the 11<sup>th</sup> Information Disclosure Evaluation.
- 2014 Received the 2014 Outstanding Performance Business for Issuance of Uniform Invoice Award from the Ministry of Finance.
- 2014 Winner of the Second Laurel Award from GreTai Securities Market
- 2015 Received EPA's bronze award at the ROC Enterprises Environmental Protection Award.
- 2015 Received the award of excellence in the Hsinchu Bureau of Environmental Protection's Enterprise with Outstanding Achievement in Environmental Protection Award
- 2015 Excellence in 2015 Occupational Safety and Health Promotion Performance Award from the Hsinchu Science Park Administration.
- 2015 Received the 2015 Science Park Enterprise with Outstanding Achievement in Environmental Protection Award - Control of Fixed Sources of Pollution from the Hsinchu Bureau of Environmental Protection.
- 2015 During the first Corporate Governance Evaluation of Listed Companies, the Company was ranked in the top 5% and received the highest honor
- 2016 During the second Corporate Governance Evaluation of Listed Companies, the Company was ranked in the top 5% and received the highest honor.
- 2016 VIS participated in the MOEA Industrial Development Bureau's "Knowledge Management Competition" and brought home a silver medal and two honorable mentions.
- 2016 Received EPA's bronze award at the ROC Enterprises Environmental Protection Award.
- 2016 Received Excellence in Occupational Safety and Health Promotion Performance Award from the Hsinchu Science Park Administration.
- 2016 Received the Taoyuan Department of Environmental Protection's Award for Reduction of Air-borne Pollutants in Public and Private Spaces.
- 2017 During the first Corporate Governance Evaluation of Listed Companies, VIS was ranked in the top 5% and received the highest honor
- 2017 Received the Merit Award for Dynamic Workplace Creativity by the Health Promotion Administration, Ministry of Health and Welfare

- 2017 Hsinchu Department of Health Friendly Breast-Feeding Room Certification
- 2017 Received Hsinchu Science Park's Outstanding Enterprise Award for Advancing Workplace Equality in 2017
- 2017 Received the Comprehensive Vaccination Award in the Friendly and Healthy Workplace Certification by the Centers for Disease Control, Ministry of Health and Welfare and Taiwan Immunization Vision and Strategy (TIVS) alliance.
- 2017 Received the EPA's Silver Award at the ROC Enterprises Environmental Protection Award.
- 2017 Received the Benchmark Enterprise Award from the Occupational Safety and Health Administration, Ministry of Labor at the National Occupational Safety & Health Award.
- 2017 Received the Taoyuan Department of Environmental Protection's Award for Reduction of Airborne Pollutants in Public and Private Spaces.
- 2017 Received Excellence in Occupational Safety and Health Promotion Performance Award from the Hsinchu Science Park Administration.
- 2017 Received the Partner in Environmental Education Promotion Award from the Hsinchu Science Park Administration.
- 2017 Received the Outstanding Achievement in Environmental Protection Award from the Hsinchu Bureau of Environmental Protection.

## 4. Corporate Governance



The structure of corporate governance

### Summary of VIS's Corporate Governance

- Three out of the seven directors are independent directors
- All members of the Compensation Committee and the Audit Committee are independent directors
- Received the highest rating (Excellent) in the international "CG6010 Corporate Governance" assessment held by Taiwan Corporate Governance Association
- Ranked in the top tier in the third Corporate Governance Evaluation: Top 5%
- Conducted performance evaluation on individual directors, the board of directors and each functional committee, and disclosed the results on the company's website
- Commissioned external independent bodies or expert scholars to conduct board performance evaluations every three years
- The first external evaluation was completed by Taiwan Corporate Governance Association
- Completed the establishment of the board member diversity policy

## 4.1 Strengthen the duties and operations of the Board of Directors

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 comply with government laws and regulations. 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.

### 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 (Note).

For the election of the eighth Board of Directors in 2015, the Company followed the principles of corporate governance and adopted the nomination system. The Company's Board of Directors contains two major shareholders: Taiwan Semiconductor Manufacturing Company (TSMC), and the National Development Fund, Executive Yuan. Since the founding of this Company, these two shareholders have always been directors of the Company. Because they are corporate shareholders, by law, they must designate representatives to perform duties on their behalf. Among the seven Directors, three are independent, they are as follows: Kenneth Kin, former Senior Vice President of Taiwan Semiconductor Manufacturing Company; W.C. Liu, Benson, former Chairman and President of the Bristol-Myers Squibb Company; and Chintay Shih, former Chairman of the Industrial Technology Research Institute. Six out of the seven directors do not serve as managers at the Company. (Note)

### 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 local laws, filing Articles of Incorporation, executing new resolutions adopted during shareholder's meetings; and maximizing shareholders' equity.

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 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 6 board meetings in 2017.

Title	Name	Attended in person (B)	Attended by a representative	Attendance rate (%)
Chairman	TSMC Representative: Leuh Fang	6	0	100%
Vice Chairman	TSMC Representative: Fan-Cheng Tseng	6	0	100%
Independent Director	W.C. Liu Benson	6	0	100%
Independent Director	Chintay Shih	5	1	83%
Independent Director	Kenneth Kin	6	0	100%
Director	Way Y. Edward	6	0	100%
Director	Representative of the National Development Fund Management Committee, Executive Yuan: Lai-Shou Su	3	0	100%
Director	Representative of the National Development Fund Management Committee, Executive Yuan: Kuo-Hui Hsiao	3	0	100%

Note: 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. During the 2015 shareholders meeting, President Leuh Fang was elected as a new Board Director and was also elected as the Chairman.

The National Development Fund Management Committee, Executive Yuan appointed Mr. Lai-Shou Su as its corporate director representative on July 1<sup>st</sup>, 2017.

The Board of Directors has established two committees: the Audit Committee and the Compensation Committee. Details of these committees are as follows:

### 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. Establishment or amendment of the internal control system according to Article 14-1 of the Securities and Exchange Act.
2. Assessment of internal control system effectiveness.
3. Establishment or amendment of asset acquisition/disposal procedures, derivative trading procedures, lending procedures, endorsement and guarantee procedures, and other procedures involving major financial consequences according to Article 36-1 of the Securities and Exchange Act.
4. Issues pertaining to the personal interests of directors.
5. Major transactions on assets or derivative products.
6. Major lending, endorsements or guarantees provided.
7. Offering, issuance, or private placement of any equity-type securities.
8. Appointment, dismissal or remuneration of the CPAs.
9. Appointment and discharge of financial, accounting, or internal audit supervisors.
10. Annual, semiannual, quarterly financial statements.
11. Review of business reports, earnings distribution, or loss compensation.
12. Changes in material matters concerning accounting policy or accounting estimates and other regulations of the Company or competent authorities.

The Audit Committee held 6 meetings in 2017; information on the attendance of committee members are as follows:

Name	Attended in person	Attended by a representative	Attendance rate
W.C. Liu Benson	6	0	100%
Chintay Shih	5	1	83%
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 2017; 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%
W.C. Liu Benson	5	0	100%

### Continuing education status of directors/supervisors in 2017

Title	Name	Date of Continuing Education		Organizer	Course title	Hours Completed
		Started On	Ended On			
Institutional investor representative	Leuh Fang	2017/11/21	2017/11/21	Taiwan Corporate Governance Association	Information Security Risks and Response Strategies for Emerging Technologies	3



Title	Name	Date of Continuing Education		Organizer	Course title	Hours Completed
		Started On	Ended On			
		2017/12/12	2017/12/12	Taiwan Corporate Governance Association	Trends and Implementation of Cross-Strait Mergers	3
Institutional investor representative	Fan-Cheng Tseng	2017/08/03	2017/08/03	Taiwan Corporate Governance Association	Information Security under Technological Development	3
		2017/08/09	2017/08/09	Taiwan Corporate Governance Association	Trends and Responsibilities of Directors and Supervisors for Protecting Personal Information in the Smart and Connected Age	3
Institutional investor representative	Lai-Shou Su	2017/10/20	2017/10/20	Taiwan Corporate Governance Association	How Directors Perform "Fiduciary Duties" (Including Analysis of Judgments and Best Practices)	3
		2017/11/03	2017/11/03	Taiwan Corporate Governance Association	Corporate Response Measures Led by Directors in an Environment with Rapidly Changing Technology	3
Director	Way Y. Edward	2017/01/24	2017/01/24	Taiwan Corporate Governance Association	Explanation of Key Points in the Amendment of the Company Act for Corporate Governance of Public Companies	1
		2017/02/22	2017/02/22	Taiwan Corporate Governance Association	Corporate Legal Compliance and Directors' Obligations for Supervision - From the Perspective of the Mega Bank Incident	3
		2017/04/07	2017/04/07	Securities & Futures Institute	2017 Insider Trading and Corporate Social Responsibility Seminar	3
		2017/08/29	2017/08/29	Taiwan Corporate Governance Association	The Promoter of Corporate Governance - Unveiling the Company Secretary	1
		2017/09/06	2017/09/06	Taiwan Corporate Governance Association	How Directors and Supervisors Perform Information Security and Risk Management	3
		2017/09/26	2017/09/26	Taiwan Corporate Governance Association	What is Your General Manager Worried About? - Corporate Response Measures Led by Directors in an Environment with Rapidly Changing Technology	1
		2017/09/28	2017/09/28	Taiwan Stock Exchange Corporation	2017 Mr. Yuan-Tung Hsu Commemorative Finance Seminar	6

Title	Name	Date of Continuing Education		Organizer	Course title	Hours Completed
		Started On	Ended On			
		2017/10/25	2017/10/25	Taiwan Corporate Governance Association	13 <sup>th</sup> International Forum on Corporate Governance	3
		2017/11/01	2017/11/01	Taiwan Academy of Banking and Finance	Workshop on the operating practices of the board of directors/supervisors and corporate governance	3
		2017/11/15	2017/11/15	Taiwan Academy of Banking and Finance	Corporate Governance Seminar (Fifth Session)	3
		2017/12/12	2017/12/12	Taiwan Corporate Governance Association	Trends and Implementation of Cross-Strait Mergers	3
		2017/12/26	2017/12/26	Taiwan Academy of Banking and Finance	Workshop on Board of Directors Operating Practices and Corporate Governance	3
Independent Director	Kenneth Kin	2017/06/15	2017/06/15	Taiwan Corporate Governance Association	Crimes and Penalties for Insider Trading - Analyses of Legal Cases - 1&2	6
		2017/12/12	2017/12/12	Taiwan Corporate Governance Association	Trends and Implementation of Cross-Strait Mergers	3
Independent Director	W.C. Liu Benson	2017/01/24	2017/01/24	Taiwan Corporate Governance Association	Explanation of Key Points in the Amendment of the Company Act for Corporate Governance of Public Companies	1
		2017/07/10	2017/07/10	Taiwan Corporate Governance Association	Sixth corporate governance system assessment review meeting, third session	2
		2017/08/03	2017/08/03	Taiwan Corporate Governance Association	Information Security under Technological Development	3
		2017/08/29	2017/08/29	Taiwan Corporate Governance Association	The Promoter of Corporate Governance - Unveiling the "Company Secretary"	1
		2017/10/31	2017/10/31	Taiwan Corporate Governance Association	Mergers and Acquisitions from the Perspective of Directors	3
		2017/12/12	2017/12/12	Taiwan Corporate Governance Association	Trends and Implementation of Cross-Strait Mergers	3
		2017/12/04	2017/12/04	Taiwan Corporate Governance Association	Evaluation of Board of Directors' Effectiveness	3

Title	Name	Date of Continuing Education		Organizer	Course title	Hours Completed
		Started On	Ended On			
Independent Director	Chintay Shih	2017/08/29	2017/08/29	Taiwan Corporate Governance Association	CSR Sustainable Governance Under Current Trends	3
		2017/12/12	2017/12/12	Taiwan Corporate Governance Association	Trends and Implementation of Cross-Strait Mergers	3

### Prevention of conflict of interest

The Company has established provisions related to the prevention of conflict of interest. If any director or juristic person represented by a director is a member of the interested party, whose involvement with a meeting agenda may have conflict of the Company's interests, they may attend the meeting, state their opinion, and raise questions. However, 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. 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.

The Company has appointed a spokesperson, and has established a website as a channel for communication and information dissemination. A mailbox for investors has also been set up, any shareholder suggestions or issues will be handled by a designated person.

In addition, the Company has rules and regulations in place to prevent conflict of interest. Firstly, 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. Secondly, in pursuant to the strict reporting requirements as regulated by the laws of the Republic of China, any transactions concerning related-parties must be disclosed.

## 4.2 Internal Control and Audit System

For all major operational activities in the company, VIS has established an internal control system and managerial guidelines, and ensures the execution and review of such system and guidelines at all times. The management evaluates the Company's internal and external environmental influences and potential fraudulent activities and defines risk items that should be managed to provide a basis for strengthening the control and management of relevant business activities.

All divisions must conduct self-evaluations on a quarterly basis regarding internal control system. If any deficiencies or improvable items are found, an improvement plan and the expected completion date must be submitted. The progress shall be tracked and reviewed by the internal audit unit until improvements are made.

The internal audit unit shall conduct auditing according to the audit plan that has been approved by the board of directors and shall regularly report the audit results and improvement outcomes to the Audit Committee and board of directors to ensure the reliability, timeliness, and transparency of the Company's financial, business, and management information as well as to ensure compliance with laws and regulations.

### Statistics of Reported Cases at VIS

	2016	2017
External Complaint Mailbox (Audit Committee, Chairperson, and President mailbox) Note 1	0	0
Employee feedback (Employee communication mailbox, employee feedback system) Note 2	74	150
Reported cases of sexual harassment	0	0
Confirmed cases following investigation	0	0
<p>Note 1: Mailbox of the Audit Committee:audit_committee@vis.com.tw Chairman's mailbox:vis_chairman@vis.com.tw President's mailbox:vis_president@vis.com.tw</p> <p>Note 2: In 2016 and 2017, there were no violations of code of ethical conducts nor financial and accounting related cases</p>		

Cases are processed by designated personnel. The opinions provided by the aforementioned employees were suggestions for management and they have been processed by designated personnel.

## 4.3 Implementation of Legal and Regulatory Compliances

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 Affairs and Intellectual Property Department. All other departments must also pay close attention to any changes in policy, laws, and regulations that may potentially have a significant impact on the Company's operations, businesses, or finance activities. Through the formulation of relevant regulations, VIS offered training courses, tracked and promoted laws and regulations, provided channels for filing complaints, self-inspections, and internal audits; these actions enabled VIS to establish and enforce plans for its compliance programs. At the same time, based on VIS's corporate value and business philosophy in honoring the principle of good faith, VIS requests all employees to comply with the policies, laws, and regulations relevant to its business activities.

## Formulation and Enforcement of Policies and Regulations

VIS has established relevant policies and regulations according to the policies, laws, and regulations from various business domains; it has also requested all employees to follow such policies while conducting business. The scope of such policies comprised of 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, professional ethics regulations, and PIP policy. To reinforce the implementation of legal and regulatory compliances and ensure corporate compliance with relevant policies, laws, and legal requirements, VIS has also incorporated the internal working principles from other companies into our policies and regulations. In 2015, VIS completed the implementation of personal information protection, as well as anti-trust policies and related training.

To support business development and to reduce risks and negative impacts on the Company caused by legal violations, while encouraging 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. Through anti-trust training and online anti-trust education programs, the high-risk units were requested to periodically inspect their business activities. We cultivate employees' compliance with anti-trust regulations to ensure that VIS continues to adhere to its regulatory commitments.

In addition, VIS has established the Proprietary Information Protection (PIP) Policy in 2003 to prevent inappropriate leaks of trade secrets and important information and prevent employees from breaking the law and damaging company interests. To strengthen the implementation of the Proprietary Information Protection Policy, VIS initiated reviews on PIP operations and management mechanisms in 2017 and completed the amendments of the Proprietary Information Protection Policy. We also established a dedicated PIP section on the intranet to allow employees to review related regulations and access education and training materials at any time for their education. VIS also uses online courses and case studies to improve employees' awareness of the Company's trade secrets and protection of confidential information. These measures strengthen the protection of trade secrets and proprietary information as well as the Company's competitive advantages.

## Education and training

Training is an integral part of legal compliance planning; VIS offers compliance training programs to its employees every year to update employees on the latest regulations and policies. At the same time, the Company introduces operating regulations and systems it intends to reinforce during that year. Thus, employees are able to implement legal and regulatory compliances during their daily operations and while performing their administrative duties, thereby strengthening VIS's commitment to comply with relevant laws and regulations.

To allow its employees to receive legal compliance training, VIS provides online educational courses that focus on the following topics: CSR policies, professional ethics, introduction to Authorized Economic Operator (AEO) supply chain safety and management system, protection of crucial information, sexual harassment prevention, and introduction to intellectual property rights. Specific training requirements have also been established based on the job responsibilities of employees. Furthermore, tests are conducted after each course to examine the employee's level of understanding regarding legal articles, policies, and regulations.

In order to allow employees to understand anti-trust laws in regions where VIS conducts most of its business activities, and to help employees identify potential violations of anti-trust laws, the Legal Department has set up three sessions of anti-trust courses in 2016 to provide training to a total of 88 employees; the training completion rate was 92.6%. In 2017, these courses will be reinforced and incorporate case studies with the goal of raising compliance awareness among the workforce. Compliance with fair competition regulations in countries where VIS operates would ensure sustainable development of the Company.

Considering the frequent interactions that take place between employees and suppliers as a part of their daily routine, in 2016 the Legal Department has set up three sessions of sexual harassment prevention and code of ethical conduct courses to prevent inappropriate behaviors such as sexual harassment or conflict of interest during the interaction between employees and suppliers. A total of 267 employees have been trained; training completion rate was 100%. These training courses are ultimately aimed to raise the awareness of employees on compliance issues. In 2017, the Legal Department will continue to hold related courses in hopes of strengthening employees' knowledge on sexual harassment prevention and code of ethical conduct through face-to-face lectures and Q&A sessions. In the future, VIS also aims to offer additional courses that focus on specific laws, regulations, and policies.

## Changes in laws and regulations

In order to ensure the legitimacy of its primary business practices, as well as the monitoring of changes in rules and regulations, VIS's Legal Department periodically reviews amendments to laws and regulations, and posts the amendment information on the Company's internal website; through the internal mail system, employees are notified of the latest law amendments and court rulings as references. VIS also promotes self-management of legal compliance, the people in charge from various departments and also examine whether the amendments have been made to the international and domestic policies, or the laws which the respective departments must comply with, and whether regulations regarding the scope of their business activities conform to such amendments, in order to lower the impact and the risks for the Company. Concerning the promotion of legal compliance, to have its employees familiarize with company policies, regulations, and the importance of legal compliance, VIS regularly posts on its internal website and bulletin boards promotional announcements and posters related to company policies and articles.

## Reporting illegal activities

To prevent illegal acts from damaging to the rights and interest of its customers and employees, and to protect the corporate image, VIS offers multiple channels for filing complaints. VIS also encourages its employees to file reports through the internal employee communication mailbox when they suspect or discover illegal activities that violate the Company's code of conducts. VIS also provides a channel for filing complaints externally, which allows outsiders to report possible illegal activities to the Company through the mailboxes of the Audit Committee and the President. The Company adheres to the principle of confidentiality over the identity of employees and external parties as well as the contents of the reported cases. This ensures VIS's conduct conforms to the requirements of international and domestic policies and regulations.

### Reporting mailbox:

Mailbox of the Audit Committee: [audit\\_committee@vis.com.tw](mailto:audit_committee@vis.com.tw)

Chairman's mailbox: [vis\\_chairman@vis.com.tw](mailto:vis_chairman@vis.com.tw)

President's mailbox: [vis\\_president@vis.com.tw](mailto:vis_president@vis.com.tw)

In the future, VIS aims to take further steps in formulating effective laws and regulations, creating a positive industry management environment, and making even greater contributions to society.

## 4.4 Implementation of Risk Management

Vanguard International Semiconductor Corporation adopts professional risk evaluation techniques and concepts from local and abroad to facilitate its pro-active risk prevention and loss control. By adopting effective engineering technologies and risk management policies, the Company is able to ensure employees' full participation and ongoing improvements. The Company has incorporated risk management measures into its daily operations. Every department is required to perform regular self assessments on risk control, while the board of directors and the executive management supervise the effectiveness of existing risk management measures and ensure that risks are kept within tolerable levels.

### Risk management organization

Below is a description of the Company's risk management organization:

- Board of directors (including Audit Committee): Determines the overall risk management system and monitors actual conditions to ensure that the system remains effective.
- Executive management (Chairman and President): Executes the board's risk management decisions and supervises regional heads and the Health, Safety and Environmental Protection Committee. It is also responsible for identifying risks and monitoring the effectiveness of various control measures.
- Management (Vice Presidents and the Health, Safety and Environmental Protection Committee): Consolidates information regarding the effectiveness of risk management activities; assists and supervises subordinates in identifying risks and implementing proper control.
- Risk management and policy execution units: The Company has specialized units responsible for identifying possible risks in daily operations and establishing control measures to address such risks. Their efforts are reviewed and reported to the management on a regular basis.
- Responsibilities of the various risk management and policy execution units are:
  - Internal audits: The overall implementation of the risk management system, risk management guidance for various departments within the Company, progress review and control, ensuring the effectiveness and robustness of current practices, and reporting back their findings to the executive management and board of directors to help improve the risk management system.
  - Legal Department: Complies with government laws, manages legal risks, and handles contract and litigation disputes to mitigate legal risks.
  - Human Resource Office: Takes responsibility in human resource systems, plans the use of human resources, improves human resource efficiency, and promotes labor-management harmony to lower management risks.
  - Quality Reliability Assurance Office: Responsible for product testing, quality control, and promotion of the company's quality strategy to ensure the quality and reliability of the company's products and lower operational risks.
  - Operations and Environmental Safety: Leads Fab 1, Fab 2, and Fab 3 plants, Special Planning Department, Product Engineering Division, Computer Integrated Manufacturing Division, Back-End Operational Division, Module Technology Development Projects, and the Risk and Environmental Safety Management Department. Defines production output goals, controls costs, improves yield rate, and provides assistance in developments, implementation of new processes, simplification and continual improvement of mass production processes, and other related activities. Responsible for improvement of business performance to ensure timely delivery of high-quality products that meet customer needs and mitigation of operational and hazard risks.



- **Global Business and Planning:** Leads the Customer Engineering Service Division, Business Division, and Business Planning Department, Technological Support Division, and Marketing Division. Organizes the Company's product planning, business, and marketing activities. Responsible for product sales service, analysis and development of domestic and foreign market information, and collates and establishes customer database to lower market risks; Responsible for determining competition and market trends and formulates marketing strategies to lower strategy risks.
- **Research & Development:** Leads the Design Service Engineering Division, Technology R&D Division 1, Technology R&D Division 2, Technology R&D Division 3, Component Engineering Division, Design System Technology Department, Design Service Department, and Planning & Management Department. Organizes process technology and IP development and provides necessary supporting resources and technologies such as component engineering, mask, CAD, and Layout.
- **Finance Division:** Responsible for financial schedule planning and adoption, evaluates and supervises investment transfers, carries out safe, mobile, and beneficial analyses under a risk management mechanism, and establishes foreign exchange hedge mechanisms to reduce financial risks.
- **Accounting Division:** Establishes the company's accounting system that produces accurate and reliable financial reports to fulfill internal control requirements and mitigate financial risks.
- **Material Management Division:** Ensures supplier management and carries out procurement-related tasks and material management as a means of continual monitoring of inventory and material cost so as to reduce operational risks.
- **Information and E-Commerce Division:** Responsible for network planning and operations and maintains network quality to reduce information risks.

#### 4.5 Information Transparency and Code of Conduct

The Company has set up an official website ([www.vis.com.tw](http://www.vis.com.tw)) to disclose its financial related data and corporate governance information, as well as provides regular information updates. At the same time, important information is being uploaded to the Market Observation Post System for public investors as regulated by the authorities in charge.

The Company holds investors' conferences every quarter. Locations and dates are always published as material information according to the law. Details of such conferences are published as material information simultaneously after the conference has begun. Related presentations are also summarized and disclosed on the Company's website. Furthermore, audio recordings of the most recent investor conference are also made available on the company website.

VIS achieved full compliance with the Securities and Exchange Act, the Company Act, and relevant labor and environmental laws. The Company did not receive any disciplinary actions (those with penalties in excess of NT\$1 million) in 2017.

Article 1 of VIS's business philosophy, "honoring the principle of good faith, abide by an exacting code of professional ethics, and create a practical, cooperative work environment", is the most fundamental and important philosophy, it is also a law which we much follow when conducting business operations. What we mean by high degree of professional ethics are the following:

1. We always tell nothing but the truth.
2. We will not exaggerate and we will not be pretentious.
3. We do not make empty promises to our customers; when we do make a promise, we will deliver by all means.
4. We engage in full force competitions with our competitors within legal limits of the law, but we will not engage in malicious defamation. At the same time, we must also respect the intellectual property rights of our competitors.
5. We challenge and cooperate with our suppliers in an objective, honest, and fair manner.

To maintain these ideas, the Company formulated the Professional Code of Ethics. The Board of Directors has approved the implementation of the Professional Code of Ethics, requesting all employees of VIS and its subsidiaries to strictly abide by such Code in order to protect the company's reputation, and earn the respect and trust of customers, suppliers, and other industrial experts. The Professional Code of Ethics clearly states the operating procedures and punishment for dishonest behaviors, the methods for filing a complaint, and policies for preventing conflict of interest. Each year, employees will receive additional training in order to implement these policies.

Training programs provided by VIS for employees include the "VIS Corporate Social Responsibility Policy" training so that they understand that VIS encourages its employees and executives of all levels to uphold integrity and honesty while conducting business activities. VIS opposes corruption of any form, including extortion, bribery, and embezzlement. The "Professional Code of Ethics" emphasized compliance to regulations on professional ethical conduct, prevention of conflicts of interests, gifts, business entertainment, and implementation of professional ethics. The aforementioned courses are mandatory of new employees and review courses must be taken every two years. The purpose of the training was to educate employees on ethical values in order for them to establish their own performance standards and implement such standards while performing their daily tasks to maintain a positive image for the Company. The actual numbers of participants in VIS's training programs are as follows:

Actual training participants						
Employee category	Direct employees		Indirect employees		All Employees	
Training programs	2016	2017	2016	2017	2016	2017
VIS Corporate Social Responsibility	2,104	409	2,455	524	4,559	933
Education of the Professional Code of Ethics	2,254	444	2,720	411	4,974	855

Note: 1. The information in the table includes employees in Taiwan. Foreign employees are not included in the statistics.  
 2. Due to course arrangements, the number of trained employees in 2016 included all employees while the training program in 2017 was arranged for all new employees in the current year.

Therefore, each employee must strive to:

1. Avoid opportunities for obtaining personal gain.
2. Protect the Corporation's confidential or secured information, as well as personal information of employees.
3. Avoid any unfair competition or improper gains, and do not accept gifts, hospitality, or bribes.
4. Protect corporation assets and use them properly.
5. Be a law abiding citizen.

The reasonable limits of gift giving and business hospitality means all employees must uphold the highest standards of professional ethics toward company suppliers, contractors, customers, or other stakeholders (including government officials), and are absolutely forbidden from receiving any form of bribery. In the Ethical Code between VIS and Suppliers, it clearly states that no form of bribery or taking personal gains is allowed, and frequent or improper business hospitality gatherings must be avoided. If a supplier violates the aforementioned regulation, VIS will take serious steps to re-consider the business partnership and take appropriate actions. The Company provides suppliers with the "VIS Corporate Social Responsibility Policy" Statement in accordance with the "Regulations on Procurement". All new suppliers are required to implement and sign the Statement before performing any transactions. A total of 238 companies signed the Statement in 2017 and the Statement was signed by 100% of the new suppliers. As of the end of 2017, 2,455 suppliers have signed the Statement. The Company shall mail the "CSR Policy Implementation Status Survey" to main suppliers and require them to perform independent investigations on their anti-corruption management system and the implementation status of their corporate donations procedures.

In addition, the Company's "Professional Code of Ethics for Directors" emphasizes fair trade, avoid personal conflicts of interest, stop insider trading, report wrongdoing, etc., further demonstrating the Company expects its executives to fully comply with the honesty and good faith principles as well as standards while conducting their business activities.

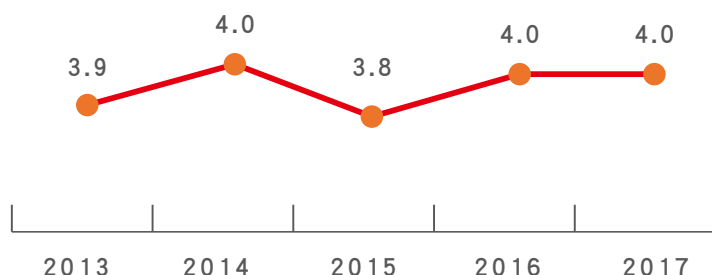
## Customer Relations and Supplier Management

### 5.1 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 average customer satisfaction scores for the past few years are shown in the following diagram)

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 2017, all customer complaints received were properly handled according to the Guidelines for Handling Customer Complaints, and we have responded to each customer accordingly.



Average Score of the Annual Customer Satisfaction Survey  
- Trend of overall Customer Satisfaction scores

Note: 1. Satisfaction scores range from 1 to 5

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

### 5.2 Green Products Conforming to International Laws and Customer Requirements

In accordance with international regulations on hazardous products, 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 substances 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 2018.
- 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.

### 5.3 Protection of Customer Privacy

VIS is focused on informational value by keeping our commitment to protect customer information. Based on international information safety standards, VIS formulated management regulations and constructed a corporate information safety and management system to protect customers' competitive advantage, making VIS a reliable business partner for our customers.

VIS has also established a PIP Policy, requiring all employees to participate in training programs, pass exams, and follow regulations. From the moment we start negotiating with our customers about business opportunities, we require all customers to sign a Non-Disclosure Agreement. To protect customer privacy rights, we determine the security level of confidential information and establish corresponding control measures, requiring only those with permission to access the information. All other personnel must not attempt to make inquiries on customer information, and when customers make requests or apply for documents through our VIS-online system, proper authorization must be obtained.

VIS not only ensures the safe transmission, storage, access, use, and authorization of customer information, but also applies information technology to reduce the risks of improper use of information and retain access records for subsequent inspection analysis. Thus, damages incurred by information leaks to the company and its customers can be prevented. Furthermore, VIS continues to conduct various risk assessments and strengthen protective measures in order to ensure the integrity and effectiveness of customer privacy protection. Based on these policies, VIS received the ISO 27001 international information security certification in 2016. (In 2017, there were no customer complaints regarding the violation or loss of customer data.)

### 5.4 Supply Chain Management

VIS's supply chain covers an extensive range of expertise and applications, including international and domestic equipment suppliers, component suppliers, raw material suppliers (8" 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).

Types of supply chain

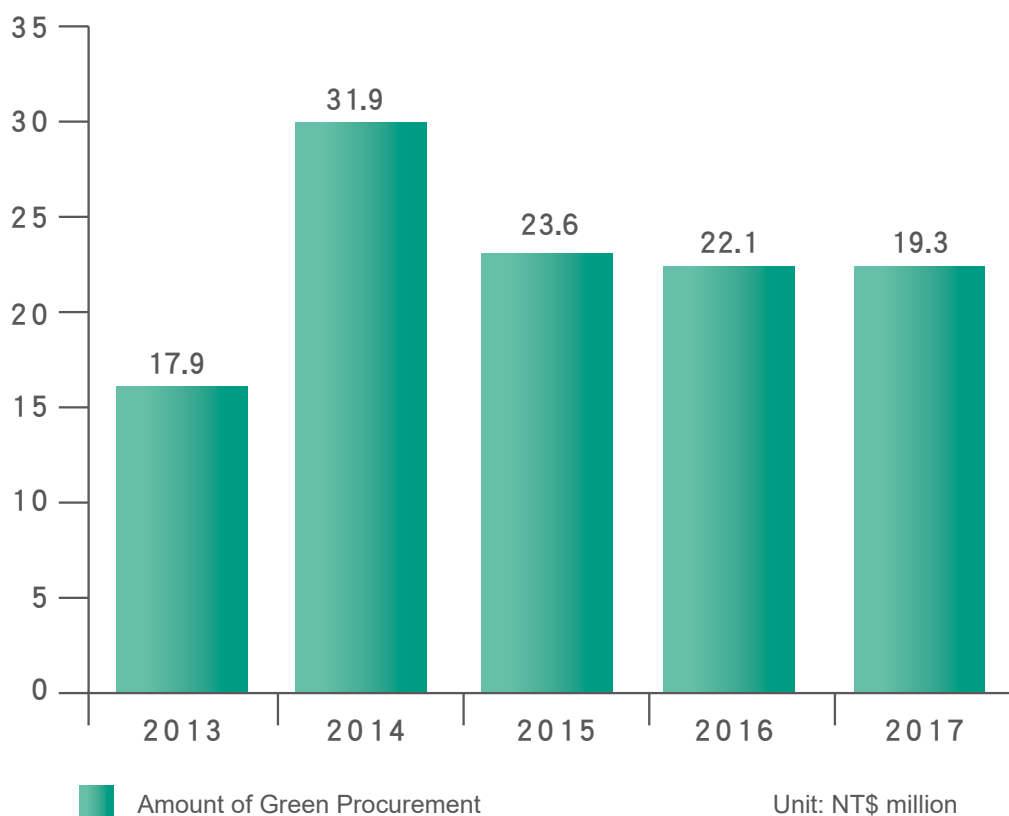


## Green supply chain

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. These are the Company's long-term goals which we will continue to focus on and strive to achieve. 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.

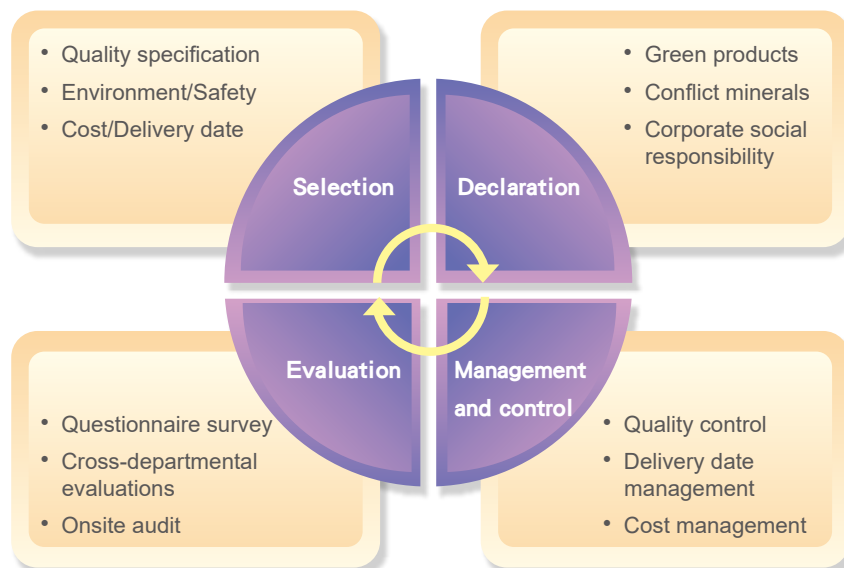
The total amount of funds VIS has spent on green procurement over the past 5 years has reached NT\$114.8 million.



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 managing conflict 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.

## 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 declarations

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 "Conflict Minerals Rules and Regulations" and any other relevant changes.



**Vanguard International  
Semiconductor Corporation**  
世界先進積體電路股份有限公司



SECURITY B  
VIS CONFIDENTIAL

January 3, 2013

Dear Supplier,

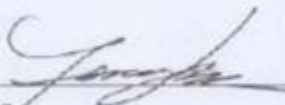
I would like to take this opportunity to express our sincere appreciation of your company's co-working and assisting Vanguard's business continuity.

Vanguard is dedicated to the long term commitment of implementing corporate social responsibility. Consequently, we have established our Corporate Social Responsibility Policy, to emphasize and promote the compliance of social, ethical, and environmental responsibility, to offer healthy and safety in working environment, labor protection and fairness, and related management systems. We would like to urge and ensure suppliers interacting with VIS to establish and follow the same guideline.

Please review and consent to the content of the attached VIS Corporate Social Responsibility Policy by signing back the attachment and mail back to VIS, attention: Procurement & Import/Export Department.

Once again, thank you for your continued support and compliance in the matter.

Best regards,

  
\_\_\_\_\_  
Leuh Fang  
President



VIS CSR policy may be updated for continuous improvement, please refer to the following website periodically for the content then in effect.

<http://www.vis.com.tw>

The information contained is confidential and shall not be distributed, reproduced or disclosed in whole or in part without prior written permission from VIS.





## **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 corporate governance business ethics, employee rights, health and safety, and the environment.

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

## **Corporate Governance**

VIS follows the corporate governance best practice principles, complies with relevant laws and regulations, establishes an effective corporate governance framework, strengthens the power of the board of directors and fulfills the function of audit committee. VIS develops its normal business and safeguards the shareholders' interests, in the meantime, pays attention to stakeholders' interests, enhances the disclosure of information and improves information transparency on corporate governance.

## **Business Ethics**

VIS upholds integrity in employee and executive conducts in all business activities and internal interactions. Business books shall be clean, transparent, 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 the 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.

Employee workweeks are not to exceed the maximum set by local law. All works are voluntary and employees are free to terminate their employment at any time. VIS employs no child labor.

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 company's global competitiveness. VIS is diligent in the risk management, legal compliance and self auditing to achieve continued improvement.

### **Environment Protection**

VIS, as a global citizen, undertakes precautionary approach 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.

Vanguard International  
Semiconductor Corporation  
世界先進精體電路股份有限公司



SECURITY B  
VIS CONFIDENTIAL

To Vanguard International Semiconductor Corporation :

We hereby declare that in all counties in which we and our suppliers do business, our and our suppliers' operation comply with all applicable domestic laws and regulations and relevant code of international conduct, including but not limited to, Vanguard International Semiconductor Corporation Corporate Social Responsibility (CSR) Policy, RoHS, EU REACH and DRC Conflict-Free and any changes, modification or revisions thereof.

Company Name: \_\_\_\_\_

Authorized Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

- 
1. VIS expects all of our suppliers, business partners and the relevant organizations to acknowledge and comply with Vanguard International Semiconductor Corporation CSR Policy.
  2. In the event any party breaches above-mentioned policy, VIS will review the business relationship between it and the breaching party strictly and take necessary action.
  3. In the event that you find any VIS's employee breaching the relevant regulations of VIS, please contact with management of Human Resource department or management of Auditing department.

Please reply letter to :  
123, Park Avenue 3rd, Science Based Industrial Park, Hsinchu,  
Taiwan, R.O.C  
Vanguard International Semiconductor Corporation  
Purchasing & Import/Export Dept.



## 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 assessments

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.

In addition, regarding management of key suppliers, the Supplier Quality Management Department holds Quarterly Supplier Review Meetings. The Department also conducts annual onsite audits. For example, the frequency of conducting audits in the past 6 years (2012-2017) was 224. More specifically, in 2012: 11 times; 2013: 9 times; 2014: 28 times; 2015: 57 times; 2016: 71 times; 2017: 48 times. Since 2014, VIS has endeavored to strengthen the extent of its supplier management; therefore, the Company has in recent years included parts suppliers into the scope of audits. Therefore, the Company has conducted more frequent onsite audits in recent years. Results from audits in recent years (2014-2016) showed that suppliers' overall performance has been stable and as there were more suppliers in 2016, the number of audits in 2017 was fewer than the audits in 2016. Based on the results of the 2017 audit, 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.

## 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.

## Management of conflict minerals

As for the management of conflict 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 RMI and its suppliers are not conflict minerals.

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 2017 (v.5.0: effective on May 12<sup>th</sup>, 2017 V5.01: effective on March 21<sup>st</sup>, 2017 V5.10: effective on December 1<sup>st</sup>, 2017), 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.

## Continuity 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 2017, VIS has also conducted surveys as quickly as possible to provide immediate responses to customer inquiries. The Qatar diplomatic crisis in early 2017 led to a blockade of its transportation routes by Arab countries and the helium production was also affected. The procurement unit closely followed related developments and took corresponding measures to successfully pass through the global helium supply shortage in the second half of the year.

## Localization strategy of supply chains

The development of semiconductor industries in European countries, the United States, Japan, and South Korea were earlier compared to Taiwan, which provided them with technological advantages, as well as the control of key techniques and raw materials. Although Taiwan's semiconductor industry has attempted to surpass the performance of these countries through continued improvements, it remains reliant on foreign imports for machinery equipment, raw materials, and software applications.

VIS firmly believes that by supporting domestic supply chains, it will not only facilitate the improvement of domestic supply chains, but also increase employment opportunities, elevate the quality of employees and raise employees' salary standards, and boost domestic economy, all of which could exert tangible benefits, divert risks, and reduce relevant costs. In addition, with the length of transportation routes significantly shortened, we will be able to exercise our corporate social responsibility by reducing carbon emissions!

Under our long-term efforts in implementing local procurement strategies, in 2017 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\$21 billion over the past 5 years (2012 to 2017). We will continue to devote our efforts in this area with the hope of maximizing our contributions to the society.

## A Happy Workplace

### 6.1 Having a Common Goal, Choosing the Right People with the Right Skills

#### 6.1.1 A stable, healthy workforce

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.

By the end of 2017, VIS had 5,215 total employees, with 49.1% male employees and 50.9% female employees. In terms of job positions, 345 were executives, 2,487 were professional workers, and 2,383 were technicians. As for age distribution, employees between ages 30 -50 accounted for the biggest population at 71.6%, followed by 30 and below (22.0%), then 50 and older (6.4%).

#### VIS Workforce

	Category		Male		Female		Group subtotal and percentage	
			Number of employees	Percentage of the group	Number of employees	Percentage of the group	Number of employees	Percentage of the total workforce
Subtotal by gender	--		2,559	49.1%	2,656	50.9%	5,215	
Nationality	Taiwanese Citizen		2,555	50.0%	2,553	50.0%	5,108	97.9%
	Foreigner		4	3.7%	103	96.3%	107	2.1%
Position	Executives		292	84.6%	53	15.4%	345	6.6%
	Professional workers (indirect labor)		1,872	75.3%	615	24.7%	2,487	47.7%
	Technicians (direct labor)		395	16.6%	1,988	83.4%	2,383	45.7%
Number of employees protected by labor-related laws	Full-time employees	Non-fixed term	2,530	48.9%	2,644	51.1%	5,174	99.2%
		Fixed-term	14	60.9%	9	39.1%	23	0.4%
	Part-time employees	Dispatched labor	15	83.3%	3	16.7%	18	0.4%
Age	30 and below		666	58.0%	482	42.0%	1,148	22.0%
	30 ~ 50 years old		1,743	46.7%	1,993	53.3%	3,736	71.6%
	50 and above		150	45.3%	181	54.7%	331	6.4%
Educational background	High school or below		235	15.5%	1,277	84.5%	1,512	29.0%
	University / College		1,160	50.4%	1,140	49.6%	2,300	44.1%
	Master's Degree		1,125	82.7%	235	17.3%	1,360	26.1%
	Ph.D.		39	90.7%	4	9.3%	43	0.8%

Note 1: A supervisor is defined as an employee who receives duty allowance for a managerial position

Note 2: Ten of the fixed-term contract employees are part-time employees

In 2017, 381 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 2017 turnover rates more closely, the average turnover rate was 10.3% among male employees and 4.9% among female employees. By age group, the average turnover rate was 9.9% among employees 39 years old or younger, 7.2% among those between 30 to 50 years old; and 2.6% for employees at 50 years of age or higher.

#### Turnover rate - gender

Year	2015		2016		2017	
Gender / Item	Number of people	Turnover rate	Number of people	Turnover rate	Number of people	Turnover rate
Male	200	8.8%	178	7.7%	254	10.3%
Female	161	6.3%	143	5.7%	127	4.9%
Total	361	7.5%	321	6.6%	381	7.5%

Note:

1. Turnover rate for the year = Number of employees resigned during the year /  $\{(\text{Number of employees at beginning of the year}) + (\text{Number of employees at the end of the year}) / 2\}$ .
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	2015		2016		2017	
Age/Item	Number of people	Turnover rate	Number of people	Turnover rate	Number of people	Turnover rate
30 and below	143	15%	138	14.4%	105	9.9%
30~50 years old	206	5.7%	178	4.9%	268	7.2%
50 and above	12	5.0%	5	1.9%	8	2.6%
Total	361	7.5%	321	6.6%	381	7.5%

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:

1. 10 days of advanced notice for employees who have worked continuously at the Company for 3 months to 1 year.
2. 20 days of advanced notice for employees who have worked continuously at the corporation for 1 to 3 years.
3. 30 days of advanced notice for employees who have worked continuously at the corporation for more than three years.

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

### 6.1.2 Recruitment and Expansion of Talented Workers with a Common Goal

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.

In 2017, 818 new employees were hired and the employment rate was 16.1%. Of the 818 new recruits, 57.8% were men and 42.2% were women. In terms of age distribution, most of the new recruits were 30 and below (61.0%), followed by those aged 30-50 (38.6%), while new recruits 50 years old or older accounted for the lowest percentage (0.4%).

Note: Rate of new hires = Total number of new employees hired during 2016 / {(number of employees at the beginning of the year) + (number of employees at the end of the year) / 2}.

### 2017 new employees by nationality and age

Category	Group	Male		Female		Group subtotal and percentage	
		Number of employees	Percentage of the group	Number of employees	Percentage of the group	Number of employees	Percentage of the total workforce
Nationality	Taiwan	473	66.3%	240	33.7%	713	87.2%
	Philippines	-	-	105	100%	105	12.8%
Age	30 and below	311	62.3%	188	37.7%	499	61.0%
	30-50 years old	159	50.3%	157	49.7%	316	38.6%
	50 and above	3	100%	-	-	3	0.4%
Total		473	57.8%	345	42.2%	818	-

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

### 2017 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	473	19.1%
	Female	345	13.3%
Age	30 and below	499	47.1%
	30-50 years old	316	8.5%
	50 and above	3	1.0%
Total		818	16.1%

Note: Rate of new hires of each group = Total number of new employees in each group hired during 2017 / {(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}.



### 6.1.3 A competitive employee compensation and benefits system

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.

#### A high-standard Compensation system

The Company conducts annual salary surveys to ensure the overall competitiveness of its compensation system. Compensation is determined based on the employee's professional skills, understanding of responsibilities, job performance, and potential for future development. Such a system is aimed to attract and retain the best talents.

#### Generous benefits

The Company offers leave policies superior to the requirements established by the Labor Standards Act. In addition to leaves required by law, employees are also provided with flexible leave days. Employees are entitled to special leaves after an employment period of three months. The Company also provides subsidies for Chinese New Year banquets, birthday celebrations, maternity leave, wedding, funeral, and emergency relief, non-periodic company travel and events, and clubs.

#### Comprehensive insurance programs

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.

### 6.1.4 A comprehensive plan to develop and cultivate human resources

In order to respond to the rapid advancements in industry technologies, VIS continues to promote performance-oriented management and provides a variety of learning resources to increase employee and company potential.

#### 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.

This year, 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 526 general employees and we guide their goal setting and implementation. These measures are complemented by periodic performance management and development each year to evaluate the status of completion and to confirm the targets for organizational operations and personal development.

## 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. The Company announced 29 internal vacancies available for transfers and respects employees' transfers for the accumulation of diverse professional skills and to cultivate internal interdisciplinary talents.

## 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 novice, management, competence, profession, external, and self-development training programs. Furthermore, to create a systematic learning process, the Company has developed a comprehensive training management system, in which employees set their own self-learning and development goals each year, and discuss with their supervisors to formulate personal development plans. Consequently, the goals of continuous development and life-long learning can be achieved.

The Company offers an e-Learning website, which includes almost 720 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 2017, 80,000 persons/times have participated in the e-Learning courses.

In 2017, the total time allocated for internal training was 178,769 hours, and the total number of attendees was 138,881. On average, each employee received approximately 34.2 hours of training. Based on the average training costs, the average training cost per employee in 2017 was NT\$1,379

### 2015 - 2017 total training hours and number of employees

Year	Number of employees	Total training hours (hours)	Average training hours	Total number of participants (individuals)
2015	4,722	116,203	24.61	73,725
2016	5,009	142,304	28.41	114,871
2017	5,215	178,769	34.28	138,881

Note: 2015-2017 total training hours and number of employees; the number of employees is expressed as an average.

VIS implemented "Internal Lectures" in all regions in 2017 and 29 trainees from all regions (including management trainee instructors) participated in the training program to expand the education scope and quality. 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, 192 employees have received certification, and this number is still increasing. The Company has arranged training courses on quality improvement practices, such as two sessions of the Six Sigma Course, through which 66 participants received training and are expected to obtain green belt certification in 2018. The "New Recruit Engineering Courses" was organized in plants for engineering education. VIS used collective training to respond to the high numbers of new recruits and R&D substitute servicemen (totaling 1,143 participants).

The Company also continues to improve knowledge management (KM) by hosting internal KM activities. In June 2017, our team participated in the MOEA Industrial Development Bureau's "Knowledge Management Competition" and brought home a bronze medal. 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 520 attendances were recorded for the supervisor training for courses for 8 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 121 people attended this workshop). To strengthen customer-oriented ideals, the Company also organized seven sessions of "customer-orientation sharing sessions" and targets were expanded to include 250 employees who process external affairs and project leaders. The exercises and case studies were provided to improve the skills of first-line employees in interacting with customers to satisfy customer expectations and requirements.



提升團隊效率  
Workshop



管理課程類



管理課程類



內部講師訓

## 6.2 Care for Employees' Physical and Mental Health

### 6.2.1 High-standard health services

VIS realizes the importance of "prevention is better than the cure". The Company takes an active role in caring for the health of our employees. Since 2009, VIS has invited physicians to provide medical care services 12 times per month at our facilities; these services included providing health consultations, medical examinations, and assisting injured employees back to work. In 2006, the Company purchased medical ultrasound imaging equipment in order to assist employees with regular health check-ups without visiting hospitals and to provide high-quality medical examination services for our employees.

The Company regularly offers self-pay health checks at preferential prices such as: abdominal ultrasound, 3-in-1 package for women (pap smear, breast ultrasound, and gynecologic ultrasound), and mammograms. The Company offers better employee health protection conditions than those prescribed in the Labor Health and Protection Act by extending the scope of health checkups and providing free annual check-ups as well as free flu shots. Meanwhile, to accommodate different needs, self-pay health examinations are also available to allow employees to follow up on most of their health indicators in one session. A total of 1,235 employees chose additional health examinations at their own expense in 2017.

#### Number of employees who used our medical services

Year	2015	2016	2017
Number of employees	740	406	641



Ultrasound examination involves the penetration of ultra-high frequency sound waves through the human body. Different tissues reflect varying degrees of sound, which are collected and subject to precision calculation by the computer to display tissue structures for physician diagnosis. As ultrasound does not emit radiation, it poses minimal harm to the human body, making it a relatively safe, noninvasive instrumentation test that can be performed multiple times in a short period. This type of medical test is also highly effective.

### 6.2.2 Providing a safe working environment

The Company requires employees to receive first-aid training and obtain appropriate licenses as required by law (the Company currently has 367 qualified first-aid providers on-site, exceeding the legal requirement of 104 qualified employees by 3.53-fold). The Company also provides licensed employees with periodic repeated training in accordance with regulations for them to continue familiarizing with related first-aid measures. In addition, to provide employees with an even safer work environment, the Company installed six automated external defibrillators (AED) at all three plants. The Company also arranged for several forms of education and training to be available to employees to help them learn how to operate the equipment.



1. Training involves departmental drills on emergency responses.
2. Repeated first-aid training and actual operations.



### 6.2.3 Work and Living Convenience

VIS offers a beautiful, well-designed employee cafeteria, providing a variety of healthy and nutritious buffet-style food, local snacks, meals, noodles/pasta, vegetarian dishes, and freshly made breakfast. Our menus are designed and created by professional nutritionists. All kitchen staff members have received relevant sanitary education and training to ensure food safety and the health of our employees.

A 24-hour convenience store is available on-site, where employees can purchase products at discounted prices. In addition, at a set time each week, banking and insurance services are provided at the company. There are also 24-hour ATMs and bankbook machines on-site, allowing employees to take care of their daily errands easily and conveniently.

### 6.2.4 Professional Mental and Physical Care Programs

The Company combines employees' various needs and offers designated contact windows and service hotlines for assistance, establishing the Employee Assistance Program (EAP), which covers topics such as medical care, legal affairs, sexual harassment prevention, psychological consultation, and humane treatment, thus providing a comprehensive service on work, life, and health-related issues. For example, our medical services require departmental supervisors to adjust work schedules according to employees' medical diagnosis so that employees can restore their health at ease. Health evaluation or medical referral services are provided to employees with health concerns so as to ensure the health and quality of life of employees. In 2017, the Employee Assistance Program (EAP) was used by 339 people.

#### 員工協助方案 (Employee Assistance Programs, 簡稱EAPs)

員工協助方案是協助員工解決社會、心理、經濟與健康等問題。提供員工諮商、資訊及轉介接受適當的治療與支持服務；服務內容包含**醫療服務**、**性騷擾防治**、**心理諮商**及**法律轉介**等項目，同仁可點選下列個專區或直接與專人連絡，更多資源之服務。

##### 醫療服務專區

聯絡人：各廠醫護室  
分機：各廠分機1515/8120

##### 性騷擾防治專區

聯絡人：各廠醫護室  
分機：各廠分機1515/8120

##### 人性化對待專區

聯絡人：一、二廠員關課  
分機：1317/8165  
三廠：招聘暨員關服務課  
分機：7391310

##### 心理諮商專區

聯絡人：各廠醫護室  
分機：各廠分機1515/8120

##### 法律轉介專區

聯絡人：一、二廠員關課  
分機：1317/8165  
三廠：招聘暨員關服務課  
分機：7391310

## 6.3 Employee Participation and Channels of Communication

### Multiple communication channels to promote employer-employee harmony

VIS truly believes in the philosophy that "open communications are the strong foundation of a united company", therefore, we have worked hard to create open, transparent communication channels to promote employer/employee harmony. The following internal communication channels are available at VIS:

1. Employee / employer meetings
2. Various channels for communicating opinions of the committee member (including mailbox of the executives, mailbox of the Audit Committee, employee feedback system, and Speak Out boards)
3. Employee Assistance Programs (EAP)
4. Communication meeting between employees and various levels of executives

To establish harmonious labor relations, the Company complies with the regulations stated in the Labor Standards Act. Since June 2010, at least one employer - employee meeting is held every quarter. High level executive meetings are personally attended by the chairman who communicates the Company's operations and philosophies to other high-level executives, in order to raise our business performance to another level. Plant manager communication meetings are attended by the highest level executives from each plant; during these meetings, the development focus of each department and relevant information are shared, achieving effective communication and coordination.

In order to systematically receive employee feedbacks and resolve disputes, executive mailboxes, Speak Out message boards and the employee feedback system were established. In 2017, a total of 195 messages were posted on the Speak Out message board. Responses were immediately provided for 183 questions and 12 questions have been processed separately. All issues have been resolved. Through the employee feedback system, 145 employee issues have been reported, including work environment, salary and benefits, management system, communication and cooperation, and performance appraisal. Responses and solutions were provided for 131 questions and 14 questions have been processed separately. All issues have been resolved. The questions raised by employees have been processed and resolved in accordance with standard operating procedures. The active responses have been widely appreciated and affirmed by our employees.



Through all the channels of communication described above, as well as the policies that were established by the Company which exceed the requirements of the Labor Standards Act, all issues have been resolved efficiently by establishing good communication.

The frequency and content of the use of diverse communication channels are described as follows:

<b>Employee/employer meeting</b>	Quarterly	Held by each plant as regulated by law.
<b>Opinion/feedback channel</b>	Non-periodically	Including mailbox of the executives, mailbox of the Audit Committee, employee feedback system, and Speak Out boards.
<b>Employee Assistance Program (EAP)</b>	Non-periodically	Including medical care, sexual harassment prevention, humane treatment, psychological consultation, and legal service referrals.
<b>Communication meeting of various levels</b>	Quarterly to semi-annual	Communication meetings with the Chairman, Plant Directors, and IDL and DL.

Note: DL = direct labor; IDL = indirect labor.



## 6.4 Balancing Life and Work

### 6.4.1 Creating a happy workplace

"Healthy employees are a company's most important asset". To create a happy and healthy workplace, and to strike a balance between work and life are what VIS believes to be the most important foundations of maintaining the healthy employee asset. To continue to promote employees' health awareness, the Chairman took the lead and led senior supervisors on a series of exercises in 2017. The Company launched various healthy exercise courses such as boxing aerobics and body balance courses and appointed professional coaches to teach employees on the use of fitness equipment. VIS also received the Active Workplace Award from the Health Promotion Administration. In addition, the Company also arranged weight-loss courses and seminars, liver function tests, pap tests, gynecologic ultrasound, weight-loss contests; quit smoking projects, and health examinations to actively promote healthy habits and physical and mental balance. In 2017, employees participated in 2017 health-promotion projects a total of 4,317 times.



### 6.4.2 Employee Benefits and Care

To help provide care for employees' daily lives, the Company not only provides wedding, funeral, maternity, and major holiday allowances, but also offers a clean, beautiful work environment equipped with an array of recreational facilities (e.g., basketball court, weight room, leisure center, aerobics classrooms, KTV rooms, and a staff lounge). In addition, a wide variety of recreational events such as employee trips, family seminars, and various sports competitions are held to help employees relax and enjoy their lives away from work.



The chairman interacting with employees on family day



Luchukong Hiking Trail



Marathon at our facility

The Employee Welfare Committee established the "Employee Welfare Committee Management Guidelines", encouraging employees to form social groups and engage in community activities. Thus, employees not only developed their own personal interests, but also expanded their social circle, achieving a well-balanced life. In 2017, 527 VIS employees participated in 18 community groups involved in hiking, badminton, yoga, basketball, and volunteering.

## Salary and benefit costs for non-managerial employees

Unit: NT\$1,000

Item	2015	2016	2017
Employee salary and benefit costs	5,753,770	6,426,587	6,384,221
Average cost for employee salary and benefits	1,182	1,326	1,253

## Note:

1. The average number of employees is calculated based on the average number for that year (Average number for the year = total number of employees at the end of every month / 12)
2. Employee salary and benefits refers to the salary, bonus, and benefit expenditures

## 6.4.3 Balancing Family and Work

If a VIS employee must take a long-term leave of absence to care for his/her children, application procedures are specified within the employee handbook as well as the personnel regulations manual. VIS also provides special consultations to assist employees with the leave of absence application process according to the Act of Gender Equality in Employment and Regulations for Implementing Unpaid Parental Leave for Raising Children. In 2017, 108 employees submitted their leave of absence applications, all of which were approved. In 2017, 69 employees were reinstated following their parental leave at a reinstatement rate of 66.3%. Specifically, the reinstatement rate among male employees was 42.9%, and 70% among female employees. Several female employees did not return to work after their leave period had expired primarily because they still needed to care for the family (93%) while many male employees do not return after parental leave mainly because they found other work (63%). Furthermore, in 2016, the retention rate of employees with one year or more of work experience at VIS reinstated from parental leave was 93.8%, 71.4% for male employees, and 96.55% for female employees.

## Implementation methods and outcomes

Item	Total	Male	Female
No. of employees applied for parental leave in 2016	108	16	92
No. of employees reinstated after taking a parental leave in 2017 (A)	69	6	63
No. of employees expected to be reinstated after taking a parental leave in 2017 (B)	104	14	90
Parental leave reinstatement rate in 2017 (A/B)	66.3%	42.9%	70%
No. of employees reinstated after taking a parental leave in 2016 (C)	65	7	58
No. of employees reinstated after taking a parental leave in 2016, and have worked at the Corporation for one year or more (D)	61	5	56
Parental leave reinstatement rate in 2016 (D)/(C)	93.8%	71.4%	96.55%

## 6.5 Occupational health, safety, and sanitation

## 6.5.1 Health and safety management practices

VIS upholds the spirit of continuous improvement, constantly improving the validity of the health and safety management system to prevent accidental incidents and protect employees' operational safety and health. All plants under VIS have obtained the Occupational Safety and Health Management System (OHSAS 18001: 2007) and Taiwan Occupational Safety and Health Management System (TOSHMS) certifications.

The plants implemented the following safety and health management systems and activities in 2017:

Category	Topic	Practices	Implementation Results
Operational Control	Safety management of change (SMOC) system	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 (SMOC), 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.
	Safety control during machinery installation	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ul>	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 822 Level-1 high-risk operations were applied for and inspected onsite in 2017.
	Contractor management	Contractor management hinges on implementation. VIS has established an online contractor management system to integrate contractor management information for all of our departments. In particular, we carefully control access to our facilities and cleanrooms by contractor personnel, including time spent in each area. We have also reinforced entryway access and evacuation measures.	During the operation, supervisors must patrol the site of operation twice per day once in the morning and once in the afternoon by following the daily construction patrol checklist for contractors.



Category	Topic	Practices	Implementation Results										
		<ul style="list-style-type: none"><li>Before entering the plant: Each contractor must complete safety and health training programs before they can apply for access into the plant.</li><li>Before construction: A safety meeting is held to develop job safety analysis (JSA) form and encourage operational personnel to use it.</li><li>During construction: Supervisors are appointed (operations involving more than 5 workers must be supervised by business operation supervisors with Class C or above administrator qualifications in occupational safety and health) to convene daily toolbox meetings during which the operational hazards of the day and safety reminders are informed.</li></ul>											
Risk Reduction	Safety checks prior to large-scale/outdoor events	The Company performs early evaluation and inspection in accordance with VIS's safety guidelines for business or large-scale/outdoor activities to reduce the risks that may arise during the activities. Large events (i.e., indoor activities attended by more than 100 people and lasting for more than 2 hours, such as large-scale seminars or Chinese New Year banquet) and outdoor activities (i.e., group outdoor activities attended by and expected to be attended by more than 20 people, such as family day, team building activities, or professional firefighting training).	Prior to large-scale events or outdoor activities, the Company has followed the safety guidelines to conduct early evaluation and inspection, thus preventing the risks of untimely response to unexpected situations caused by crowd gathering.										
	Operational safety observation	Each responsible unit appoints a deputy manager or senior staff to act as the operation observer. Depending on the chemicals or content of operation used for each process/machine, the responsible unit or workplace safety personnel evaluates the latent risks of each operation and whether the protective measures are sufficient.	We propose improvement plans based on the observation results and confirm whether modification to the operating procedure is necessary in order to enhance operational safety and lower the possibility of risk occurrence.										
Proposal for Improvement	Workplace safety and environmental protection mailbox	The Company has established an electronic workplace safety and environmental protection mailbox, which is a platform that distinguishes the risk levels involved in an employee proposal and includes these levels in their performance evaluation. Rewards are given every six months according to employees' proposal evaluation.	<p>Proposals and improvement results are submitted to the Company's Health, Safety and Environmental Protection Committee, which announces the winning employee on the Company's electronic billboard to encourage employees to continue to identify risks at the plants. In 2017, 87 proposals were accepted and implemented for improvements. Number of proposals implemented over the past 5 years:</p> <table><tr><th>Y2013</th><th>Y2014</th><th>Y2015</th><th>Y2016</th><th>Y2017</th></tr><tr><td>32</td><td>29</td><td>35</td><td>37</td><td>87</td></tr></table>	Y2013	Y2014	Y2015	Y2016	Y2017	32	29	35	37	87
Y2013	Y2014	Y2015	Y2016	Y2017									
32	29	35	37	87									

Category	Topic	Practices	Implementation Results
	Zero Defect Essay Composition	The most important task for Zero Defect in 2017 was to resolve common issues found in 2016 together. Six major categories were listed for employee proposals. We encourage employees to think and come up with effective methods for improvement. We encourage them to aim to succeed in their first attempt.	Proposals encompassed six major categories including FAB regulations, integration, and use of personal protection equipment. A total of 627 proposals were filed in 2017.  We continue to promote the winning essay in hopes of imperceptibly indoctrinating all members of personnel with the correct workplace safety concepts throughout all aspect of their daily lives.

### 6.5.2 Epidemic prevention and management

Due to recent changes in the ecological system, adaptation of microorganisms, and the emergence of bioterrorism, new human diseases have developed, and we are seeing a rapid increase in their occurrence rate. Moreover, infectious diseases have spread quickly because of population migration, frequent international trades and tourist activities, the convenience of public transportation, environmental changes, and climate changes.

If such contagious diseases are not prevented, severe epidemic outbreaks may occur, adversely affecting employee health and safety, which would in turn impact corporate operations. In light of the potential threats from these emerging diseases, VIS has formulated a set of VIS Disease Prevention Operating Guidelines. When any contagious disease or seasonal flu begins to spread worldwide, disease developments can be tracked, response measures can be planned according to the epidemic threat level, steps can be initiated, and disease prevention resources can be prepared. Key execution items are as follows:

1. Constant monitor of epidemic development
2. Management of kitchen and dining areas for disease prevention
3. Management of employee business trips
4. Provide channels for reporting abnormalities and seeking medical assistance
5. Monitoring body temperatures
6. Continuous promotion of health education
7. Establish safe inventory storage for disease prevention supplies, sterilization equipment, and manage employee attendance
8. Prepare for pandemic diseases and increase the number of people receiving flu shots

VIS began providing free flu vaccines for company employees in 2004 and the numbers of flu shots taken have continued to increase. In 2017, we invited plant directors to serve as vaccination ambassadors and use quizzes with prizes to dispel employees' misconceptions regarding flus in order to increase their willingness to receive flu shots. The Company's efforts won the praise of the Centers for Disease Control in 2 consecutive years.



二廠流感防疫大使  
李慶穎廠長



三廠流感防疫大使  
余俊良廠長





### 6.5.3 Management of Employees at High Risk of Developing Diseases

In accordance with the special hazardous health operations stated in the Labor Health Protection Rules, VIS provides special yearly physical examinations to new employ employees, or any employee dealing with changes in their operating procedures. These examinations typically focus on the following: noise, ionizing radiation, arsenic, nickel, chromic acid, indium trichloride, and indium iodide. The Company also monitors the operating environment of labor workers. Examination results are classified according to VIS Abnormal Workload-Inducing Disease Prevention Guidelines, which require physicians to talk to employees face-to-face and arrange for medical consults so that medical advice and lifestyle recommendations are provided by professional physicians stationed at the plants. Plant nurses follow the advice of plant physicians to conduct follow-up on employees' health and provide timely health and sanitation education and assistance so that employees can change their way of life spontaneously and effectively maintain their personal health. Every employee at VIS is an important partner; therefore, VIS pays special attention to potential health problems with employees performing repetitive tasks over long periods of time. VIS has collected feedbacks from our facility personnel, conducted field observations of work processes, and invited professional medical doctors to discuss the potential risks of employees suffering from musculoskeletal discomfort caused by long-term engagement in routine operations, as well as how to take necessary preventative measures.

To provide employees with an even safer work environment and increase the employee revival rate in case of major accidents or emergencies, the Company has installed automated external defibrillators (AEDs). The knowledge of how to operate the AED has also been included as a required skill for the emergency response personnel.



In 2017, a weight-loss competition and various sports events were held at our facility. The objective of the event was to encourage employees to exercise and stay fit. Employees are encouraged to motivate each other while achieving their goals.





#### 6.5.4 Disabling Injury Statistics

In 2017, there were 8 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 2017. 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.

**Note:** 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.

#### Disabling Injury Statistics

Year	2013		2014		2015		2016		2017	
Gender	Man	Woman	Man	Woman	Man	Woman	Man	Woman	Man	Woman
Number of disabling injury cases	0	4	0	2	0	0	2	3	2	5
Disabling injury frequency rate Note 1	0	0.52	0	0.22	0	0	0.20	0.30	0.27	0.45
Severity of disabling injuries Note 2	0	1.96	0	1.43	0	0	0.50	4.60	2.00	1.72
Total injury index Note 3	0	0.03	0	0.02	0	0	0.01	0.04	0.02	0.03

	2013		2014		2015		2016		2017	
	Man	Woman	Man	Woman	Man	Woman	Man	Woman	Man	Woman
Number of disabling injury cases of contractors	NA		NA		0	0	0	0	0	0
Disabling injury frequency rate of contractors Note 1	NA		NA		0	0	0	0	0	0
Severity of disabling injuries of contractors Note 2	NA		NA		0	0	0	0	0	0
Total injury index of contractors Note 3	NA		NA		0	0	0	0	0	0

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.

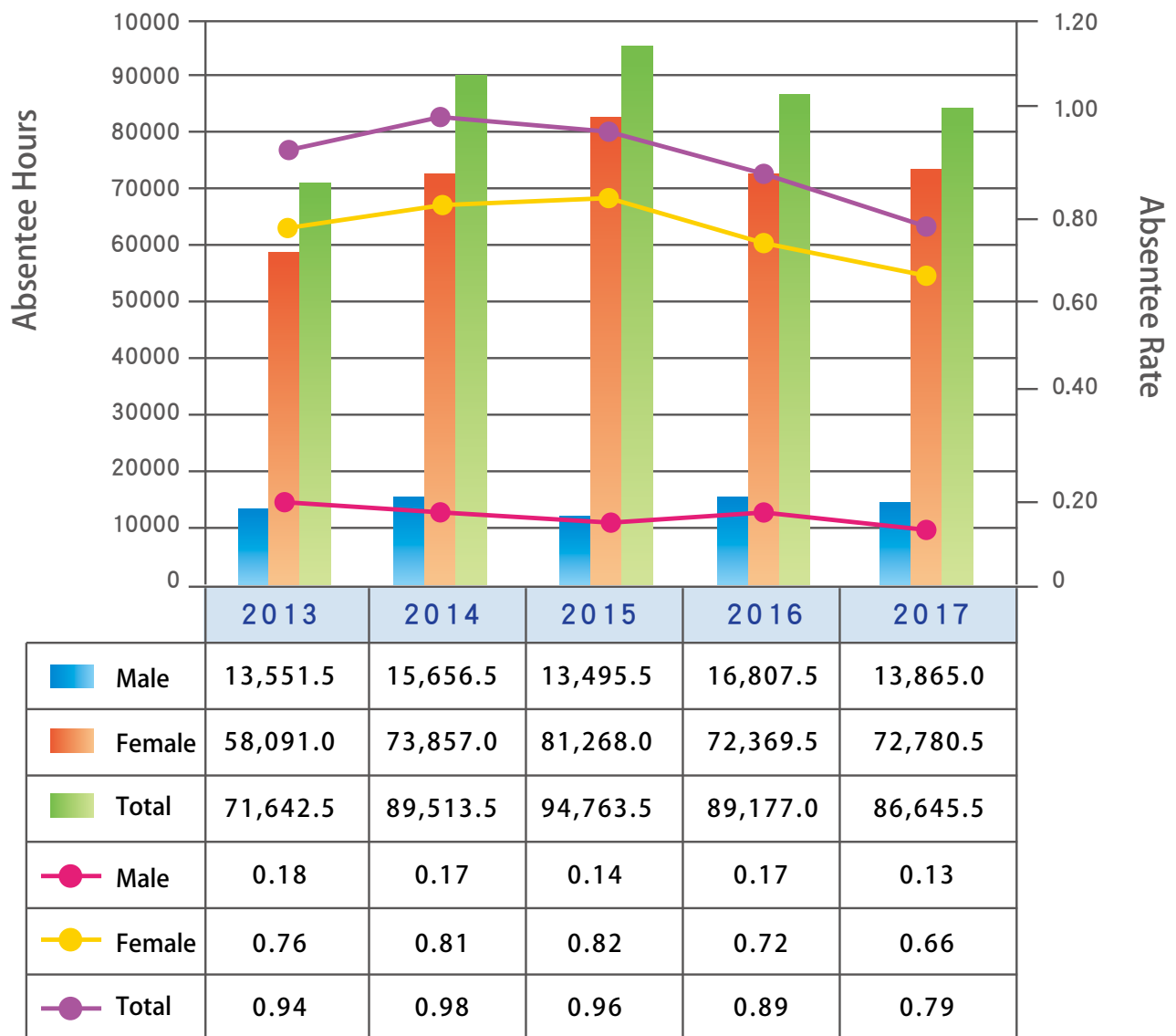
Note 3: Total injury index =  $\sqrt{(\text{Disabling injury frequency} * \text{Severity of disabling injuries} / 1,000)}$ .

### Absentee rate

The following table contains gender-based statistics compiled between 2012 and 2017 on the percentage of VIS employees who took sick leave or were incapacitated due to work-related injuries.

Year	2013		2014		2015		2016		2017	
Gender	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Absentee Hours	13551.5	58091.0	15656.5	73857.0	13495.5	81268.0	16807.5	72369.5	13865.0	72780.5
Absentee Rate% (Note 4 )	0.18	0.76	0.17	0.81	0.14	0.82	0.17	0.72	0.13	0.66

Note 4: Absentee rate = (Total hours of sick leave and work-related injury leave taken / total work hours).



## 6.6 Damage Prevention

### 6.6.1 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. Following the assembly, actual unscripted drills are carried out to allow the commanding officers to perform task assignments, and the commanders and Emergency Response Center (ERC) members are also required to engage in situational operations or simulated scenarios.

VIS conducted a total of 10 ERT drills/training sessions in 2017. 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 229 sessions were held; 6,438 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 evaluation exercises	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



Post-earthquake evaluation exercises



ERC training on search and rescue  
in confined space



Unannounced response drills



Practical fire-fighting training

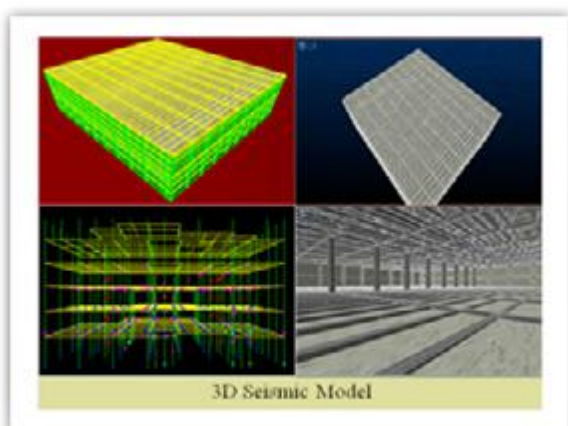


TE evacuation drills

## 6.6.2 Management of earthquake-resistant construction

### Earthquake-resistant construction:

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.



### 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 and 532 foot pieces were installed on 16 furnaces and acid benches in 2017. The installation is expected to be fully completed in 2020.



### 6.6.3 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.

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:



- 1 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.
- 2 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.
- 3 Content of the drill-Various preventive measures and drills are implemented to ensure the conformance and effectiveness of the implementation



#### 6.6.4 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 20 discrepancies were discovered in 15 non-periodic audits performed in accordance with Triple A standards in 2017. The units have been asked to make improvements 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:

We completed the following in 2017:

1. Installed the fire pumps
2. Installed outdoor fire hydrants and portable water cannons in the surroundings of the plant
3. Conducted regional fire drills to for the benefits of neighboring plants and residents

Continual Improvement:

1. Installed Very Early Smoke Detection Apparatus (VESDA) in the cleanroom and return air grilles
2. Completed improvement projects for fire prevention sprinklers

#### 6.6.5 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.

1. Define pipeline risk value, with values 3 to 1 denoting high to low risk level.
2. Refer to regulatory documents, such as those of Semiconductor Equipment and Materials International (SEMI) and the National Fire Protection Association (NFPA).
3. Establish testing methods for personnel operation, process supply, and post-processing discharge
4. Inspect pipelines by using instrument testing

### 6.6.6 Business continuity plan

Since 2007, we have established a business continuity plan (BCP) and a Risk Book 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, we have completed BCP training at each plant and conducted BCP earthquake drills at Fab3 to examine the horizontal and vertical communication at the time of the occurrence from different angles through simulated scenarios in order to ensure the validity of our BCP strategies.



BCP Education and Training



Fire drills in all three plants

## Environmental Protection

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

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

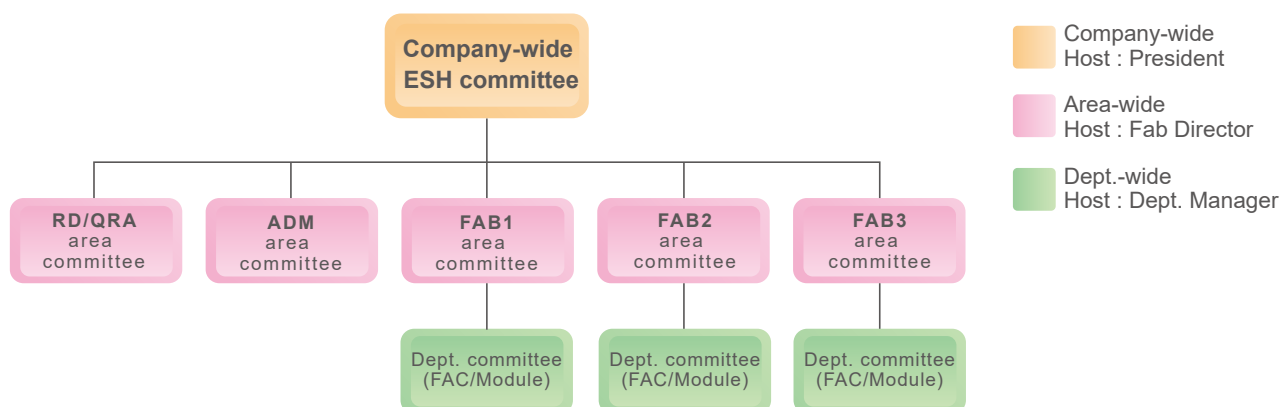
When it comes to the Company's environmental, safety, and health policies, VIS places a strong emphasis on full participation by all employees to ensure across-the-board safety. After being reviewed and signed by VIS Chairperson and President Leuh Fang, the latest policies are posted on the Company's 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. 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.

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

VIS has passed the Environmental Management System certification (ISO 14001) in 1997 and ISO 14001: 2015 revision verification and inspections in February 2018. VIS also passed the Occupational Safety and Health Management System certification (OHSAS 18001) in 2003, both a testament to our effort to ensure the safety and health of the Company and to continuously facilitate environmental protection.

With regard to safety and health management as it relates to VIS's improvement-oriented management methodology, our primary strategy for boosting occupational safety is to prevent harm associated with equipment use to the greatest extent possible. To this end, the Company continually proposes and implements improvement plans where feasible in a bid to clamp down on potential safety and health risks. In terms of environmental protection, the top three approaches VIS has adopted to improve its impact on the environment are waste reduction, re-use and recycling, and energy conservation, all of which effectively serve to reduce the waste of resources. In the course of promoting our environmental, safety, and health management system, we create relevant forms in the system in order to comply with PDCA (Plan-Do-Check-Action) tracking methodology and to uphold our spirit of continuous improvement, including: Environmental Safety & Health (ESH) management system, regulatory compliance verification, corrective and preventive measures, and other systems for managing non-compliance.

Regarding employee participation, labor representatives of VIS account for more than a third of the Safety and Environmental Committee members. The profile and structure of VIS Safety and Health Committee are illustrated below.



### 7.1.3 Promotion of Environmental, Safety, and Health in Each Department

Each department designates senior personnel to record and evaluate safety and health risks and environmental aspects associated with the various types of occupational activities, products, and services encountered on the job as well as common occupational hazards, insurance company audits, recommendations from outside experts, and records of previous accidents and regulatory requirements of each department and partnering plants. In addition, VIS departments are required to submit ESH improvement proposals which address high-risk and significant environmental aspects. Proposals currently being implemented include the following:

#### Formulating environmental, safety, and health management programs

Each responsible department formulates management programs according to the "Safety, Health, and Environmental Goals and Targets". These programs should contain the procedures, descriptions, expected completion time, person in charge, and products of each stage in order to facilitate subsequent tracking and inspection. The responsible person of a program and supporting staff should coordinate with each other before the planning process and during implementation process to make sure that the program is feasible and to confirm matters requiring support. All operations involved in an ESH management program (e.g., proposals, progress, tracking, modification, and conclusion) are applied for through an electronic system. The number of ESH management program proposals and the number of programs completed in 2017 are summarized below:

	Number of proposals in 2017	Number of programs completed in 2017	Number of programs extended to 2018
Environmental programs	117	115	2
Health and safety programs	376	373	3

Minimizing environmental impact through green production is VIS's core environmental policy. We completed 115 environmental improvement projects in 2017 and the cumulative results are shown in the table below

Item	Saving	Unit	Item	Savings	Unit
Electricity	1,822	MWH / Year	Water Volume	2,774	Mt / Year
Chemicals	949	Mt / Year	Emission Reduction of CO <sub>2</sub>	964	Mt CO <sub>2</sub> e/ Year
Wastes	10.1	Mt / Year	Cost down	1,014	10 thousand / Year

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 an energy-saving low-frequency primary pump for the chilled water system, replacement of the variable frequency dry pumps, 4% H<sub>2</sub>/N<sub>2</sub> automatic aeration supply to reduce energy usage, and other measures designed to mitigate negative environmental impact. Examples of representative solutions and results are as follows:

Category	Program	Environmental Benefits
Energy conservation	Energy-saving variable frequency converters for the water supply pump for the front-end filter in the ultrapure water system	Reduced the power consumption of PB-UF water supply pumps by 333,307 kWh/year
Water conservation	Extended the POLY Process PM cycle and reduced the usage of Tube Cleaner HF & DI Water	Reduced water consumption by 198 cubic meters/year; Reduced HF usage by 0.06 tons/year
Chemicals usage reduction	TMAH usage optimization	Reduced TMAH usage by 22.12 tons/year

### Determining and verifying regulatory compliance

Every month, the environmental safety department visits the Laws & Regulations Database of the Republic of China portal website to search for news of amendments to environmental, safety and health laws and other requirements by the Ministry of Labor, Environmental Protection Administration, Atomic Energy Council, National Fire Agency, Construction and Planning Agency, Ministry of Science and Technology Science Park Administration, and European Chemicals Agency. This is to ensure our compliance with the aforementioned laws and requirements of other stakeholders.

### Measuring safety and health performance, and managing environmental monitoring

Each unit regularly measures and monitors its safety and health performance to monitor and measure the potential hazards and risks of all operations and in the workplace. The results elucidate how well a department performed in ensuring environmental safety and health in the first half of the year. Our environmental management system effectively monitors and measures the pollutants produced by the company's production, operation, and service activities to facilitate compliance with environmental requirements and development of environmental monitoring management regulations.

### Administering competitive KPI benchmarks for environmental, safety, and health compliance

VIS has established workplace safety representatives in each of its business unit. These representatives are responsible for assisting with the promotion and tracking of workplace safety affairs to implement workplace safety systems, which in turn reduced the occurrence of workplace safety-related incidents. KPI results are reported in the monthly Fab environmental safety meetings. ESH KPI performance evaluation is conducted once every six months in an effort to elevate employees' awareness on safety and health. The winning unit is presented with banners and rewards.

### Carrying out internal and external audits

VIS has implemented the Procedures for Health and Safety/Environmental Corrective and Preventive Measures and Internal Audits to ensure that its Safety and Health Management System and Environmental Management System continue to comply with ISO 14001/ OHSAS 18001/ CNS 15506 requirements.

The Company arranges internal auditing twice a year and external auditing by third-party verification unit once a year to facilitate management system evaluation. If any non-conforming matters are identified during the internal/ external audit process, the corrective action request (CAR) System of the environmental safety department issues a CAR to the problem department for subsequent improvement and tracking.



#### 7.1.4 Promotion of Environmental, Safety and Health Education

To enhance employee's comprehension of safety, health, and environmental protection concepts both inside and outside the Company, and to hone skills and awareness related to the safety of employees at their respective work sites, VIS has arranged classes as required by law and also formulated health, safety, and environmental training plans based on the actual needs of our plants to reinforce employees' safety and health awareness and sense of responsibility.

- **Training for New Employees:** Prior to officially starting work, all new employees must first complete a 6-hour set of comprehensive internal training courses on health, safety, and environmental education in order to ensure they fully understand VIS's environmental, safety, and health regulations and relevant company policies.
- **On-the-Job Training:** Employees participate in various on-the-job training programs in order to enhance specific skillsets related to different job duties.



有機溶劑作業主管在職訓練



特定化學物質作業主管在職訓練



輻射防護訓練



人因性危害防止計畫導入實務課程



氣體安全訓練



民防訓練

- **Promoting 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, ensuring that employees are able to participate in both on-site and off-site CSR activities.
  - **Ocean Protector Volunteers:** In response to the government's energy conservation and carbon emissions reduction policies and to create a green energy ecological environment, VIS volunteers and employees participated in the beach clearing event organized by Hsinchu City Government in 2017. The event established employees' awareness of environmental protection and encouraged them to care about the environment. Roll up your sleeves, bend over, pick up waste from the beach, and restore cleanliness to the ocean. Protect the marine ecology and let future generations share the beautiful and abundant coastal resources.
  - **DIY Mini Food Forest Activity:** VIS volunteers teamed up with the Wutong Foundation and allowed colleagues in the Science Park to learn about the sustainability of food in the forests in the event and to increase environmental awareness through practical education. Participants were invited to create their own food forest while enjoying the fun in harvesting clean food ingredients and implementing the efforts in daily lives.
  - **A Journey with Trees:** In A Journey with Trees hosted by the Wutong Foundation, VIS volunteers and employees gathered before the Hsinchu Train Station to give out 1000 tree sprouts for the public to adopt as ways of greening, improving air quality as well as responding the carbon emissions reduction policies.



Ocean Protector Volunteers



DIY Mini Food Forest Activity



A Journey with Trees





### 7.1.5 Company Achievements Relating to Environmental, Safety, and Health in 2017

Fab 3 received EPA's Silver Award at the 26<sup>th</sup> ROC Enterprises Environmental Protection Award



VIS received the Benchmark Enterprise Award from the Occupational Safety and Health Administration, Ministry of Labor at the National Occupational Safety & Health Award



Fab 3 received the Taoyuan Department of Environmental Protection's Award for Reduction of Airborne Pollutants in Public and Private Spaces

Fab 1 received Excellence in Occupational Safety and Health Promotion Performance Award from the Hsinchu Science Park Administration



VIS received the Partner in Environmental Education Promotion Award from the Hsinchu Science Park Administration



Fab 1 received the Outstanding Achievement in Environmental Protection Award from the Hsinchu Bureau of Environmental Protection



## 7.2 Climate Change

### 7.2.1 Global response to climate change

VIS attaches great level of importance to global climate change issues

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. The Vice President of Finance of VIS convenes meetings periodically to continue the implementation of related activities and review the performance.

#### VIS project promotion in response to climate change

In addition to following rules and regulations closely, 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. The Company completed a product carbon and water footprint analysis in 2016 and will continue to promote this program in 2018.

## Climate change risks and opportunities

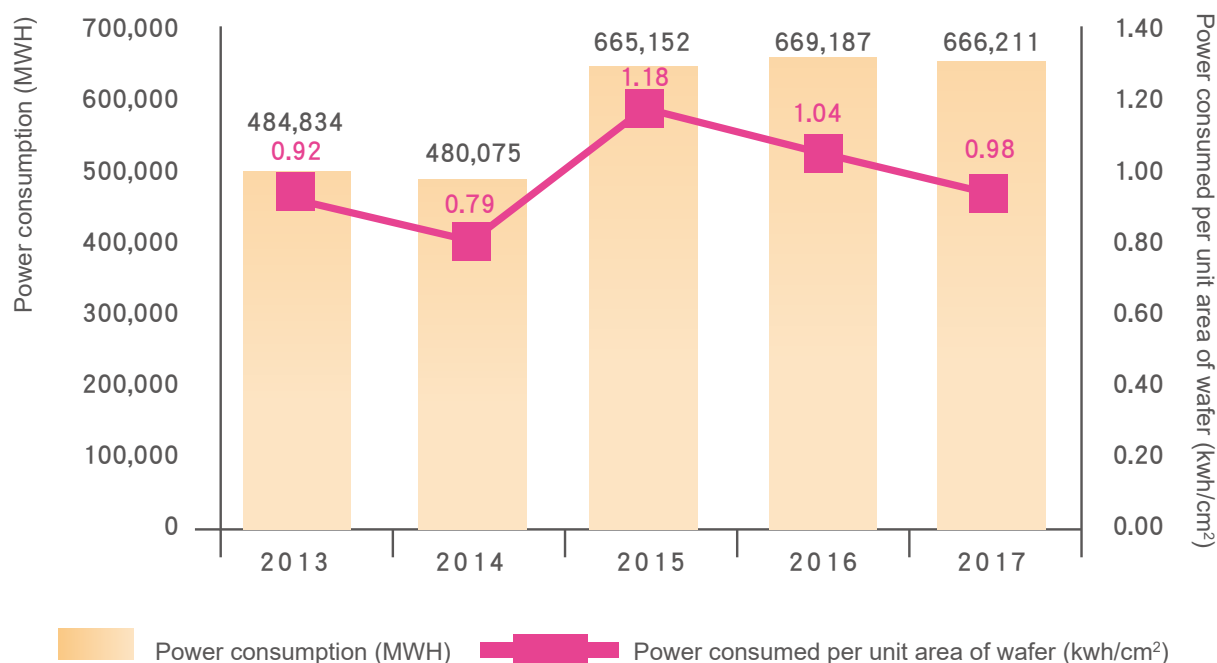
Dimensions	Aspects	Reduction		Opportunity	Response Strategy
Regulations	Industry reduction agreement	Increasing equipment investment and setup cost	Low-medium	Encouraged the emission reduction to gain more carbon credits	<ul style="list-style-type: none"> <li>Continue to monitor legislative trends and communicate with the authorities to prioritize the regulation of cap and trade scheme following the ratification of the Paris Agreement</li> </ul>
	Product performance standards	Failing to meet customers' requirement for carbon reduction, which lowers product demand	Low-medium	Increased in market demand for high efficiency products	<ul style="list-style-type: none"> <li>Implement the Company's Law and Regulation Monitoring System, which registers any additions/amendments to environmental protection regulations to elaborate the action plans for all plants to reduce legal risks.</li> <li>Communicate with governments through industrial organizations and associations to set reasonable and feasible legal requirements</li> </ul>
	Carbon emission disclosure	Increasing operating costs	Low	Encouraged the emission reduction to gain more carbon credits	<ul style="list-style-type: none"> <li>Establish product carbon footprints for VIS plants and suppliers to encourage them to conserve energy, and share energy performance results with customers</li> <li>Promote collaboration with process equipment vendors to reduce energy consumption during production process</li> </ul>
Physical Changes	Wind disaster, flood, and drought	Increased probability of disaster occurrence and severity will reduce or disrupt production	Low-Medium	Required for a higher adapted production capacity	<ul style="list-style-type: none"> <li>Evaluate the risks of flood and drought caused by climate change and develop risk mitigation mechanisms, and request the government to strengthen the resilience of public facilities against climate risks</li> </ul>
	Average temperature and above sea level	Increased probability of flood occurrence and severity is likely to affect production output	Low-Medium	Required for a higher adapted production capacity	<ul style="list-style-type: none"> <li>Encourage employees to conserve water consumption by increasing the recycling rate of process water and rainwater and establish response measures for water shortage</li> <li>Raise the foundation height of newly constructed Fab s and install floodgates for Fab s located in low-altitude areas</li> </ul>
Others	Social & finance trend	Changes with the trend increase operating costs / reduce production	Medium	Efforts in reducing carbon emission also reduce the use of electricity. It lowers the risk of being influenced by insufficient electricity.	<ul style="list-style-type: none"> <li>Assist and require the suppliers to establish a system to monitor and reduce the emission of green gases, which is the key reference of evaluating the company's purchase strategy.</li> </ul>

## 7.2.2 Energy Management and Energy Conservation Achievements

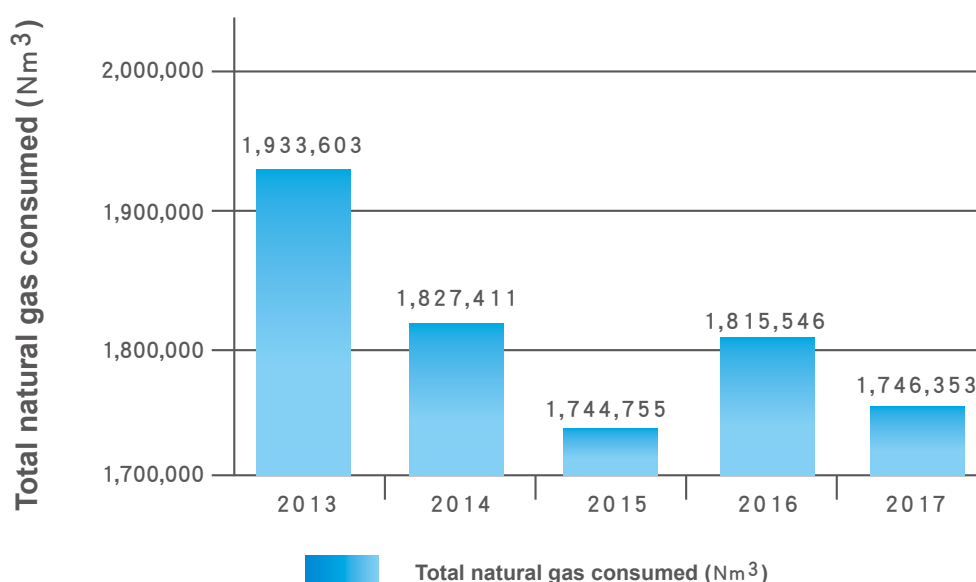
VIS facilities mainly use electrical power, followed by natural gas, and rarely use any other form of energy source. Due to its small size, the development of renewable energy in Taiwan is difficult. Existing power plants are mainly fossil-fuel power stations that require coal or natural gas to generate 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 2016 and 2017, VIS's power consumption per unit area of wafer reduced from 1.04 kWh/cm<sup>2</sup> to 0.98 kWh/cm<sup>2</sup> which was a 5.7% reduction. 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. For example, while maintaining high product quality, VIS has increased the environmental temperature in non-photo areas of cleanrooms, improved energy consumption of fan filter units in the cleanroom; 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. Air pollution treatment equipment and the VOC burner were upgraded to recycle and reuse high-temperature exhaust gas; Obtained ISO 50001: 2011 certification for all three plants in 2017. 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's performances in energy conservation during the last 5 years are listed below.



Power consumption and power consumed per unit area of wafer



Total natural gas consumed

#### 7.2.2.1 2017 Primary Energy Conservation Measures and Their Effectiveness

The most efficient means of conserving energy and reducing carbon emission is by lowering power consumption (KWH). 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 2017 resulted in 12.15 million kWh in reduced electricity consumption, which was an energy conservation rate of 1.8% and translated to NT\$29.78 million in savings. The table below summarizes various practices employed by VIS in 2017 to conserve energy.

Category	Energy conservation practices
Energy conservation of public facilities	<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> </ol>



Category	Energy conservation practices
	16. Control and manage Sub FAB lighting for energy conservation 17. Replaced MAU fan outlet with two-way outlet to reduce pressure loss and save energy 18. Replaced CDA compressor rotors to increase operating efficiency 19. Replaced CDA desiccant dryer with heating dryer for energy conservation 20. Reduce the operations of the C/R MAU for energy conservation 21. Use steam boilers to supply water and increase the temperature in the tank for energy conservation 22. Increase UPW chilled water temperature by 0.5°C for heat exchange for energy conservation
Energy conservation of production facilities	1. Installed insulation layers in the CDO scrubber chamber to reduce heater usage 2. Reduce P5K tool H.X temperature SP 3. MK8 UPLA energy saving solution: Down Flow SPC 4. Shut down and suspend the use of the VMB exhaust ventilation for energy conservation 5. Reduce the PCW flow in the 2 FNC Polyimide Curing RCU 6. Endura MOCVD scrubber (hot air type) scrubber change to (absorption type) scrubber 7. Switched the coolant compressor in the HE Chiller to a heat exchange type 8. Cease the use of the transferred auxiliary pump for the ULTM equipment 9. Purchased energy efficient dry pumps for new manufacturing machines 10. Replaced Alcatel with Ebara EVM-102N-BE pump 11. Placed DRM auto season for online automatic operations 12. Moved out the FNC pump test cabinet 13. Reduced the yellow light chemical box damper

#### 7.2.2.2 Mid and Long-term Goals of Energy Management

VIS's mid and long-term measures for energy management are as follows. We aim to conserve 10% less energy per unit area of wafer by 2021 than the amount consumed in 2016. As of the end of 2017, the completion rate was 5.7%.

Targets of the 2018-2019 project	Targets of the 2020-2021 project
<ul style="list-style-type: none"> <li>Replaced all facility lighting with LED lights to conserve energy and reduce carbon emission</li> <li>Replaced or added new variable-frequency air compressors, and replaced heating dryer with adsorption dryers</li> <li>Replaced refrigerant oil in ice-water machines with polarized refrigerant oil to enhance the unit's operational efficiency</li> <li>Discarded uninterrupted power systems with poor efficiency, replaced them with high-performance equipment</li> </ul>	<ul style="list-style-type: none"> <li>Replaced old manufacturing equipment or added high-efficiency motors</li> <li>Replaced uninterruptible power supply systems with new high-performance equipment</li> <li>Installed solar and wind power facilities to provide some electricity for lighting</li> <li>Discarded transformers with poor efficiency, replaced them with high-performance equipment</li> <li>Installed CHP/CWP variable-frequency control in chillers</li> <li>Chiller energy conservation - Replacement of old machines</li> </ul>



### 7.2.3 GHG Inventories

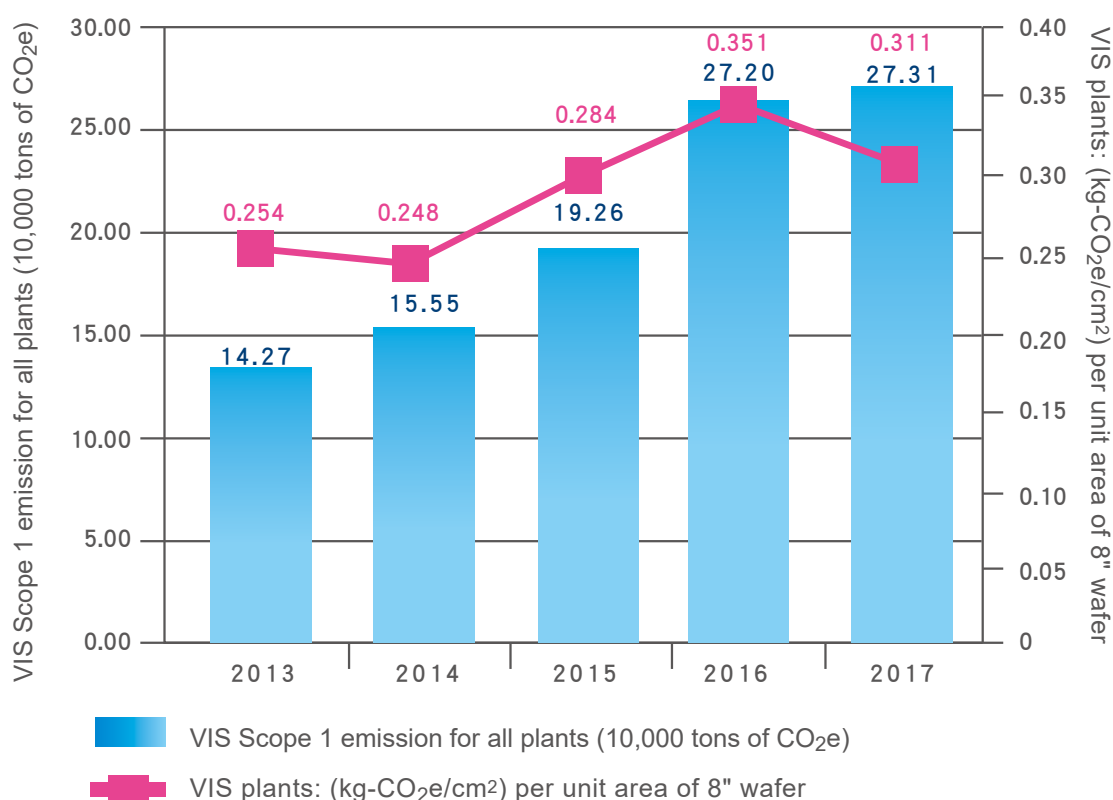
GHG reduction is a key measure for fighting against climate change and global warming, while GHG inventories serve as the basis for emission reduction. Based on inventory results, reduction goals and priorities can be established to facilitate subsequent reduction endeavors and the verification of reduction 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.

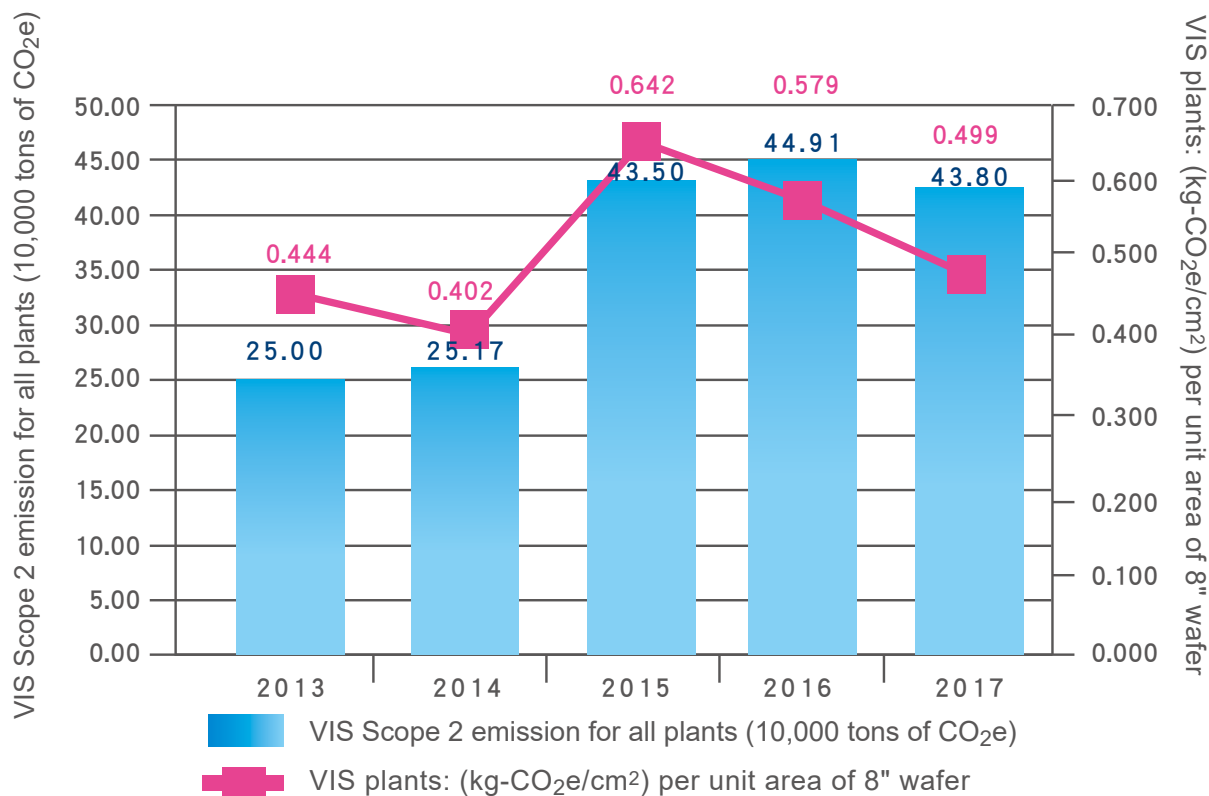
VIS conducts its GHG inventories by following ISO/CNS 14064-1 standards, the Executive Yuan Environmental Protection Administration (EPA) Greenhouse Gas Validation Guidelines<sup>Note</sup>, "Greenhouse Gas Emission Inventory Registration Guidelines", and the WBCSD/WRI GHG Protocol, with 100% control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

**Note:** In 2017, 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.

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.

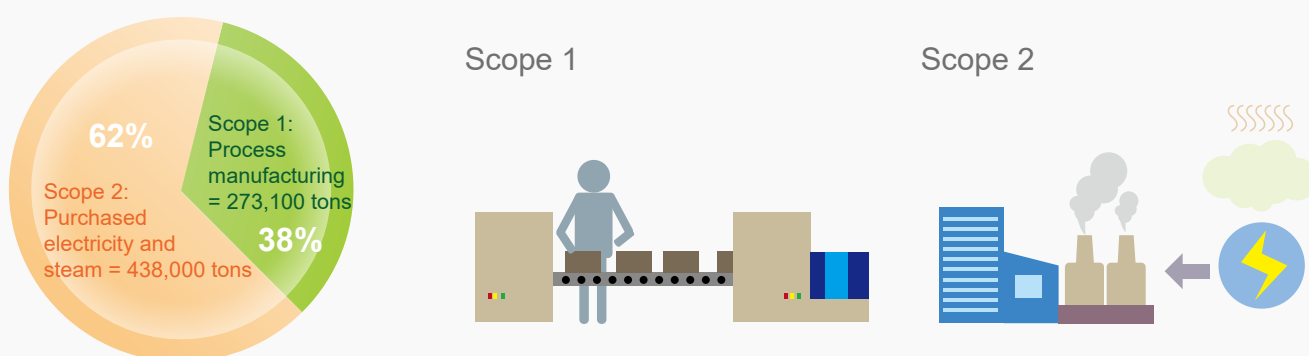


VIS Scope 1 GHG emission



VIS Scope 2 GHG emission

### Composition of VIS GHG emissions in 2017



Scope 1: Process manufacturing = 273,100 tons  
 Scope 2: Purchased electricity and steam = 438,000 tons

### 7.2.4 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.

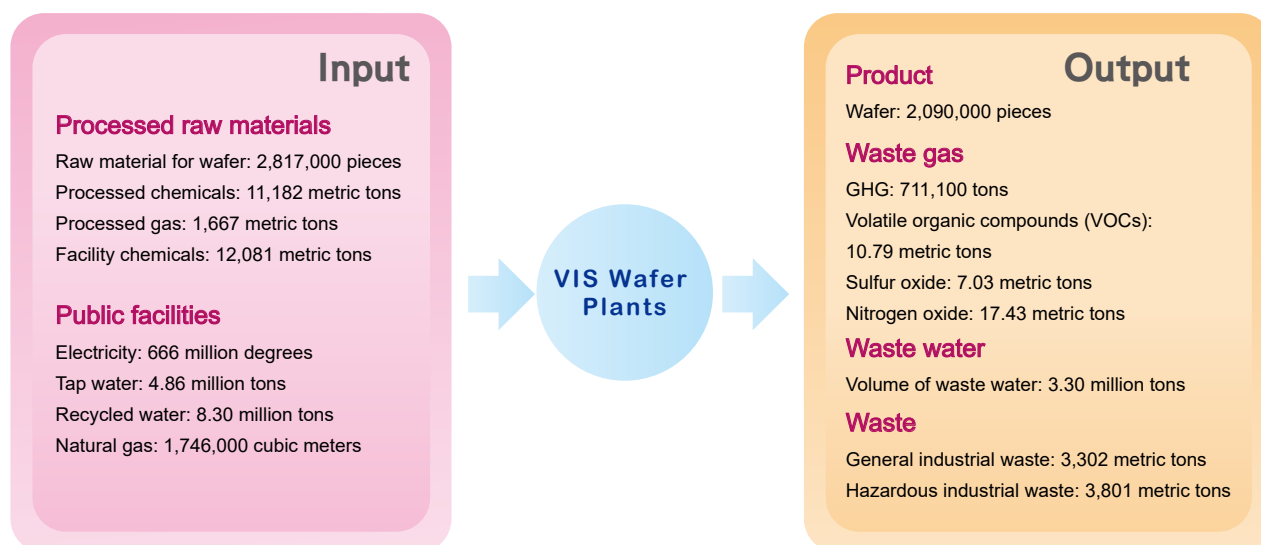
### 7.2.5 GHG reduction

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 7.2.2 Energy Management and Energy Conservation Achievements) to reduce GHG emissions per unit area of wafer. Based on the 2015 GHG carbon emission coefficient announced by the Taiwan Power Company, the GHG emission per unit area of wafer is expected to be 15% less by 2021 than the amount emitted in 2016; the current completion rate is 12.8%.

## 7.3 Pollution Prevention

### Schematic diagram of VIS raw materials and output

VIS has always followed the principle of minimizing the use of raw materials in order to reduce waste generation and lower production costs, generating economic benefits and achieving environmental protection. VIS has established a dedicated unit to regularly review company-wide reduction performance. Internally, VIS continues to adjust parameters of raw materials in order to achieve optimization and minimization, which not only reduce production costs but also prevents the generation of pollutants and waste.



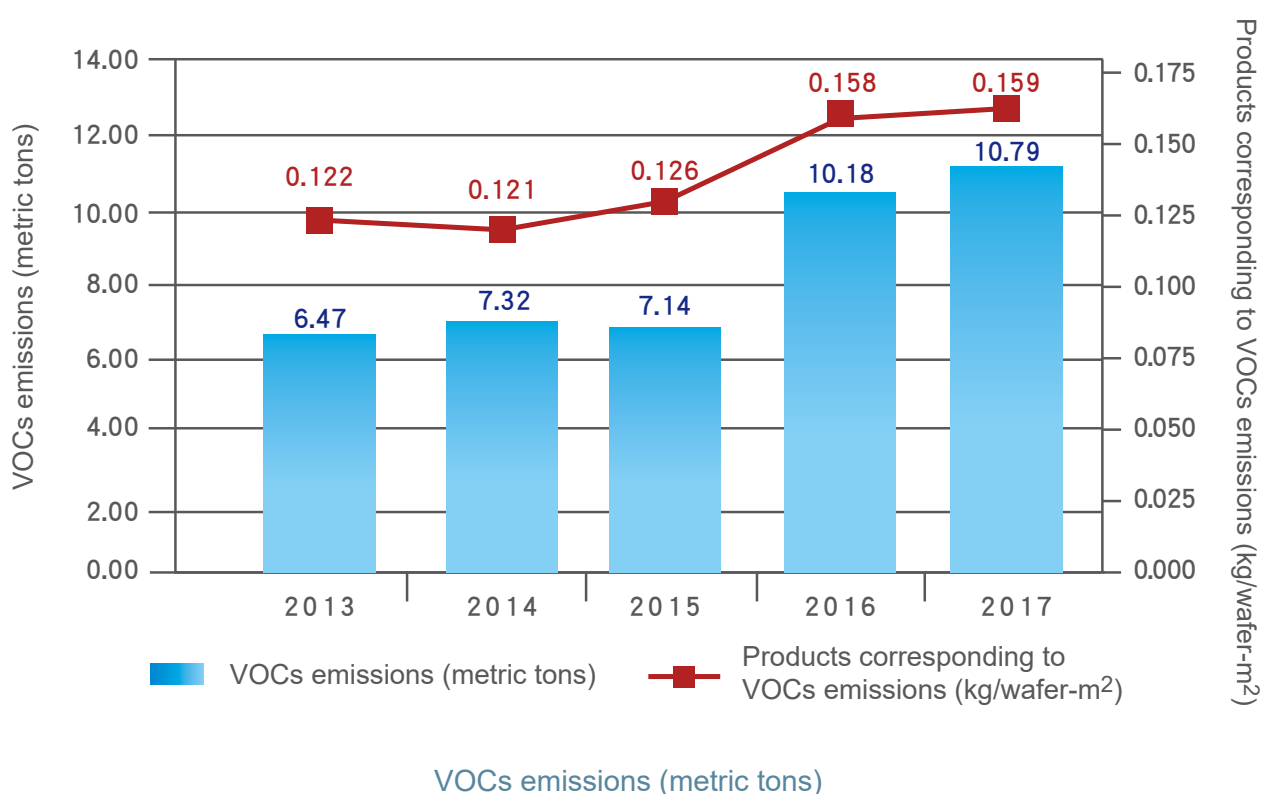
Schematic diagram of VIS's raw material use and output in 2017

### 7.3.1 Air Pollution Control

VIS's air pollution control strategy involves collecting processed waste gas in a closed environment, then preprocessing 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 2017, the average removal efficiency of VOCs in plant areas was 93.4%, which was better than the 92% established by the environmental impact assessment best available control technology.

Based on the performance in 2016 and 2017, VOC emission per unit area of wafer remained mostly the same and rose from 0.158 kg/m<sup>2</sup> in 2016 to 0.159 kg/m<sup>2</sup> in 2017 (a marginal 0.6% increase).



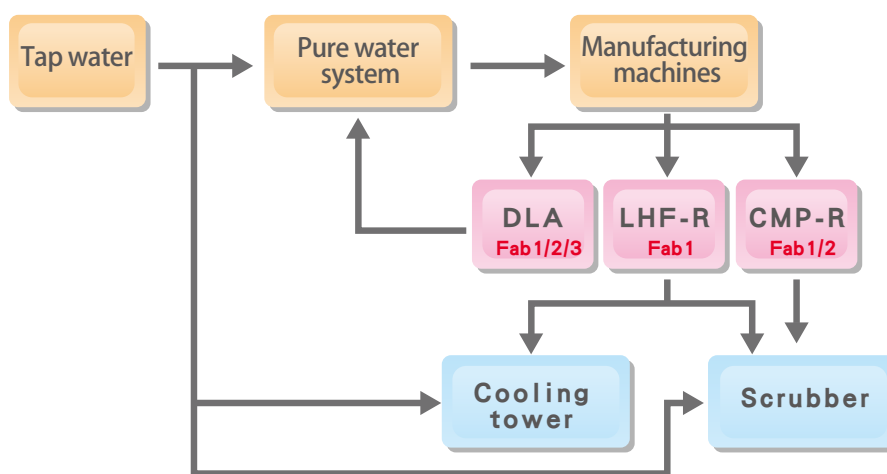
At VIS, natural gas and minor amounts of diesel fuel are used (for power generators). According to estimated air pollutant emission coefficients of NO<sub>x</sub> and SO<sub>x</sub> formulated by the EPA with respect to the semiconductor industry, VIS reported NO<sub>x</sub> emissions of 17.43 metric tons and SO<sub>x</sub> emissions of 7.03 metric tons in 2017.

### 7.3.2 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 and three types of recycling systems which are classified according to water quality and user demands into low-concentration HF waste recycling (LHF-R) system, chemical mechanical polishing wastewater recycling (CMP-R) system, and low-concentration acidic wastewater recycling (DLA) system. LHF-R provides additional water for scrub columns and cooling water towers, and water produced by the CMP-R system provides additional water for scrub columns. Lastly, the DLA system recycles water for use in a pure water system. Recycling systems described above can be 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 2017, VIS's Fab1 and Fab 2 plants recorded an average water recycling rate of 86.7% and 85.4%, 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 average water recycling rate in Fab 3 in 2017 was 76.7% which was an 8.8% increase from 2015. (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).

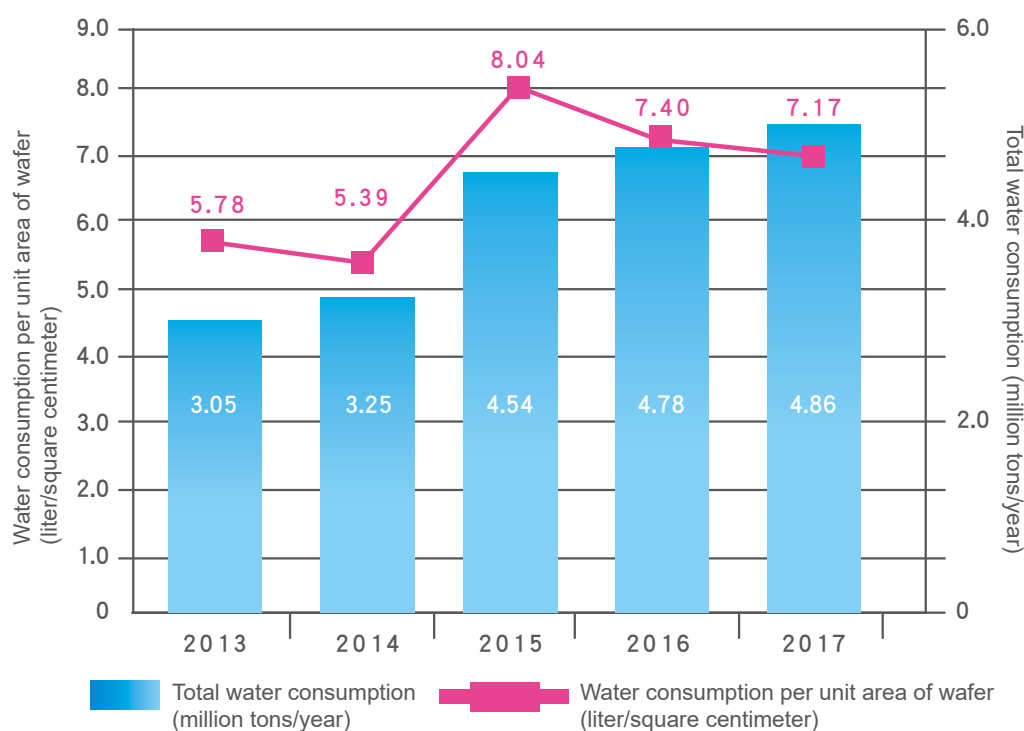
With regard to the volume of water recycled from the production process, Fab1 saved 2.71 million tons of water in 2017, showing an improvement of 1.8% compared with 2013, whereas Fab2 conserved 3.61 million tons of water, representing an improvement of 1.7% compared with 2013. Fab3 conserved 1.98 million tons of water since water recycling was implemented in 2015. The volume increased significantly by approximately 130% from 2015.

## Statistics of water recycling rate

Year	2013	2014	2015	2016	2017
Fab1 average water recycling rate (%)	88.0%	87.8%	86.9%	86.8%	86.7%
Fab1 amount of recycled water (million metric tons)	2.66	2.69	2.51	2.69	2.71
Fab2 average water recycling rate (%)	85.9%	85.9%	85.5%	85.5%	85.4%
Fab2 amount of recycled water (million metric tons)	3.55	3.58	3.48	3.55	3.61
Fab3 average water recycling rate (%)			70.5%	71.8%	76.7%
Fab3 amount of recycled water (million metric tons)			0.86	1.72	1.98
Total amount of recycled water (million metric tons/year)	6.21	6.28	6.85	7.96	8.30

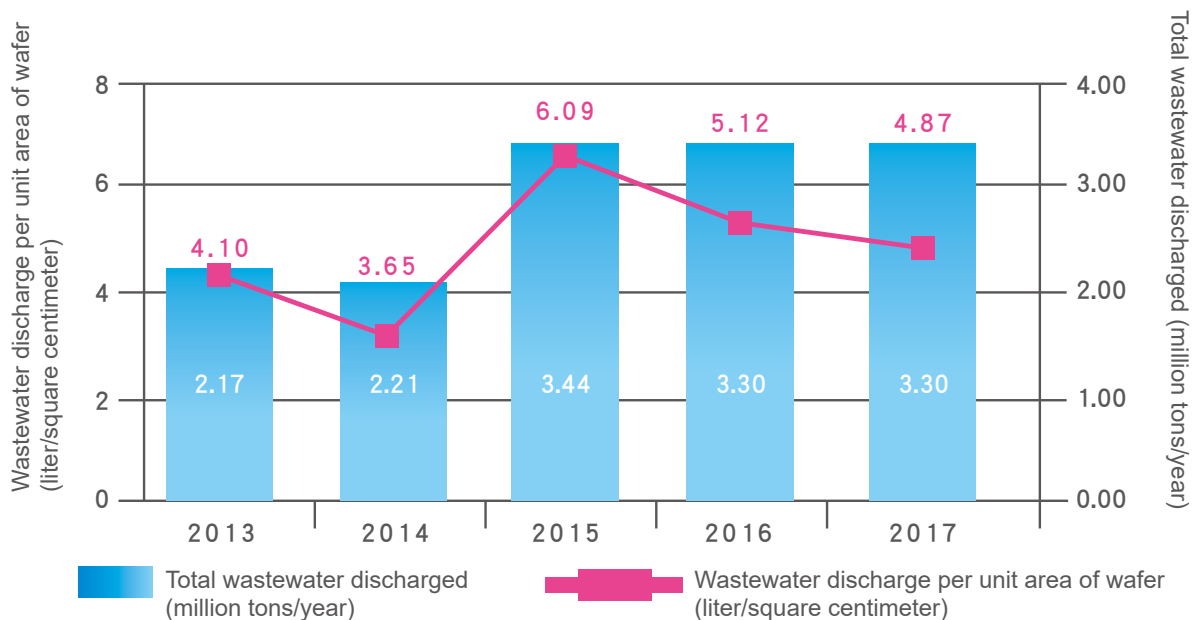
An examination of VIS's water consumption per unit area of wafer showed a rising trend in water consumption per cm<sup>2</sup> of wafer in 2015 due to the acquisition of Fab3 in 2015. In the same year, Fab3 also implemented the production water recycling improvement project, the outcome of which was reflected in approximately 10.8% reduction of water consumption per cm<sup>2</sup> of wafer from 8.04 L in 2015 to 7.17 L in 2017.

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 cm<sup>2</sup> of wafer in 2015 due to the acquisition of Fab3 in 2015. In the same year, Fab 3 also implemented the production water recycling improvement project, the outcome of which was reflected in a 20.0% reduction of wastewater discharge per cm<sup>2</sup> of wafer from 6.09 L in 2015 to 4.87 L in 2017 for every cm<sup>2</sup> of 8" wafer produced.



VIS water consumption per unit area of wafer





VIS wastewater discharge per unit area of wafer

### 2017 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 2017 water conservation measures are listed below.

Category	Water-conservation measures
Water conservation at public facilities	Recycle the production waste water to Cooling tower. In average, about 163 ton, of water was saved per day .
Water conservation at production facilities	Recycle the back-wash PB-UF# unit to the original pool, In average, about 15 tons of water was saved per day.

### Mid and Long-term Goals of Water Resource Management

In 2021, the water consumption per unit of product is reduced by 13% compared with 2015. As of the end of 2017, the water consumption per unit of product is reduced by 10% compared with 2015.

Category	Water-conservation measures
Water conservation at public facilities	<ul style="list-style-type: none"> <li>Altered WWTs sand filter tower backwash to ROR concentrated water to reduce the depletion of water resources</li> <li>Recycled and reused water discharged from the west MAU</li> <li>Adjusted the ROR recovery ratio</li> </ul>
Water conservation at production facilities	<ul style="list-style-type: none"> <li>Recycled and reused discharged water from PB UF backwash</li> <li>Adjusted the RO recovery ratio</li> <li>Water saving for change QDR idle</li> </ul>

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 (NH<sub>3</sub>-N) in water discharges in order to mitigate the harmful effects of water discharge. Procedures for improving wastewater quality at VIS are as follows:

- Install tetramethylammonium hydroxide (TMAH) wastewater treatment systems to reduce substances containing nitrogen in discharged water (Fab 1).
- Install collection systems for wastewater containing ammonium fluoride, commission external services to process ammonium fluoride and reduce the content of ammonia nitrogen in discharged water (Fab 2/3).
- Install outsourced wastewater collection facilities for alkaline scrub columns to reduce the ammonia concentration (Fab 1).
- During the cleaning process, we use ultrapure water as an alternative to ammonia water in mechanical polishing machines to reduce ammonia consumption (Fab 1/2).
- Reduce the temperature of ammonia water in the acid machine, decrease the amount of evaporation and acid complementation, and reduce the use of ammonia nitrogen (Fab 1).

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.

Discharged wastewater analysis results of VIS

Regulated Items	Fab location		Regulation Standards	2013	2014	2015	2016	2017
Concentration of suspended solids in wastewater (mg/l)	Within the science park	Fab1/2	300	8.3~279	9.7~185	8.2~114	9.0~50.5	6.8~170
	Outside of the science park	Fab3	30			1~15.8	1~15.9	2.3~18.3
Concentration of chemical oxygen demand in wastewater (mg/l)	Within the science park	Fab1/2	500	17.8~139	17.5~130	31.9~129	19.0~124	29.9~131
	Outside of the science park	Fab3	100			5.5~44.7	5.5~44.8	5.9~53.9
Concentration of TMAH in wastewater (mg/l)	Within the science park	Fab1/2	30			12.7	1.7~27	0.5~19.3
	Outside of the science park	Fab3	NA					
Concentration of ammonia in wastewater (mg/l)	Within the science park	Fab1/2	75			42.77	25.2~72.4	8.3~46.1
	Outside of the science park	Fab3	75 (before 6/30/2015)			7.85~31.7	13.9~16.2	16.4~18.6
			30 (after 7/1/2015)			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 are 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.

### 7.3.3 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 produce 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 2017 to recycle and reuse wastes.

#### Reduction in solve waste discharge:

VIS extended the acid exchange time for wet etching machines to reduce the use of sulfuric acid and reduce the production of sulfuric acid waste. It reduces production by 6.69 metric tons each year which is approximately 1% of total production.

#### Partnering with vendors to introduce waste reuse technologies:

VIS commissions waste treatment vendors to introduce new technologies for recycling and reusing low-concentration ammonium sulfate waste discharged from alkaline scrub columns. VIS reduced ammonium sulfate discharge by a total of 160.66 tons in 2017. The efforts put in by VIS over many years have shown significant results. Although categorizing wastes are getting increasingly complex, the Company and its waste handling vendors have 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	2013	2014	2015	2016	2017
General industrial waste (metric tons/year)	2,398	2,589	3,215	3,117	3,302
Hazardous industrial waste (metric tons/year)	2,678	2,618	3,670	3,849	3,801
Amount of industrial waste recycled (metric tons/year)	4,746	4,842	6,216	6,302	6,421
Amount of industrial waste incinerated (metric tons/year)	328	363	667	647	675
Amount of industrial waste buried (metric tons/year)	2	2	2	17	7
Waste reuse rate (%)	93.51	93.00	90.28	90.47	90.39
Percentage of industrial waste incinerated (%)	6.46	6.97	9.69	9.29	9.51
Percentage of industrial waste buried (%)	0.03	0.03	0.03	0.24	0.10

### Waste reuse methods

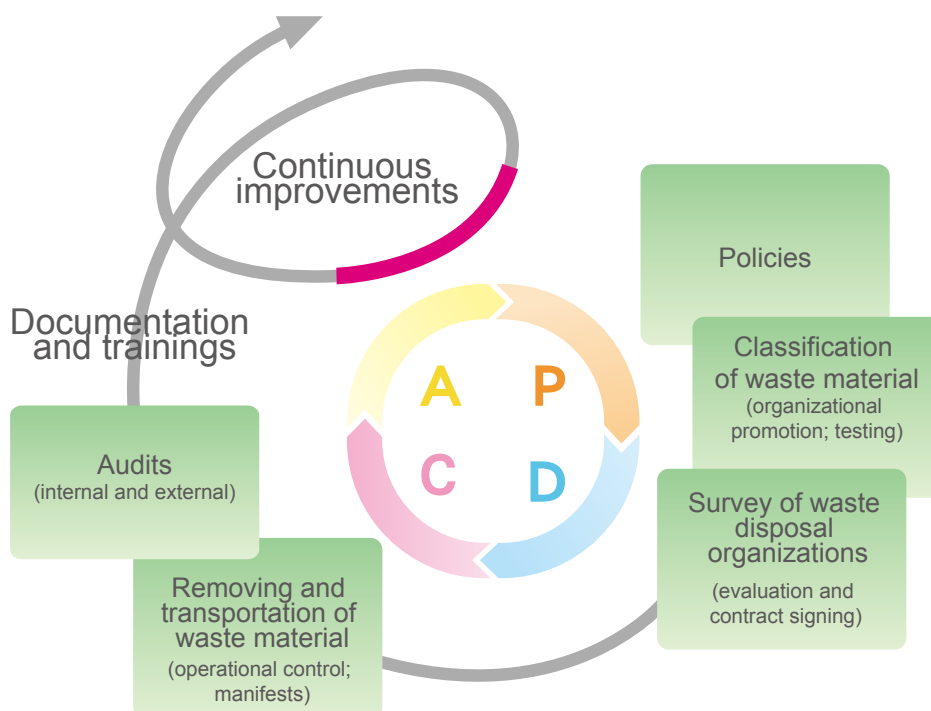
The waste we produce is mainly composed of acid waste, solvent waste, and sludge, most of which are physically or chemically treated into industrial raw materials or additives for cement or bricks for reuse. Containers that cannot be recycled are washed and reused. VIS employs waste disposal and recycling 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 2017 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 4,718 computers and monitors, which is equivalent to the reduction of approximately 114 metric tons of carbon dioxide emissions or cutting down of approximately 9,531 trees.<sup>Note</sup> VIS will continue to monitor international legislations, customer demands, and potential future legal requirements to prepare for effective response measures.

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

### Management of Waste Disposal Organizations

In the management of external waste treatment vendors, VIS conducts annual audits on cooperating vendors, completing auditing on 16 vendors in 2017. 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.



### Mid and Long-term Goals of Waste Management

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. For example, VIS will commission waste treatment vendors to introduce new technologies for recycling and reusing low-concentration ammonium sulfate waste discharged from alkaline scrub columns. These technologies reduced 160.66 tons of low-concentration ammonium sulfate discharge in 2017.

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.

### 7.3.4 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, expansion and procurement of prevention facilities for special chemicals, wastewater, and waste gas, and handling of gas emissions. Approximately NT\$316 million was expended in these areas.

In 2017, a legal fine amounting to NT\$72,500 was incurred due to the discovery of a damaged treatment channel in the pure water system; consequently, relevant safeguards and monitoring were enhanced, and the frequency of regular inspections has been increased.

## 2013 - 2017 Environmental protection expenditures

2013 - 2014 Total environmental protection expenditures (Fab 1 + Fab 2)

2015 - 2017 Total environmental protection expenditures (Fab 1 + Fab 2 + Fab 3)

Unit: NT\$1,000

Year	2013		2014		2015		2016		2017	
Category	Recurring cost	Capital expenditure	Recurring cost	Capital expenditures	Recurring cost	Capital expenditures	Recurring cost	Capital expenditures	Recurring cost	Capital expenditures
Subtotal	105,464	170,178	125,380	38,023	149,775	160,116	169,546	48,962	197,743	118,746
Total	275,642		163,403		309,891		218,508		316,489	

Note 1: Recurring costs included fees required by environmental protection laws and regulations, testing fees, operational maintenance costs, and personnel costs.

Note 2: Capital expenditures included costs for installation of environmental protection equipment, etc.



## Social Engagement

### Charity and volunteer services

VIS actively takes part in community and public charity events and consistently demonstrates its concern for disadvantaged persons within our communities by making tangible contributions to society. VIS organized an employee fundraising event for building the kindergarten for the "Smangus Tribe" in January and raised approximately NT\$1.22 million. The Company also donated NT\$780,000 totaling NT\$2 million to help the Smangus construct their new kindergarten for their children. In addition, the Company organizes employee outings to mountainous areas in order to provide volunteer services and lend educational assistance to kindergartens. In 2017, a total of 23 employees volunteered to visit Smangus, an indigenous village, and provide educational services as well as donate a collection of books and computers to a kindergarten. From June 21<sup>st</sup> to 22<sup>nd</sup>, VIS employees organized an educational field trip for a group of schoolchildren from Smangus to visit the National Taiwan Science Education Center and the Taipei Zoo.

To care for those with physical and mental disabilities, the Company invited people with disabilities from St. Joseph Social Welfare Foundation, Syin-lu Social Welfare Foundation, and Children Are Us Foundation to attend our Chinese New Year banquet during which our employees have prepared exciting performances to share moments of warmth and happiness with the participants. The Company has also donated NT\$600,000 to fund learning and rehabilitation services for people with physical and mental disabilities. In addition to year-end parties, the Company has continued to make its contribution of NT\$200,000 to the St. Joseph Social Welfare Foundation's charity programs and Christmas events to bring joy and warmth to our friends who have physical and mental disabilities. The Company organized a family day event in Leofoo Village Theme Park on September 23<sup>rd</sup> and invited 100 elderly citizens that live alone from the "Huashan Social Welfare Foundation" and children from the "Children Are Us Foundation". VIS donated NT\$200,000 and arranged volunteers to help them enjoy a warm and delightful day in the Theme Park.

VIS also sponsored National Tsing Hua University's "Sunrise Program" by providing an annual scholarship of NT\$200,000 to two students who come from disadvantaged family background, enabling these low-income students to concentrate on their schooling without financial concerns. In an effort to help give back to society, VIS also sponsored the "TSMC Musical Theater" by providing NT\$100,000 in a bid to promote art education. Furthermore, 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 the broadcast program "The Future of Taiwan & Taiwan in the Future," through which topics such as current global trends, education in Taiwan, talented individuals, social livelihood, energy resources, and environmental protection are discussed. There were passionate responses after the program was aired.



VIS hosted year-end charity dinners and invited economically disadvantaged groups.



Company employees went to the Smangus Tribe and provided volunteer services.

## Appendix

## GRI G4 index – following the Core option

The performance indicators disclosed below have been verified by external agencies; relevant verification results are as indicated in the statement of external assurance

## Declaration of independent assurances

GRI indicators		Reference Chapter/Description	Page No.
G4-1	Provide a statement from the organization's highest level decision-maker on the relevance of sustainability to the organization, and the organization's strategy for addressing sustainability	1. Message from the Chairman	p.4
G4-3	Name of the organization	3.1 Company Profile	p.17
G4-4	The main brand, products, and services	3.1 Company Profile 3.2 Business Overview	p.17 p.20
G4-5	Location of the company headquarters	3.1 Company Profile	p.17
G4-6	List all the countries with the organization's establishments (include countries with significant business operations or related to the sustainable development issues)	3.1 Company Profile	p.17
G4-7	The nature of ownership and legal formats	3.1 Company Profile	p.17
G4-8	Markets serviced (including geographic breakdown, servicing sectors, and types of customers/beneficiaries)	3.1 Company Profile	p.17
G4-9	Size and scale of the organization	3.1 Company Profile	p.17
G4-10	Employee breakdown by employment type, contract, region, and gender	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
G4-11	The percentage of total employees covered by collective bargaining agreements	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
G4-12	Describe the organization's supply chains	5.3 Protection of Customer Privacy	p.43
G4-13	Significant changes during the report period regarding the organization's size, structure, ownership, or its supply chains	3.2 Business Overview	p.20
G4-14	Whether our organization is equipped with the appropriate early warning guidelines or principles	3.3 Business Policies	p.25
G4-15	List the economic, environmental, social, or any other principles and regulations established by external organizations which the Company recognizes or endorses	3.4 Foreign and Domestic Organizational Members	p.26
G4-16	List the public associations and national/international advocacy organizations in which the organization participates	3.4 Foreign and Domestic Organizational Members	p.26
G4-17	List all entities included in the organization's consolidated financial statements	3.2 Business Overview	p.20
G4-18	a. Explain the process for defining the content of this report and Aspect Boundaries b. How has the organization implemented the Reporting Principles for Defining Report Content	2.3 Identifying the material Aspects	p.11
G4-19	List the material Aspects identified during process of defining the content of this report	2.3 Identifying the material Aspects	p.11
G4-20	For each material Aspect, report the Aspect Boundary within the organization	2.3 Identifying the material Aspects	p.11
G4-21	For each material Aspect, describe the Aspect boundary outside the organization	2.3 Identifying the material Aspects	p.11
G4-22	Explain the effects of any restatements of information provided in previous reports, and the reason for making the restatements	None	
G4-23	Explain any significant changes from previous reporting periods in the boundaries of "Scope" and "Aspects"	About This Report	p.2

GRI indicators		Reference Chapter/Description	Page No.
G4-24	List the stakeholder groups engaged by the organization	2.2 Engagement of stakeholders	p.8
G4-25	The process for identifying and selecting stakeholders with whom to engage	2.2 Engagement of stakeholders	p.8
G4-26	Discuss the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an specify whether any of the engagement was conducted specifically as part of the report preparation process	2.2 Engagement of stakeholders	p.8
G4-27	Describe key topics and concerns raised during stakeholder engagements, and how the organization has responded to those key topics and concerns, including reports. Describe the stakeholder groups that raised each of the key topics and concerns	2.2 Engagement of stakeholders	p.8
G4-28	Period of the information reported	About This Report	p.2
G4-29	Date of Previous Report	About This Report	p.2
G4-30	Period of Report	About This Report	p.2
G4-31	Provide a contact person for responding to questions regarding this report or its contents	About This Report	p.2
G4-32	The page reports, indices, and "in accordance" options chosen by the organization	About This Report GRI G4 Index	p.2
G4-33	Organization's policies and current practices assured by external agencies for the purposes of this report	About This Report	p.2
G4-34	The organization's structure of governance, including the highest level of governing body. Identify the committees responsible for making decisions on economic, environmental, and social impacts	4.1 Strengthen the Authority of the Board of Directors	p.30
G4-56	Describe the organization's values, principles, standards, and norms of behavior such as codes of conduct and codes of ethics	4.3 Implementation of Legal and Regulatory Compliances	p.36

Major Factors to Consider	DMA and indicators		Reference Chapter/Description	Page No.
Economic performance	DMA	Disclosure of management strategies	3.2 Business Overview	p.20
	G4-EC1	The direct economic value generated and distributed (EVG&D) by our organization	3.2 Business Overview	p.20
	G4-EC2	Financial implications and other risks and opportunities caused by climate change	7.2 Climate Change	p.85
Raw materials	DMA	Disclosure of management strategies	7.3 Pollution Prevention	p.92
	G4-EN1	Total weight or volume of raw materials	7.3 Pollution Prevention	p.92
Energy	DMA	Disclosure of management strategies	7.2 Climate Change	p.85
	G4-EN3	Energy consumption within the organization	7.2 Climate Change	p.85
	G4-EN5	Energy intensity	7.2 Climate Change	p.85
	G4-EN6	Decrease energy consumption	7.2 Climate Change	p.85

Major Factors to Consider	DMA and indicators		Reference Chapter/Description	Page No.
Water	DMA	Disclosure of management strategies	7.3 Pollution Prevention	p.92
	G4-EN8	Total amount of water withdrawal by source	7.3 Pollution Prevention	p.92
	G4-EN9	Water sources significantly impacted by withdrawing water	7.3 Pollution Prevention	p.92
	G4-EN10	Percentage and total volume of water recycled and reused	7.3 Pollution Prevention	p.92
Emissions	DMA	Disclosure of management strategies	7.2 Climate Change	p.85
	G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	7.2 Climate Change	p.85
	G4-EN16	Indirect greenhouse gas emissions from energy use (Scope 2)	7.2 Climate Change	p.85
	G4-EN18	Intensity of greenhouse gas (GHG) emissions	7.2 Climate Change	p.85
	G4-EN19	Reduction of greenhouse gas emissions	7.2 Climate Change	p.85
	G4-EN21	NOX, SOX, and other significant gas emissions	7.3 Pollution Prevention	p.92
Wastewater and waste	DMA	Disclosure of management strategies	5.2 Green Products Conforming to International Laws and Customer Requirements	p.42
	G4-EN22	Total amount of water discharged based on water quality and purpose of discharge	5.2 Green Products Conforming to International Laws and Customer Requirements	p.42
	G4-EN23	Total weight of waste by type and method of disposal	7.3 Pollution Prevention	p.92
Products and services	DMA	Disclosure of management strategies	5.2 Green Products Conforming to International Laws and Customer Requirements	p.42
	G4-EN27	Reduce the environmental impact caused by products and services	5.2 Green Products Conforming to International Laws and Customer Requirements	p.42
Legal compliance	G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	7.3 There were no significant fines and non-monetary sanctions for non-compliance with environmental laws and regulations	p.92
Overall situation	DMA	Disclosure of management strategies	7.3 Pollution Prevention	p.92
	G4-EN31	Total environmental protection expenditures and investments by category	7.3 Pollution Prevention	p.92
Assessment of suppliers' environmental protection policies	DMA	Disclosure of management strategies	5.3 Protection of Customer Privacy	p.43
	G4-EN32	Percentage of new suppliers screened based on environmental criteria	5.4 Management of Supply Chains	p.43
	G4-EN33	Percentage of new suppliers that were screened using environmental criteria that have significant actual and potential negative environmental impacts in the supply chain and actions taken	5.3 Management of Supply Chains	p.43
Relationship between employer and employees	DMA	Disclosure of management strategies	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
	G4-LA1	Total number and percentage of new and former employees based on age group, gender, and region	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
	G4-LA2	Benefits provided for full-time employees only, based on main bases of operation	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
	G4-LA3	Percentage of employees returning to work after parental leave and their retention rates based on gender	6.4 Balancing Life and Work	p.63
Labor/ Management Relations	DMA	Disclosure of management strategies	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52

	G4-LA4	During a collective negotiation, was a minimum notice period given regarding significant operational changes	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
Occupational health and safety	DMA	Disclosure of management strategies	6.5 Occupational health and safety	p.58
	G4-LA5	Percentage of total workforce represented in official joint management-worker health and safety committees; who helped monitor and advise on occupational health and safety issues	7.1 Environmental, Health and Safety Management System and Policies	p.79
Training and education	DMA	Disclosure of management strategies	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
	G4-LA10	Programs for skills management and life-long learning that support the employee's continued employability and assist them in planning for retirement	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
Assessment of suppliers' labor practices	DMA	Disclosure of management strategies	5.3 Protection of Customer Privacy	p.43
	G4-LA14	Percentage of new suppliers screened according to the labor practices criteria	5.4 Management of Supply Chains	p.43
	G4-LA15	Actual or potential significant negative impacts in supply chain's labor practices, and actions taken		p.43
Method for filing a labor practice complaint	DMA	Disclosure of management strategies	6.3 Employee Participation and Channels of Communication	p.61
	G4-LA16	Number of labor practice complaint cases officially filed, addressed, and resolved	6.3 Employee Participation and Channels of Communication	p.61
Child Labor	DMA	Disclosure of management strategies	5.4 Management of Supply Chains	p.43
	G4-HR5	Operation base and suppliers identified as in potential violation of employing child labor, and corrective measures taken to eliminate the use of child labor	5.4 Management of Supply Chains	p.43
Assessment of suppliers' human rights policies	DMA	Disclosure of management strategies	5.4 Management of Supply Chains	p.43
	G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken Percentage of new suppliers that were screened using human rights criteria	5.4 Management of Supply Chains	p.43
Anti-corruption	DMA	Disclosure of management strategies	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
	G4-SO4	Communication and trainings on anti-corruption policies and procedures	4.5 Information Transparency and Code of Conduct	p.40
	G4-SO5	Confirmed corruption cases and actions taken	4.5 Information Transparency and Code of Conduct	p.40
Assessment of suppliers' impact on society	DMA	Disclosure of management strategies	5.4 Management of Supply Chains	p.43
	G4-SO10	Significant actual and potential negative impacts on society in the supply chain and actions taken Percentage of new suppliers that were screened using criteria for impacts on society	5.4 Management of Supply Chains	p.43
Labeling of goods and services	DMA	Disclosure of management strategies	5.1 Customer Satisfaction and Methods for Filing a Complaint	p.42
	G4-PR5	Results of customer satisfaction surveys	5.1 Customer Satisfaction and Methods for Filing a Complaint	p.42
Customer privacy	DMA	Disclosure of management strategies	5.2 Protection of Customer Privacy	p.42
	G4-PR8	Number of substantiated complaints on customer privacy violations and misplacing customer data	4.3 Implementation of Risk Management 5.2 Protection of Customer Privacy	p.36 p.42



## ISO26000 Social Responsibility Guidelines

Classification	Main topics	Reference Chapter/Description	Page No.
Corporate governance	A system by which an organization makes and implements decisions while pursuing its objectives	4.1 Strengthen the Authority of the Board of Directors	p.30
Human Rights	Compliance with laws and regulations, and conduct inspections to avoid risks caused by human rights violations	4.3 Implementation of Legal and Regulatory Compliances	p.36
	Risks of enforcing human rights	4.4 Implementation of Risk Management	p.39
	Avoid complicity: direct, benefit, silent, etc.	4.5 Information Transparency and Code of Conduct	p.40
	Resolving grievances	6.3 Employee Participation and Channels of Communication	p.61
	No discrimination against disadvantaged people	6.2 Care for Employees' Physical and Mental Health	p.58
	Protection of civil and political rights	6.4 Balancing Life and Work	p.63
	Protection of economic, social, and cultural rights	6.4 Balancing Life and Work	p.63
	Protection of individual's right to work	6.4 Balancing Life and Work	p.63
Labor Practices	Promote employment and employment relationships	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
	Work conditions and social protection	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
	Maintain social dialogue	6.3 Employee Participation and Channels of Communication	p.61
	Health and safety at work	6.2 Care for Employees' Physical and Mental Health	p.58
	Training and developing talents	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52
Environment	Pollution prevention	7.3 Pollution Prevention	p.88
	Taking advantage of sustainable resources	7.3 Pollution Prevention	p.88
	Climate change mitigation and adaptation	7.2 Climate Change	p.81
	Environmental protection, biodiversity, and restoration of natural habitats		
Fair business practices	Anti-corruption	4.2 Internal Control and Audit System	p.37
	Responsible political involvement	4.5 Information Transparency and Code of Conduct	p.41
	Fair competition	4.5 Information Transparency and Code of Conduct	p.41
	Promoting social responsibility in the value chain	4.5 Information Transparency and Code of Conduct	p.41
	Respect for intellectual property rights	4.5 Information Transparency and Code of Conduct	p.41
Consumer Issues	Fair marketing, information and contractual practices	5.1 Customer Satisfaction and Methods for Filing a Complaint	p.43
	Protecting consumers' health and safety	The Corporation is a semiconductor fab plant, we do not provide end products to consumers.	
	Support sustainable consumption	5.1 Customer Satisfaction and Methods for Filing a Complaint	p.43
	Consumer service, support, and complaint/dispute resolution	5.1 Customer Satisfaction and Methods for Filing a Complaint	p.43
	Consumer data protection and privacy	5.2 Protection of Customer Privacy	p.43
	Guarantee the rights to receive essential services	5.1 Customer Satisfaction and Methods for Filing a Complaint	p.43



	Education and awareness	5.1 Customer Satisfaction and Methods for Filing a Complaint	p.42
Community involvement and development	Community involvement	8. Social Engagement	p.102
	Create career opportunities and skill development	8. Social Engagement	p.102
	The development of new technologies	8. Social Engagement	p.102
	Increase wealth and income	8. Social Engagement	p.102
	Promote education and culture	8. Social Engagement	p.102
	Promoting health	8. Social Engagement	p.102
	Social investment responsibilities	8. Social Engagement	p.102

### Comparison chart of the UN Global Compact

Classification	Ten principles	Reference Chapter/Description	P a g e No.
Human Rights	Businesses should support and respect the protection of internationally accepted human rights regulations	4.5 Information Transparency and Code of Conduct	p.40
	Assuring no involvement with human rights violators	4.5 Information Transparency and Code of Conduct	p.40
Labor standards	Businesses should support the freedom of association and recognize collective bargaining rights	6.3 Employee Participation and Channels of Communication	p.61
	The elimination of all forms of forced and compulsory labor	6.4 Balancing Life and Work	p.63
	The effective elimination of child labor	5.4 Management of Supply Chains	p.43
	The elimination of discrimination in respect of employment and occupation	6.2 Care for Employees' Physical and Mental Health	p.58
Environment	Businesses should support a preventive approach to deal with environmental challenges	7.3 Pollution Prevention	p.92
	Undertake initiatives to promote greater environmental responsibilities	7.2 Climate Change	p.85
	Encourage the development and promotion of environmentally friendly technologies		
Anti-Corruption	Businesses should oppose all forms of corruption, including extortion and bribery	6.1 Having a Common Goal, Choosing the Right People with the Right Skills	p.52

### Comparison of CSR codes of practice for TWSE/GTSM-Listed Companies

Chapter	Corresponding chapters
Chapter 1 General Provisions	2. CSR at VIS 3. About VIS 4. Corporate Governance
Chapter 2 Implementation of Corporate Governance	2. CSR at VIS 4. Corporate Governance
Chapter 3 Development of Sustainable Environment	7. Environmental Protection
Chapter 4 Protection of Social Welfare	5. Customer Relations and Management of Supply Chains 6. A Happy Workplace 8. Social Engagement
Chapter 5 Strengthen the Disclosure of CSR Information	2. CSR at VIS 4. Corporate Governance
Chapter 6 Appendix	2. CSR at VIS

# INDEPENDENT ASSURANCE OPINION STATEMENT

## 2017 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 VIS only for the purposes of verifying its statements relating to its sustainability, 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 followings:

1. The assurance scope is consistent with the description of Vanguard International Semiconductor Corporation 2017 Corporate Social Responsibility Report.
2. The evaluation of the nature and extent of the VIS's adherence to all three AA1000 AccountAbility Principles and the reliability of specified sustainability performance information in this report as conducted in accordance with type 2 of AA1000AS (2008) sustainability assurance engagement.

This statement was prepared in English and translated into Chinese for reference only.

### Opinion Statement

We conclude that the 2017 VIS Corporate Social Responsibility (CSR) Report provides a fair view of the VIS programmes and performances during 2017. 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 2017 economic, social and environmental performance indicators are correctly represented. The CSR performance indicators disclosed in the report demonstrate VIS's efforts recognized by its stakeholders.

Our work was carried out by a team of (CSR) report assurers in accordance with the AA1000 Assurance Standard (2008). 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 AA1000 Assurance Standard and their self-declaration of 'in accordance' with the G4 sustainability reporting guidelines: the Core option were fairly stated.

### Methodology

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

- 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 stakeholders to conduct interview
- interview with 27 staffs involved in sustainability management, report preparation and provision of report information
- 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 company's reporting and management processes concerning this reporting against the principles of Inclusivity, materiality and responsiveness as described in the AA1000 AccountAbility Principles Standard (2008)



## Conclusions

A detailed review against the AA1000 AccountAbility Principles of Inclusivity, Materiality and Responsiveness and sustainability performance information as well as the G4 sustainability reporting guidelines are set out below:

### Inclusivity

This report has reflected a fact that VIS has made a commitment to its stakeholders continually. The participation of stakeholders has been initiated in developing and achieving an accountable and strategic response to sustainability. The reporting systems are being developed to deliver the required information. 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 company.

### Materiality

The VIS publishes sustainability information completely with materiality analysis that enables its stakeholders to make informed judgments about the company'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 Corporation is developed and continually provides the opportunity to further enhance the VIS's responsiveness to stakeholder concerns. In our professional opinion the report covers the VIS's responsiveness issues.

### Performance information

Based on our work described in this statement, specified sustainability performance information such as GRI G4 indicators disclosed in this report, VIS and BSI have agreed upon to include in the scope. In our view, the data and information contained within 2017 VIS CSR Report are reliable by means of vouching, re-tracking, re-computing and confirmation.

### GRI-reporting

VIS provided us with their self declaration of 'in accordance' with the G4 sustainability reporting guidelines: the Core option (at least one Indicator related to each identified material Aspect). Based on our review, we confirm that social responsibility and sustainable development performance indicators with reference to the GRI Index are reported, partially reported or omitted. In our professional opinion the self declaration covers the VIS's social and sustainability issues.

### Assurance level

The high level assurance provided is in accordance with AA1000 Assurance Standard (2008) 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 Engineering sector, and trained in a range of sustainability, environmental and social standards including AA1000 AS, ISO14001, OHSAS18001, ISO14064 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  
2018-06-01

**bsi.**



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