



# 2020

Vanguard International Semiconductor Corporation  
Sustainability Report



# Content

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## Letter from Chairman

### Pursuing Corporate Growth through Sustainable Thinking

In 2020, “Environment, Social, Governance” (ESG) became a highly concerned topic in the world. First, regulations for the mitigation of climate change and actions of carbon reduction continued to be implemented in all countries, and enterprises and countries proposed “Zero Net” or “Carbon Neutral” climate actions and visions, working together towards the shared goal of climate change mitigation. Second, the COVID-19 pandemic that broke out in late 2019 continues to spread globally today. The pandemic has forced us to reflect on existing ways and adapt to new models. Facing the uncertainties, “sustainability” has become a value equally important as “growth”. Regardless of regions, countries, or individuals, as we pursue growth, we must also embrace sustainable thinking to achieve long-term sustainable gains.

In 2020, VIS persistently performed corporate social responsibility with an equal emphasis on both growth and sustainability.



In terms of corporate growth, VIS achieved record highs in both consolidated revenue and profit despite the global outbreak of the COVID-19 pandemic and the ongoing trade war between China and the U.S. The annual consolidated revenue reached NT\$33.131 billion, an increase of approximately 17% compared to the year before. Net income after tax was approximately NT\$6.306 billion, and earning per share was NT\$3.81, an increase of approximately 8% compared to the previous year. This shows that the added capacity from the acquisition of the Singapore fab in 2019 has already brought substantial benefits to the company's profit, supporting VIS' continued growth.

With the company achieving growth, VIS has also structurally increased the salaries of all domestic and foreign employees by 10% starting from January 1, 2021, while regular annual salary adjustment and year-end bonus, holiday bonuses, and cash bonus remain the same.

In terms of corporate sustainability, we continued to follow the “Corporate Governance 3.0 – Sustainable Development Roadmap” promoted by FSC and strived for UN SDGs; VIS comprehensively examined the company's policy, organization, and various working objectives, and updated the company's corporate sustainability policy, including:

- 1.** Renamed “Corporate Social Responsibility Policy” to “Corporate Sustainability Policy”: Through sustainable thinking, VIS updated its policy to follow to international trends and practical operational needs.
- 2.** Renamed “Corporate Social Responsibility Committee” to “Corporate Sustainability Committee”: Included innovation-related R&D and intelligent management units in the committee to focus more on the promotion of ESG.
- 3.** Newly added 63 short-, mid-, and long-term sustainability goals of ESG topics: In addition to formulating management guidelines based on the 12 major CSR topics identified through stakeholder survey, VIS also proactively set short-, mid-, and long-term goals of 63 ESG topics by 2022 and 2025, and after 2025, as the guidance of its implementation of corporate sustainability.
- 4.** Enhanced international disclosure of corporate sustainability: VIS has participated in the Carbon Disclosure Project (CDP) in seven consecutive years, and earned A- rating two years in a row. In 2020, VIS prepared to participate in 2021 Dow Jones Sustainability Index (DJSI) evaluation for more complete information disclosure to all stakeholders in the world.

Moreover, VIS has also achieved the following results in respective aspects of ESG in 2020:

In the aspect of corporate governance, VIS ranked in the top 5% and received the highest honor in the Corporate Governance Evaluation of TWSE- and TPEX- Listed Companies in the sixth consecutive year. Also, in compliance with corporate governance principles, VIS

established the Risk Management Committee in 2020, setting risk management duties and responsibilities, establishing risk management culture, conducting risk identification, and regularly reporting to the Audit Committee and Board of Directors' Meeting on risk management policy and procedures. The committee has also defined emerging risks of the company over the next two to three years that resulted from Taiwan's renewable energy development policy and Singapore's plan to adjust carbon tax in 2030. Moreover, at the onset of the outbreak of COVID-19 pandemic, VIS immediately established Pandemic Prevention Committee; in the different stages of the pandemic, the committee has effectively integrated the company's resources to rapidly execute and promote measures of pandemic prevention, lowering the risk of infection within the company.

In the aspect of environmental protection, VIS strived to implement environmental protection measures to mitigate the adverse impacts of production and operation on community, environment, and climate change, while continually investing in R&D of eco-friendly technologies. In 2019, VIS introduced the framework of the Task Force on Climate-related Financial Disclosures Recommendation (TCFD) devised by the Financial Stability Board and identified eight risks of the company brought by climate change. In 2020, VIS further adopted three climate scenarios of NDC, SBT1 and SBT2, to conduct financial impact assessment and analysis of these eight climate risks. Targeting the use of resources of water, electricity, gas, and wastes, VIS also formulated short-, mid-, and long-term sustainability goals, and included the calculations data of the Singapore fab that joined the company in 2020. As for the use of renewable energy, VIS planned the installation of solar PV systems from 2021 to 2022; the capacity of renewable energy was projected to reach 500 kW in 2025, saving approximately 550,000 kWh every year, and VIS would continue to purchase clean and pollution-free green energy in the future.

In terms of corporate commitment, VIS comprehensively reexamined the existing internal regulations of the company and amended the contents of "Ethical Corporate Management Best Practice Principles," "Ethics and Business Conduct," "Regulations Governing Sexual Harassment Prevention," "Human Rights Policy," and "Personal Data Protection Policy," to build a friendlier workplace and protect employees' rights; VIS also expanded the scope of Ethical Corporate Management Best Practice Principles to all subsidiaries, and rewrote its Human Rights Policy, which was combined with the human rights risk evaluation procedure to ensure the company's core values of human rights and protect the company's operation from human rights risks. Also, VIS promoted more comprehensive Employee Assistance Program (EAP), where professionals provided employees one-on-one health, mental, management, wealth management, and legal consultations, where full protection of their privacy was ensured.

Moreover, VIS required all suppliers to comply with the company's "Sustainability Green Supply Chain Policy," and established the supply chain sustainability management cycle, in aim to build green supply chain.

In the aspect of social engagement, VIS encouraged all employees to exert profession and to passionately join the company to become the elevating force of the society. VIS also called for the supply

chain to join the efforts, expanding the influences. In 2020, VIS adopted the community investment evaluation mechanism of London Benchmark Group (LBG) to quantify the company's social engagement and the generated benefits as indicators of its influences, and defined five themes of social engagement: Care for the Disadvantaged, Care for Senior Citizens Living Alone, Support for Diverse Education, Sustainability Initiatives, and Environmental Education. VIS calculated commercial and social benefits of each theme, based on which the company's allocation of resources was reviewed to avoid repetition and waste.

In 2020, VIS reached new highs in terms of donated amount, number of volunteers and volunteering hours. VIS invited nearly 400 children from halfway houses and the Garden of Hope Foundations' shelters north of Miaoli, which were taken care of by VIS volunteers, to the company's Family Day event. Moreover, in addition to the usual sponsorship for the Chinese New Year's Eve dinner with senior citizens living alone, VIS's Year-End Charity Donation also targeted three additional social welfare groups related to "rare disorders," to provide children with rare disorders emergency aid, rehabilitation aid, and scholarship, encouraging these special angels to bravely pursue their dreams for a brighter future and experience wonderful life. As for donation of pandemic prevention supplies, VIS responded to the initiative of TSMC Charity Foundation and donated 31 PAPRs used at VIS fabs to Taiwan Association of Medical Technologists, Chiayi Catholic St. Martin Hospital, and Taitung Mackay Memorial Hospital, boosting the morale of medical professionals fighting on the first line of defense, and offering them safer protective equipment to lower the risk of infection.

Moreover, VIS' effort in building environmental education sites earned the company the recognitions of EPA's "National Environmental Education Award – Excellence Award" and "ROC Enterprises Environmental Protection Award – Gold Award." The Cherry Blossom Park adopted by VIS, after over a year of restoration, became the restoration site of fireflies. VIS plans to release 2,500 to 3,000 firefly larva annually into the wild from 2020 to 2023. We look forward for not only for these fireflies released into the wild to become the ecological indicator of environmental purification, but also to build Cherry Blossom Park with trees, creek, and fireflies, into a water-accessible urban park where people can admire fireflies.

In 2020, the COVID-19 pandemic spread around the world, and today, we still have to live with it and face all the changes resulted from our battle with the pandemic. During this period of risks and uncertainties, it is every enterprise's responsibility and challenge to continually pursue growth and persistently take sustainable actions. Together with the members of the management team, we will do our best to safeguard the company's interests in the face of changing trends, and cautiously explore new opportunities; meanwhile, we will continue to invest resources to create value for all stakeholders, so we can march together toward a future of co-prosperity and common good.

Chairman  
Leuh Fang



## Awards and Recognition

For the second year in a row, VIS received a score of A- among 9,617 global companies participating in the 2020 Carbon Disclosure Project (CDP). VIS also won EPA's "National Environmental Education Award – Excellence Award" and "ROC Enterprises Environmental Protection Award – Gold Award," which recognized VIS' disclosure and concrete actions of climate change and environmental protection. Chairman Leuh Fang also earned fellowship of the Chinese Society for Management of Technology for his contributions to the semiconductor industry. Moreover, VIS won the recognition of the following awards and certifications in the areas of corporate governance, CSR, occupational safety, energy conservation, and taxation:



Chairman Leuh Fang (R) received the 21st Fellowship of Chinese Society for Management of Technology



1

## About VIS

Annual Consolidated  
Revenue NT\$

**33.13** Billion

Earnings Per Share  
NT\$

**3.81**

Return on Equity

**21.34%**



## 1.1 Company Profile

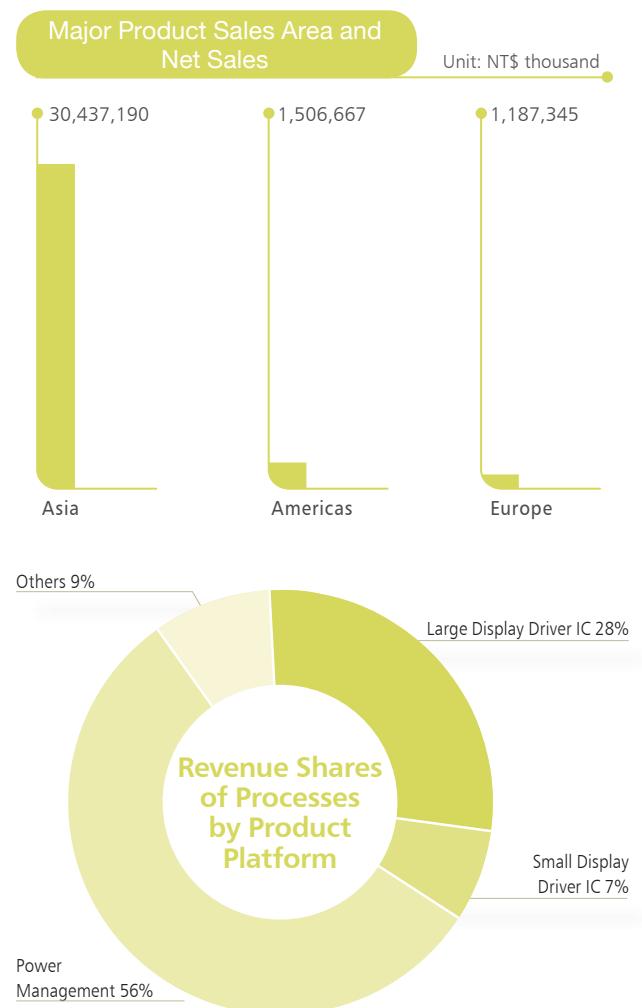
As a leading specialty IC foundry service provider, Vanguard International Semiconductor Corporation (VIS) upholds “customer service-oriented” business philosophy to offer its customers cost-effective solutions and high value-added services. VIS headquarters is located in Hsinchu Science Park, Taiwan. VIS currently has four 8-inch fabs, among which three are located in Taiwan and one in Singapore. As of 2020, VIS has 5,929 employees. To better serve its worldwide customers, VIS has established sales and service offices in worldwide main IC clusters in addition to Headquarters in Taiwan and subsidiaries in USA and Singapore.



VIS 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.

In 2020, with the addition of the Singapore Fab, as well as the collective effort of its employees, VIS achieved record high in both consolidated revenue and profit despite the global outbreak of the COVID-19 pandemic and the ongoing trade war between China and the U.S. The annual consolidated revenue reached NT\$33.13 billion, an increase of approximately 17% compared to the year before. Net income was approximately NT\$6.31 billion, and earning per share was NT\$3.81, an increase of approximately 8% compared to the previous year.

The added capacity of the Singapore Fab has already brought substantial benefits to the company's profit. We believe, operational benefits brought by continued expansion of capacity and smart transition, and the company's competitiveness in applications such as power management, display, car electronics, fingerprint sensor, IoT, and MEMS, will become our greatest strengths to continually create values for our customers. Looking forward, VIS will continue to elevate the overall operation, and join forces with employees, shareholders/investors, customers, suppliers and partners to create value. With a more forward-looking and prudent approach, VIS ensures sustainability of all stakeholders' values and cautiously explores new horizons in the turbulent global competition.



**17%**  
Increase in Consolidated Revenue than the Previous Year

**6.31**  
NT\$ Billion in 2020 Net Income

**8%**  
Increase in Earning per Share than the Previous Year

Company Name: Vanguard International Semiconductor Corporation

Stock Symbol: 5347 Date of Establishment: December 5, 1994

Chairman: Leuh Fang Total Number of Employees: 5,929

President: Leuh Fang

Independent Director: Chintay Shih, Benson W.C. Liu, Kenneth Kin

Capital: NT\$16.39 Billion Total Asset: NT\$43.67 Billion

Net Income: NT\$6.31 Billion

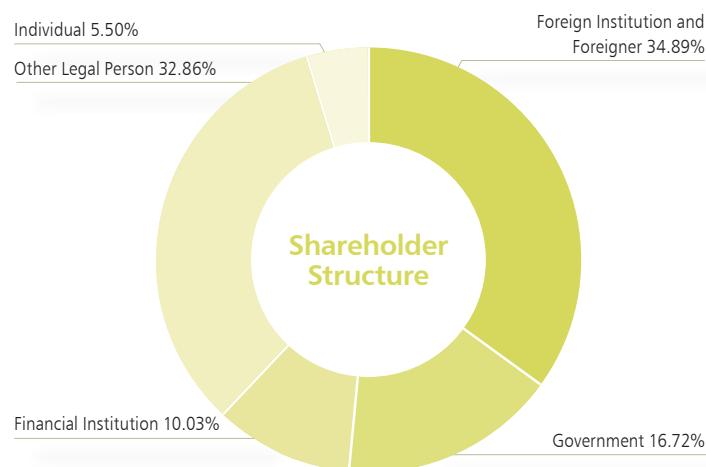
Company Telephone No.: +886-3-5770355

Company Address: No. 123, Park Ave. 3, Hsinchu Science Park, Hsinchu

Company Website: [www.vis.com.tw](http://www.vis.com.tw)

## Shareholder Structure

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



2020 Annual Consolidated Revenue  
33.13 Billion

EPS  
3.81

ROE  
21.34%

2020 Average Monthly Capacity  
240 Thousand 8-inch wafers



## 1.2 Financial Performance

### Sustainability Goals

#### Short-Term (2022)

- ROE at least 20%
- CAGR of operating income to be between 5% - 10%

#### Mid-Term (2025)

- ROE at least 20%
- CAGR of operating income to be between 5% - 10%

#### Long-Term (2025~)

- ROE at least 20%
- CAGR of operating income to be between 5% - 10%



With the added capacity of the Singapore Fab, VIS annual revenue in 2020 reached NT\$33.13 billion, an increase of approximately 17% compared to previous year's revenue of NT\$28.29 billion. The company's average gross profit for the year was approximately 34.0%; net income was NT\$6.31 billion, and EPS was NT\$3.81. The return on equity was 21.34%. VIS contributed as many as NT\$1.31 billion in tax.

### 2018-2020 Consolidated Financial Information

Item	Basic Elements	Unit: NT\$ million		
		2018	2019	2020
Direct Economic Value Generated (A)	Revenues (Note 1)	29,246	28,735	33,282
Distributed Economic Value (B)	Operating Cost (Note 2)	14,036	13,705	16,310
	Employee Wages and Benefits (Note 3)	7,710	7,631	9,354
	Payment to Shareholders (Note 4)	4,917	5,245	5,245
	Payment to Government (Note 5)	1,327	1,532	1,308
	Community Investment (Note 6)	6	6	5
Economic Value Retained (A-B)		1,250	616	1,060

Note 1: Revenues include net sales revenue and net nonoperating income and expense.

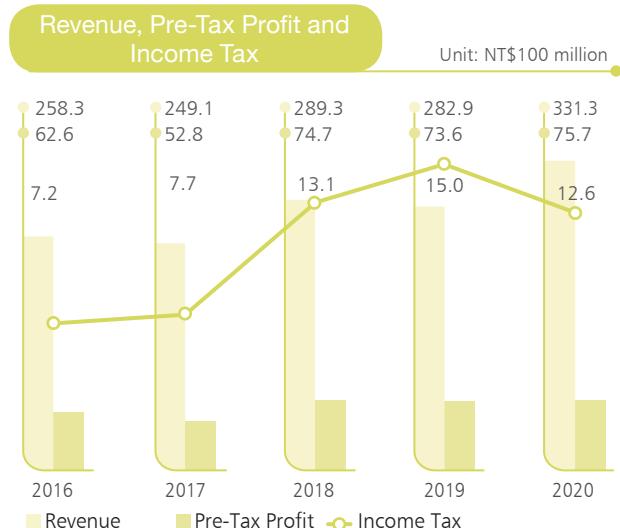
Note 2: Operating costs include cost of goods sold and operating expenses, and exclude employee wages and benefits, property tax, stamp tax, vehicle tax, other taxes and community investment.

Note 3: Includes bonus, pension, and labor and health insurances.

Note 4: Cash dividends of the year.

Note 5: Includes income tax, property tax, stamp tax, vehicle tax, and other taxes.

Note 6: Charity expenses donated to government agencies, social welfare groups, and neighborhood charity.



The profitability of VIS relies on each and every employee. In 2020, the revenue per employee was NT\$5.60 million, and profit per employee was NT\$1.07 million. VIS is experiencing steady growth, and since 2005, it has distributed cash dividends every year. Current five years distributed dividends as follows:

Item	2016	2017	2018	2019	2020 (Note)
Distributed dividends (NT\$ 100 million)	49.2	49.2	52.4	52.4	57.4
Amount (NT\$)	3.0	3.0	3.2	3.2	3.5

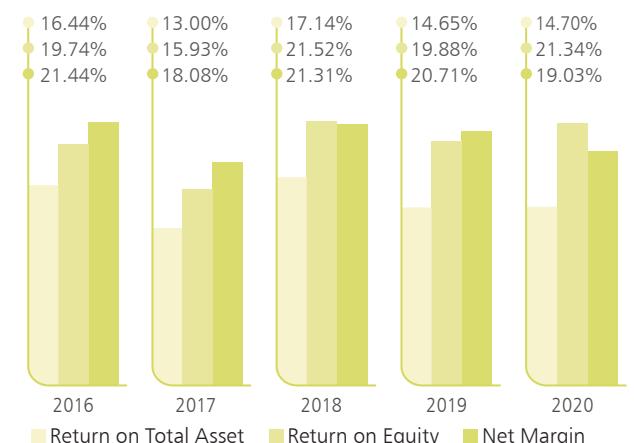
Note: Distributed dividends of 2020 has yet been calculated. The matter will be resolved in the shareholders' meeting in 2021.

In addition to distributing cash dividends to shareholders, VIS will also invest capital expenditures and R&D expense according to the company's strategy. In 2020, VIS acquired Singapore Fab for capacity expansion, and actively continued to invest in R&D, advanced processes and device technology to ensure our competitiveness in global market.

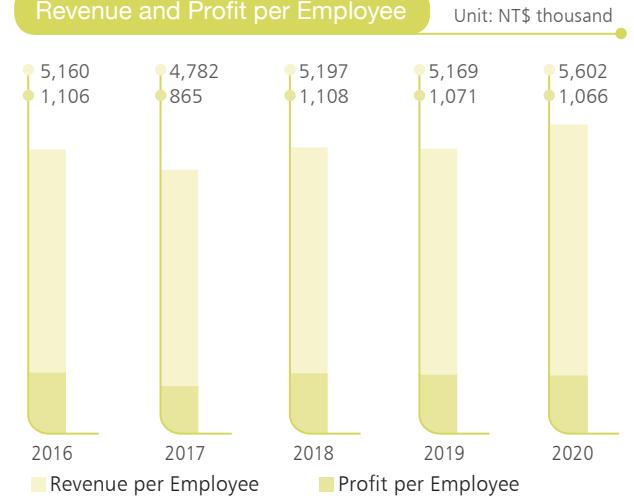
### 1.3 Tax Policy

VIS implement the conservative tax governance by complying with tax laws thoroughly and aiming to create corporate value and control tax risk. VIS does not avoid tax illegally without commercial substance, and endeavor to fulfill the social responsibility and the obligations of corporate citizen. VIS' Tax Governance Policy has been implemented with approval of the Chairman.

Company Profitability



Revenue and Profit per Employee



### VIS' Tax Governance Policy

1. Act all times in accordance with tax laws and regulation and file tax on time in the jurisdictions we operate.
2. Inter-company transactions are based on arm's-length principle, in compliance with internationally accepted transfer pricing guidance published by OECD. VIS do not use transfer pricing arrangement for manipulating profit.
3. Consider tax impact as part of major business decision and do not undertake transaction for avoidance tax without commercial substance.
4. Investment structures are in line with operation consideration. VIS do not engage in transactions or use tax havens for purpose of tax avoidance, and not undertake unusual tax structures to transfer value to low tax jurisdictions.
5. Only use tax incentives offered by governments, and not use any incentives against the spirit of law.
6. Develop honest and mutually respectful relationship with tax authorities, involve in the tax reform and provide the suggestions from practical viewpoint.
7. Tax related information is disclosed regularly to interested parties in public financial reports, annual reports and corporate sustainability reports.
8. Strengthen tax professional skills, consult with tax advisors, review and assess the implications of changes in applicable tax laws, and formulate appropriate responses.

The main operation sites of VIS are Taiwan and Singapore. VIS complies and fulfill the tax obligation with tax laws and regulation in the jurisdictions we operate. VIS has proactively complied with the government's tax regulations and promotion of tax administration, and filed and paid tax honestly, earning the recognition of the National Taxation Bureau, ROC, and winning the Excellent Business Person Award from the Ministry of Finance in 2014 and 2020, respectively. Any amendments of taxation laws and regulations will affect the company's effective tax rate and operational performances; therefore, VIS continues to keep a close eye on latest updates of relative tax laws and regulations and analyze potential effects on taxation, formulating response measures, while also conducting internal trainings to ensure all employees are equipped with necessary taxation skills and knowledge. We also have external tax consultants to provide tax advice to reduce potential tax risks. VIS's Primary activities, financial and tax information for each tax jurisdiction are list as following:

1. The names of the main tax resident entities, primary activities and number of employees for each tax jurisdiction in which we operate

Item	Taiwan	Singapore
Company Name	Vanguard International Semiconductor Corporation	Vanguard International Semiconductor Singapore Pte. Ltd.
Primary activities	Manufacturing, selling, packaging, testing and computer-aided design of integrated circuits and other semiconductor devices and the manufacturing of masks	Manufacturing, selling and packaging
Y2020 Average Number of Employees	5,196	710

2. Y2020 Revenue, Income before income tax, Income tax and Income Tax Paid for each tax jurisdiction in which we operate

Item	Amount	Taiwan	Singapore (Note)	Other
Revenue	331	92%	8%	0%
Income before income tax	76	118%	-21%	3%
Income tax	16	100%	0%	0%
Income Tax Paid	13	100%	0%	0%

Note: VIS acquired Globalfoundries' Fab 3E, an 8-in wafer fab, in Singapore in 2019. The transaction was completed at the end of 2019, and the fab started its operation on January 1, 2020. In the early stage of the operation, the expenses are high and capacity utilization remains to be enhanced, resulting in operation loss.

3. Consolidated tax information

Item	2019	2020	Two Year Average Rate
Income before income tax	74	76	
Income taxes	15	13	
Cumulative acceptable adjustments	0	0	
Effective tax rate	20%	17%	18%
Income tax paid	17	13	
Cash tax rate	23%	17%	20%

VIS' effective tax rate in 2020 was 17% lower than 20% in 2019 and the Cash tax rate in 2020 was 17% lower than the R.O.C. statutory corporate income tax rate of 20%, due primarily to tax credit for research and development expenditures according to regulations under the R.O.C. Statute for Upgrading Industries and the Statute for Industrial Innovation.

Tax payments made to the government by VIS primarily encompasses corporate income tax, property tax and stamp tax. In 2020, total tax amounted to NT\$1.3 billion; and actual amount paid to the government was NT\$1.4 billion.

Item	2016	2017	2018	2019	2020
Tax Expenses (Note)	7	8	13	15	13

Note: Tax expenses include income tax, property tax, stamp tax, vehicle tax and other taxes.

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## Sustainable Governance

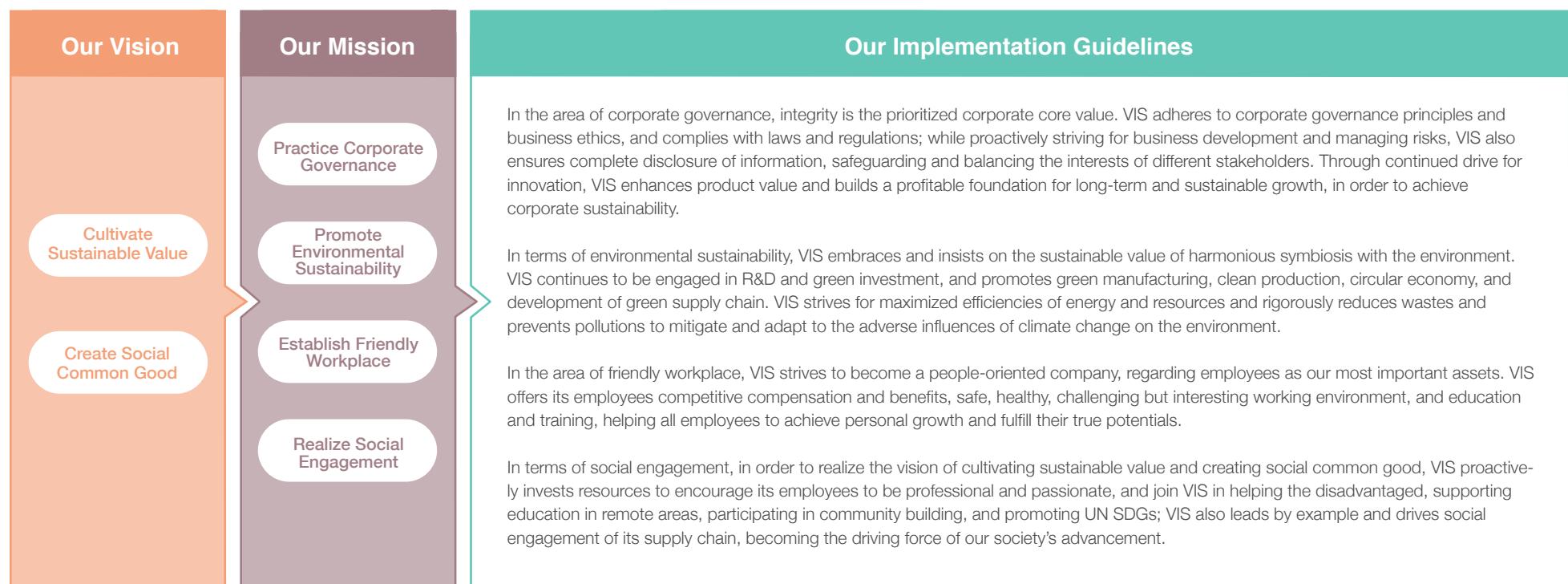
Respond to  
**12**  
UN SDGs

**13**  
Major Topics  
Concerned by  
Stakeholders



## 2.1 VIS Corporate Sustainability Policy

Vanguard International Semiconductor Corporation (VIS) is a leading specialty IC foundry service provider in the world. Providing customers the most competitive and comprehensive solutions and high value-added services are the core value of VIS, as well as the foundation of the company's sustainable development. In pursuit of long-term and stable profitability, VIS responds rapidly to market changes, and works closely with customers to create win-win situation. Also, while safeguarding shareholders' interests, VIS grows together with stakeholders, including employees, suppliers, community and society, and follows the principles of sustainability to thrive with the environment and society.



## 2.2 Corporate Sustainability Management

### Corporate Sustainability Committee

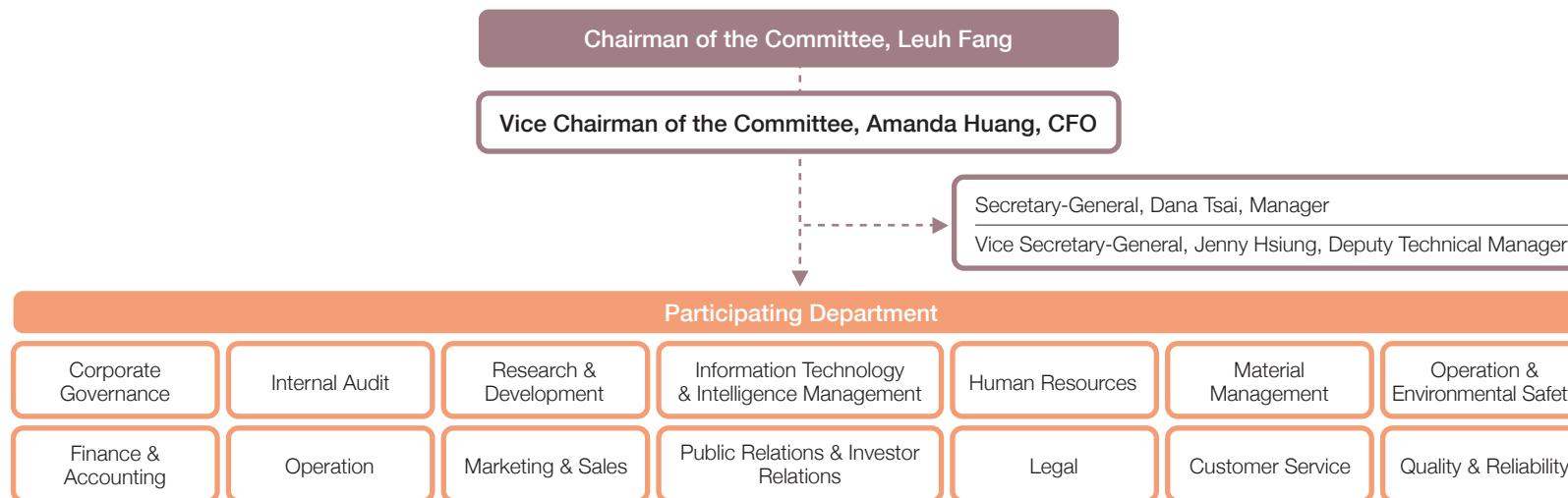
To implement corporate social responsibility, and facilitate sustainable development of ESG (environment, society, economy), VIS formulated the company's "Corporate Social Responsibility Policy" in 2012 and founded "Corporate Social Responsibility Committee (CSR Committee)" to build the CRS management system of VIS. In 2020, VIS proactively participated in the "Corporate Governance 3.0 – Sustainable Development Roadmap" promoted by FSC, amending related policy articles to change VIS' Corporate Social Responsibility Policy and Corporate Social Responsibility Committee to "Corporate Sustainability Policy" and "Corporate Sustainability Committee" respectively to follow international trends and respond to practical operational needs.

After the name change, the committee's tasks will focus more on the implementation on ESG, keeping in line with international trends; however, its organizational structure remains the same, where VIS Chairman serves as the Chairperson and CFO as the Vice Chair of the committee, leading

the company to formulate corporate sustainability goals and development guidelines, and regularly review the execution progress of various tasks, reporting to the Board of Directors every six months. VIS Corporate Sustainability Committee also consists of representatives of various divisions of the company, including Corporate Governance, Public Relations & Investor Relations, Human Resources, Legal, Internal Audit, Research & Development, Information Technology & Intelligence Management, Operation, Quality & Reliability, Operation & Environmental Safety, Finance & Accounting, Customer Service, and Marketing & Sales. Each representative plans and implements different corporate sustainability missions based on respective responsibilities.

VIS regularly convenes Corporate Sustainability Committee Meeting every quarter, where each division representative reports on respective progress and future plan. All the committee members brainstorm together to jointly review implementation outcomes and make improvements, continually driving VIS' sustainable development in the areas of economy, society, and environment.

## CSR Committee Organization Chart



## Highlights of Sustainability Topics Reported to the Board of Directors' Meeting

### Participating in the DJSI Evaluation for the First Time

In October 2020, VIS prepared for the 2021 Dow Jones Sustainability Index (DJSI) evaluation for the first time. Led by the members of the Corporate Sustainability Committee, employees from related divisions were invited to jointly collect and compile information in response to the questions of DJSI, and then hold discussion meetings across different organizations targeting the various topics of ESG. Through continued compilation and analysis of information, the process of the DJSI evaluation disclosed VIS' various sustainability actions more clearly and logically, and offered VIS future ESG development direction to keep up with international trends.

### Reexamining Charity Donation Policy and Increased Amount of Annual Donation

Starting from 2018, VIS has thematically expanded its connection with social welfare groups in three consecutive years through the annual year-end charity donation. From "foundations caring for senior citizens living alone" in 2018, "midway houses" in 2019, to "rare disease related foundations" in 2020, VIS has established relations with 9 social welfare organizations, where the charity donation of VIS employees was used exclusively for thematic projects related to these foundations, bridging the employees and the social welfare organizations and ultimately developing long-term friendships with the groups.

Since the scale of social engagement has been gradually established, a director suggested to review VIS' charity donation policy at the Q4 Board of Directors' Meeting, aiming to increase the annual amount of donation to further expand social engagement of VIS and its employees.

### Building Cherry Blossom Park into a Natural Site of Environmental Education

Since 2019, VIS has adopted Cherry Blossom Park near VIS Fab2, planting trees and improving the section of the Ke-Tzu-Hu Creek surrounding the park. With water-accessible environment established at Ke-Tzu-Hu Creek, VIS launched a 1.5-year firefly restoration program in 2020. In addition to building the ecosystem at Cherry Blossom Park, VIS has also adopted the old trees at Cherry Blossom Park and Sunlight Park and set up signs, becoming the first private enterprise in Hsinchu to proactively apply for adoption of old trees. Tree-planting, clean water source, and ecological restoration, are the three phases of VIS' eco-friendly program; in the next phase, VIS plans to open up the parks to the public as natural site of environmental education after successfully building the ecosystem.

## Sustainability Outcomes and Achievements



### Corporate Governance

- Established Corporate Risk Management Committee, and submitted the "Corporate Risk Management Policy and Procedures" to the Board of Directors for approval, which was used to formulate the procedures of the committee's organization and operation.
- Updated company website's framework and content, and reestablished corporate sustainability website to improve information disclosure to stakeholders.



### Environmental Sustainability

- Evaluated the company's renewable energy utilization ratio and timetable.
- Collected sustainability self-evaluation questionnaires from 326 first-tier suppliers with transaction amounts over NT\$2 million in 2020; completed sustainability audit for 84 first-tier suppliers that accounted for over 80% of the total procurement amount.



### Friendly Workplace

- Offered employees more comprehensive EAP, totaling 117 cases of health, mental, management, wealth management, and legal consultations, where professionals provided employees one-on-one assistance. All consultation services were subjected to the protection of privacy policy.



### Social Engagement

- Expanded scale of volunteering, and systematically calculated investment in social engagement.
- Sponsored IC Broadcasting's "Focus on Taiwan" program, advocating 11 UN SDG topics.

## 2.3 Materiality Analysis and Stakeholder Communication

### 2.3.1 Materiality Analysis

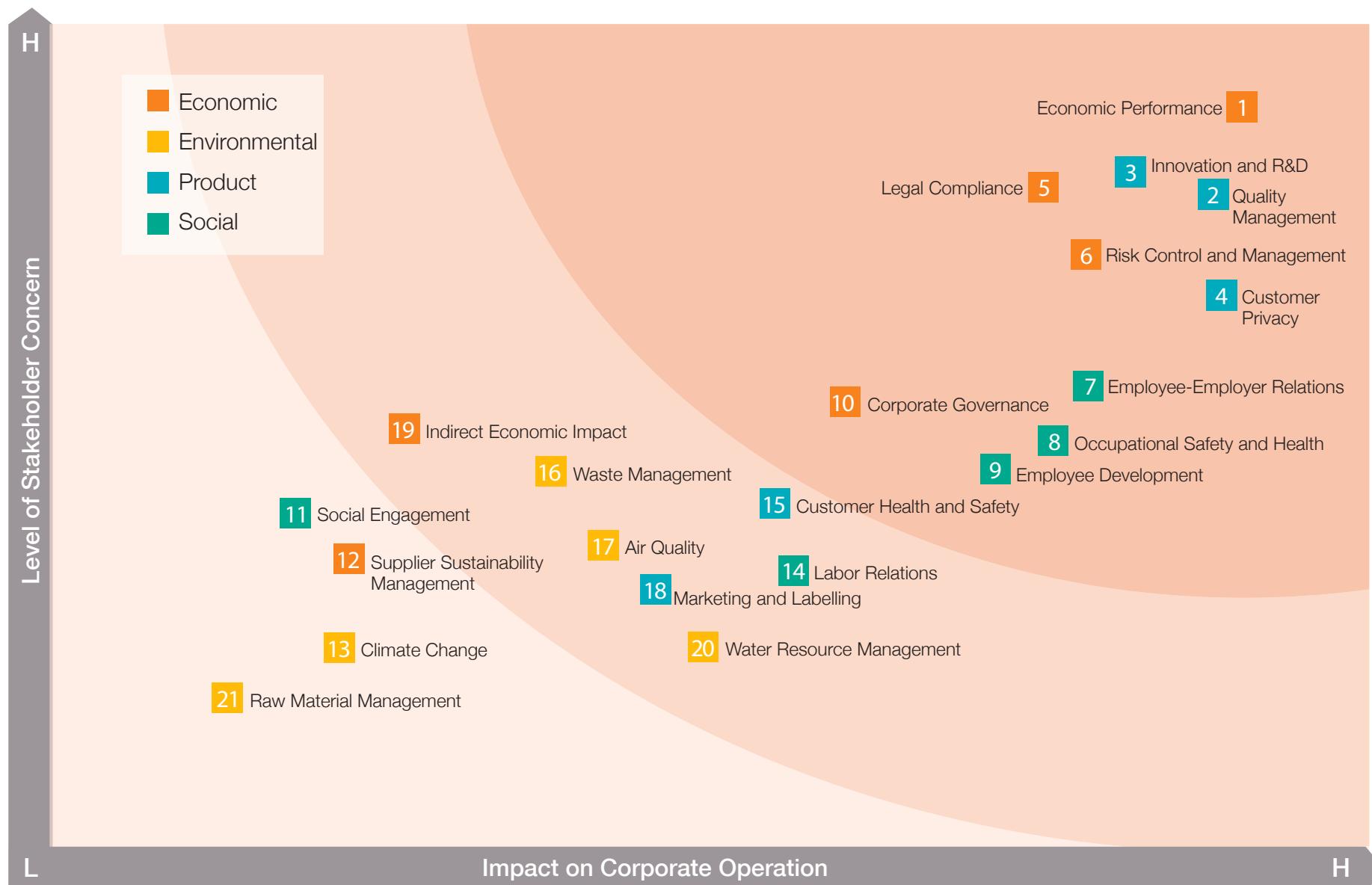
#### Major Topics and Stakeholder Communication

In 2020, following Global Reporting Initiative (GRI) standards and AA1000 Stakeholders Engagement Standards (SES), and referencing other major semiconductor companies' major topics, the CSR Committee discussed and determined 21 Sustainability Topics. A questionnaire was compiled and then sent to all stakeholders, including investors/shareholders, employees, customers, suppliers/partners, media, public agencies, and society/communities. The top 13 topics were chosen as major corporate sustainability topics of 2020.

## Major Topics Analysis

Phase 1: Identification		Phase 2: Collection and Analysis of Sustainability Topics			Phase 3: Confirmation
Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
					
Selection of Target of Communication	Collect Sustainability Topics	Survey Level of Concern	Analysis Impact on Operations	Matrix of Major Topics	Review and Disclose Content
7 Categories of Stakeholders	21 Sustainability Topics	299 Questionnaires	92 Executives	13 Topics	14 Standards
VIS values the opinions of all stakeholders. According to frequency of communication, and levels of dependency and influence, VIS Corporate Sustainability Committee has identified 7 key targets of communication, including employees, suppliers (partners), investors, government agencies, customers, media, and community/society.	Following the topics, product uniqueness, concerned issues of domestic and overseas industries, and global sustainability trends, in the GRI Standards, VIS focused on the company's own operations and business, and identified 21 sustainable topics.	Collect stakeholders' concrete responses through distribution of questionnaires, collecting a total of 299 questionnaires.	VIS CSR Committee invited all executives to participate; through questionnaires, we investigated the impacts on operations in four aspects: economics, products, environment, and society.	Calculate the weights of different stakeholders using the questionnaires of executives for the adjustment of the scores of stakeholder responses, produce matrix of major topics, and conduct meticulous discussion to select 13 topics.	Compare the 13 major topics with 14 GRI Standards, and disclose management guidelines and report requirements based on related regulations.

## Major Topics Matrix



We conducted the survey on all stakeholders using online and offline questionnaires. A total of 299 questionnaires were collected, among which 260 were valid; these included 92 questionnaires collected from executives, among which 91 were valid. To properly listen to employees' opinions, the questionnaires were distributed to employees of different positions, departments, and nationalities, in order to achieve sample representativeness, fully reflecting the thoughts across all levels.

Weight	Stakeholder	Collected Questionnaires	Valid Questionnaires
13.79%	Investors/Shareholders	18	16
17.56%	Employees	101	83
17.75%	Customers	25	20
15.51%	Suppliers/Partners	33	25
13.32%	Media	12	11
11.49%	Government Agencies	5	5
10.57%	Society/Communities	13	9
Total		299	260



Compared to the results of last year's major topics analysis, the topics concerned by internal and external stakeholders this year were slightly different. Therefore, VIS decided to include "climate change," "social engagement," and "supplier sustainability management" in the major topics during an internal meeting, while also adjusting the order of some major topics. To highlight the topics it is highly concerned with and proactively developing, VIS has set Innovation and R&D, Climate Change, and Occupational Safety and Health, as the top three major topics, and ranked the other major topics according to their respective questionnaire scores.

2019	Economic Performance	Environmental Assessment	Legal Compliance for	GHG Emissions	Risk Management	Technological Innovation	Quality Management	Occupational Health and Safety	Corporate Governance	Employee-Employer Relations	Social Participation	Legal Compliance for Products	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2020	Innovation and R&D	Climate Change	Occupational Safety and Health	Economic Performance	Quality Management	Customer Privacy	Legal Compliance	Risk Control and Management	Employee-Employer Relations	Employee Development	Corporate Governance	Social Engagement	Supplier Sustainability Management

## Major Topics and VIS Value Chain

Aspect	Major Topics	Influences on Value Chain			Corresponding GRI Standards	Annual Achievements (Chapter/Section)
		Procurement	Manufacturing	Customer Utilization		
Economic	Economic Performance	●	●		Economic Performance (201)	1.2 Financial Performance 4.1 Climate Change and Energy Management
	Legal Compliance	●	●		Environmental Compliance (307), Socioeconomic Compliance (419)	3.3 Ethics and Transparency
	Risk Control and Management	●	●		Set by VIS	3.2 Risk Management
	Corporate Governance	●	●		Set by VIS	3.1 Corporate Governance
	Supplier Sustainability Management	●	●	●	Procurement Practices (204)	5. Responsible Supply Chain
Product	Innovation and R&D	●	●	●	Set by VIS	3.4 Innovation Management
	Quality Management	●	●	●	Set by VIS	3.5 Quality and Customer Service
	Customer Privacy	●	●	●	Customer Privacy (418)	3.5 Quality and Customer Service
Environmental	Climate Change	●	●	●	Energy (302), Emissions (305)	4.1 Climate Change and Energy Management
Social	Occupational Health and Safety	●	●		Occupational Health and Safety (403)	6.4 Occupational Safety and Health
	Employee-Employer Relations	●	●		Employment (401)	6.1 Talent Recruitment and Retention
	Employee Development	●	●		Training and Education (404)	6.2 Talent Development
	Social Engagement		●	●	Set by VIS	7. Common Good

## 2.3.2 Stakeholder Communication



2020

100%

Customer Satisfaction  
Survey coverage rate

92.8%

Overall customer  
satisfaction at 92.8%,  
achieving the target of  
customer satisfaction  
over 90%

### Significance to VIS

Customers are our partners, and they are VIS' top priority. VIS continues to uphold the principle of "customers are partners". We regard their competitiveness as our competitiveness, and their success as our success; this position is key to our future growth.

### Communication Method/Frequency

- Annual Customer Satisfaction Survey/Annually
- Quarterly Business Review/Quarterly
- Customer Visit/Non-Periodic
- VIS-Online Customer Communication System/Non-Periodic

### Issues of Concern

- Economic Performance
- Customer Privacy
- Quality Management
- Innovation and R&D
- Legal Compliance

### Details of Concern

- Domestic and overseas political and economic situations and developments and regulatory changes
- Company technological development agenda and plan
- Company capacity plan and production information
- Smart manufacturing and intelligent management capacity

### VIS Responses

- 100% Customer Satisfaction Survey coverage rate
- Overall customer satisfaction at 92.8%, achieving the target of customer satisfaction over 90%
- Introduced tools like RPA, big data intelligence, and AI, to create highly automated decision-making semiconductor production and manufacturing environment, optimizing speed of manufacturing, productivity, and quality



Appreciate the partnership, commitment and support from Vanguard on improving our quality, and to adopt Vishay automotive quality mindset and requirement by TAQ (Think Automotive Quality) workshop.

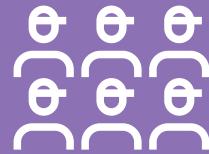
**Stephen Lazuardi**

*Vice President of Quality, Vishay Intertechnology*

VIS has always maintained close partnership with Sitronix! Regardless of R&D of new processes or cooperation for the simplification of multiple processes, we have worked hard together to achieve concrete results! This tight partnership is more than evident during the recent shortage of foundry capacity; VIS has provided necessary engineering manpower to help Sitronix, so its products can be quickly mass-produced, and to a large extent, relieve Sitronix's pressure of delivery! In addition to thanking VIS for its support, we also believe that our partnership will continue to blossom!

**Ray Wu**

*Senior Division Chief, Product Engineering,  
Sitronix Technology Corp.*



## Employees

2020

96%

Key talent retention  
rate of 96%

146

Received 146  
employee feedbacks

### Significance to VIS

Employees are VIS' most important assets. Through various policies and management guidelines, VIS offers open environment of two-way communication to allow talents to continually develop and assume their most suitable roles, further creating a highly efficient, interesting, and challenging working environment.

### Communication Method/Frequency

- Code of Conduct Training/Once a Year
- Quarterly Employee-Employer Meeting/12 Meetings a Year
- President Communication Meeting/At Least Twice a Year
- Supervisors Communication Meeting/At Least Twice a Year
- Employee Feedback Channels/Non-Periodic

### Issues of Concern

- Economic Performance
- Employee-Employer Relations
- Labor Relations
- Occupational Safety and Health
- Employee Development

### Details of Concern

- Cultivate relations with schools and expand scale of academia-industry collaboration
- Job rotation of employees and recruitment and retention of key talents
- Open and effective employee-employer communication channel
- Compliant, safe, and healthy working environment

### VIS Responses

- Cooperated with National Yang Ming Chiao-Tung University to promote AI surface-defect detection research project
- Cooperated with National Yang Ming Chiao-Tung University to promote Short-Term Wafer Start Decision-Making Optimization Project
- Created challenging and interesting working environment to achieve key talent retention rate of 96%
- Received 146 employee feedbacks, which have been dealt with adhering to the principle of highest confidentiality



I've worked at VIS around 9 years. I'm lucky be a part of RD team throughout these years to achieve future growth and maintain VIS relevance in its chosen market. With a kind of support and freedom I've from management, it is immense satisfaction to work with a team that involves in a wide range of research & development activities, publications and to finding improved solutions in response to specific problem from customers within a given time frame.

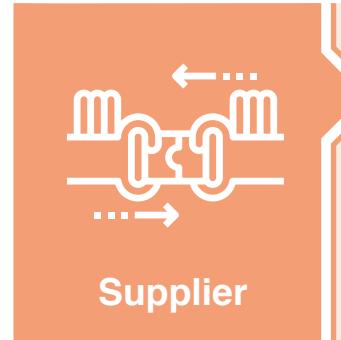
**Karuna Nidhi**

*R & D Engineer*

I have been with the company for 25 years. Looking back, VIS has planned comprehensive education and training, as well as e-learning, to help me find the right place, while also earning rich experience and connections. More importantly, VIS has given me stable and exciting life. In addition to steady income, we also enjoy quarterly bonus and cash dividends; VIS also organizes activities like family day, year-end banquet, employee trip, and staff tour, to not only provide fun experiences but also strengthens the company's unity and cohesion! Thank you, VIS!

**Chu Mei-Shun**

*Project Manager, Customer Service Division 1*

**2020****100%**

100% of first-tier suppliers signed VIS CSR Policy

**100%**

100% of suppliers signed hazardous substance affidavit and provided hazardous substances risk assessment report

**Significance to VIS**

Suppliers are VIS' important operational partners. VIS continues to work with our partners to develop new procedures, enhance quality, formulate EHS regulations, and improve code of conduct, and deepen collaborative ties, realizing sustainability and common good of the supply chain.

**Communication Method/Frequency**

- VIS CSR Policy Promotion/Annually
- Supplier Self-Evaluation Survey/Annually
- Guidance and Audit/Non-Periodic

**Issues of Concern**

- Risk Control and Management
- Legal Compliance
- Economic Performance
- Innovation and R&D
- Quality Management

**Details of Concern**

- Monitor related international regulations and trends
- Execute sustainable actions and continued improvement
- Focus on quality of raw materials
- Comply with hazardous substances policy and risk control and management
- Establish effective responsible minerals management mechanism

**VIS Responses**

- 100% of first-tier suppliers signed VIS CSR Policy
- 100% of suppliers signed hazardous substance affidavit and provided hazardous substances risk assessment report
- 100% usage of compliance minerals



Global Wafers Co., Ltd. strives for process optimization, resource recycling and reuse, and waste reduction, joining VIS to build a supply chain of sustainable development.

**Doris Hsu***Chairwoman, Global Wafers Co., Ltd*

The Earth's resources are limited, and it is everyone's responsibility to love our planet. Environmental protection and green production are two of our company's policies, and we have always strived for energy saving and carbon reduction, water resource management, and waste recycling and reduction. We look forward to join VIS and do our part for the Earth, proactively creating a win-win green supply chain, and assuming our corporate social responsibility to protect our environment and leave future generations a beautiful home.

**Sune Ching-Tzong***President, Episil-Precision Inc.*

**2020****200**

investors meetings

**18** consecutive yearsAchieved positive ROI  
for investors in 18  
consecutive years**Significance to VIS**

VIS also ensures shareholders' best interests while growing business proactively. Through offering investors transparent information of management and governance strategies and financial policy, VIS achieves the target of increasing investors' investment value.

**Communication Method/Frequency**

- Annual Meeting of Shareholders/Annually
- Board of Directors' Meeting and Investors Conference/Quarterly
- Business Revenue Announcement/Monthly
- Market Observation Post System/Updated in Real Time
- Company Website/Updated in Real Time

**Issues of Concern**

- Economic Performance
- Legal Compliance
- Risk Control and Management

**Details of Concern**

- Political and economic situations' influences on company performances
- Market competition and changes
- Financial performances
- VIS' future profitability
- Strategy for stable growth of dividend

**VIS Responses**

- Held four investors conferences
- Held nearly 200 investors meetings to proactively communicate with investors
- Achieved positive ROI for investors in 18 consecutive years



Its openness and honesty when communicating with the investment community, its continuous efforts to improve its capital returns, and the sustainable growth of its dividend are all clear evidence that focusing on shareholders' rights is already at the root of VIS' corporate culture. As an independent research analyst, it has been my pleasure to watch the company grow over the past few years. I look forward to VIS' continuous improvements to its sustainability and in other ESG-related areas.

**Stefan Chang**

*Research Director,  
Aletheia Analyst Network Limited*



## Media

2020

### Significance to VIS

The media are the main channels through which VIS discloses to the public its performances and endeavors. VIS has established spokesperson system and responsible unit for external information disclosure, ensuring consistency and accuracy of information, as well as openness and transparency.

### Communication Method/Frequency

- Press Release/Monthly
- Press Conference/At Least Twice a Year
- Social Gathering with Journalists and Media/At Least Twice a Year
- Compilation of Corporate Sustainability Report/Annually
- Phone and E-mail Responses to Media Inquiry/Non-Periodic
- Market Observation Post System for Clarification of Media Misinformation/Non-Periodic

### Issues of Concern

- Social Engagement
- Innovation and R&D
- Economic Performance

### Details of Concern

- Domestic and overseas political and economic developments
- VIS' recent performances and future outlook
- Concrete achievements and future plan of VIS' corporate sustainability/ESG
- VIS' major events and awards

### VIS Responses

- Released 16 financial statement related press releases and 4 non-financial statement related press releases
- Held four investors conferences to explain VIS' recent performances and future outlook
- Promoted VIS' corporate sustainability/ESG actions



Chairman Fang of VIS does his talking through concrete performances, and has been open and honest at every quarterly shareholders' conference and press conference, explaining to investors and media all the details on the company's operations through transparent information. Over the past ten years, VIS has increased its output value by 10 times, and its importance has never been more evident during this global shortage of wafers.

### Steven Chien

*Senior Writing Committee Member, United Daily News*



## Government/ Agencies

2020

66

Participated in 66 meetings and seminars held by related associations

111

Participated in 111 meetings and seminars held by government agencies

### Significance to VIS

VIS maintains open and effective channels of communication with related government agencies, in order to learn first-hand government policies and regulatory changes; in collaboration with associations it belongs to, VIS makes suggestions for the government to build an industrial environment beneficial to the development of semiconductor.

### Communication Method/Frequency

- Response to Government Demands through Official Correspondence/Immediate Response
- Participation in Face-to-Face Meeting and Seminar Invited by Competent Authority/Non-Periodic
- Taiwan Semiconductor Industry Association (Director)/Monthly or Quarterly
- The Allied Association of Science Park Industries (Director)/Monthly or Quarterly
- Provision of Financial Information according to Competent Authority's Regulations/Monthly

### Issues of Concern

- Economic Performance
- Legal Compliance
- Risk Control and Management
- Social Engagement
- Corporate Governance

### Details of Concern

- VIS' compliance with local laws and regulations
- Sufficient water and electricity supplies of the semiconductor industry
- Sufficient talent incubation and future manpower of the semiconductor industry
- Tax benefits for enterprises and enhancement of investment incentives of the industry

### VIS Responses

- Participated in 66 meetings and seminars held by related associations
- Participated in 111 meetings and seminars held by government agencies
- Joined TSIA and the Allied Association of Science Park Industries to communicate with EPA, discussing air pollutant emission standards of the semiconductor industry and amendments of Greenhouse Gas Emission and Management Act
- Co-organizer of Bureau of Energy's 2020 "Benchmark Learning of Wasted-heat and Wasted-cold Recycling Application and Demonstration Program," introducing the application of compressor waste-heat recovery technology, while also providing guided tours to share benefits
- Assisted Hsinchu Science and Industrial Park Administration to organize the Benchmark Learning Program for the 2020 Annual Science Park Water-saving Outstanding Enterprises, introducing the LHF recovery system water-saving strategy and outcomes, while also providing guided tours on water-saving measures
- Shared on water-saving technology exchange platform to enhance the overall water-saving efficiency of Hsinchu Science and Industrial Park
- Participated in Hsinchu Science and Industrial Park Administration's BS 8001 Circular Economy Guidance Program
- Participated in IDB's cleaner production certification (IC manufacturing)



SEMI strives to facilitate overall development of global microelectronics supply chain, and combines the forces of enterprises, governments, and associations, to accelerate Taiwan's development of more complete semiconductor clusters. Thanks to VIS for jointly facilitating discussions on related topics, such as responsible supply chain, smart manufacturing and green manufacturing, through interaction with SEMI Taiwan Committee and member enterprises, proactively participating in activities, including forums regularly organized by SEMI and government initiatives, and enhancing exchange between the industry, academia and government, through sharing of practical experiences, in aim to achieve common prosperity for Taiwan's semiconductor industry.

### Terry Tsao

*Global Chief Marketing Officer & President of Taiwan, SEMI*



## Society/ Community

2020

Employees volunteered

a combined **456**  
times, accumulating  
**1,883** hours

### Significance to VIS

The public and neighboring communities are VIS' final targets of communication. To ensure sustainability of the Earth, VIS gathers all types of resources and joins forces with its employees to provide long-term support for disadvantaged groups and proactively invest in community development, setting up incubation of the next-generation talents and giving back to the society through diversified concrete actions.

### Communication Method/Frequency

- Volunteering/At Least Once a Week
- Year-end Charity Donation/Annually
- Invite Social Welfare Organizations to the Company's Family Day/Annually
- Adoption of Two Parks in the City/Annually
- Organize Environmental Education Seminar/Non-Periodic
- Communication with Community Residents by Designated Unit/Non-Periodic

### Issues of Concern

- Customer Privacy
- Social Engagement
- Legal Compliance

### Details of Concern

- Care for the disadvantaged groups, and promotion of social welfare events and charity projects
- Increase the number of people benefiting from volunteering service and enhance influences
- Dedicate to environmental education and community building, enhance residents' knowledge on environmental sustainability
- Lead the supply chain to jointly participate in activities of corporate sustainability

### VIS Responses

- Through volunteering service and charity donation, VIS continued to launch charity actions targeting five main themes: "care for the disadvantaged," "care for senior citizens living alone," "environmental protection," "support for diverse education," and "sustainability initiatives"
- Employees volunteered a combined 456 times, accumulating 1,883 hours
- Adopted/maintained Hsinchu City's Cherry Blossom Park and Qianjia Park
- Restored Ke-Tzu-Hu Creek and built water-accessible facilities
- Invested approximately NT\$10.2 million in resources for social prosperity



Thanks to VIS Fab2 partners for offering the "Fireflies Dance" class. All participating teachers and students of Lung Shan Elementary School were enthusiastically engaged in the exciting activity. On our way back, the children continued to talk about the activity, whether it was the vision of the ecological environment drawn in the presentation, or the transformation, life, feeding habits, and natural enemies, throughout the life of firefly, as well as their natural habitat and the significance of restoration introduced in the challenge, the most precious thing was that the children were inspired by the real experience of releasing the fireflies into the wild to look forward to a future where "fireflies glitter and dance in air". The children know that to achieve this action, they need to start from daily life, and through their actions, they can a stroke at a time paint the beautiful scenery of dancing fireflies.

#### Hsu Hui-Ying

Director of Student Affairs, Lung Shan Elementary School

Thanks to VIS and its employees for lending their helpful hands during this difficult time around the world, giving patients of rare disorders the warmest support, and continuing their lives.

#### Chen Li-Yin

Founder, Taiwan Foundation of Rare Disorders

## Material Issues Management Guidelines

Economic   Product   Environmental   Social

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
 Economic Performance	<b>Significance and Purpose of Management</b> → Through pursuing sound financial performance, VIS ensures that it achieves the goal of corporate sustainability, creating long-term and stable value for the company through revenue growth and increasing profitability.				
VIS, shareholders/-investors, employees, customers, suppliers, government agencies, society/communities	<ul style="list-style-type: none"> <li>Continue to expand capacity, decentralize production bases and establish diverse product capability.</li> <li>Disclose financial information according to international financial reporting standards recognized by FSA</li> <li>Regularly hold management review meeting, follow up on business performances, and understand status of operation and supervise progress.</li> <li>Convene quarterly Board of Directors' Meeting to ensure that business strategy remains forward-looking and feasible</li> </ul>	<ul style="list-style-type: none"> <li>Management team formed by vice presidents of manufacturing, sales, R&amp;D, administration, and finance, setting business targets and achieve performances based on respective expertise and responsible area</li> <li>Accounting Division reports regularly various financial statistics based on the company's operations to President to follow up on performances, in order to continually create value for the company and enhance shareholders' benefits.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to invest capex and R&amp;D expenses according to business strategy</li> </ul>	<ul style="list-style-type: none"> <li>ROI reached 21.3%</li> <li>Revenue annual growth rate at 17.1%</li> <li>Net profit annual growth rate at 7.6%</li> <li>Among the world's top ten foundry service providers</li> </ul>	<ul style="list-style-type: none"> <li>Acquired GLOBALFOUNDRIES' 8-inch fab in Singapore, as well as facilities and equipment, and MEMS IPs and business in 2019, allowing VIS to further diversify product portfolio and gain advantage in capacity in the foundry market.</li> <li>Monthly capacity of VIS VS1 in Singapore reached 28,000 wafers in 2020, and its capacity has already generated synergy. In 2020, VIS' combined revenue grew 17% more than the previous year, and VIS hopes to achieve continued profitability and growth in the future and give back to shareholders.</li> </ul>

Economic   Product   Environmental   Social

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
 Legal Compliance	Significance and Purpose of Management →	Implement the core value of business ethics to avoid the risk of violating the law. Identify related laws and regulations that may have significant influences on the operations, business or finance of the company, and establish internal policies, procedures, and executive plans. Through tracking of laws and regulations, education and training, promotion, and offering reporting channels, VIS avoids or minimizes the risks of incompliance.			
VIS, shareholders/investors, employees, customers, suppliers/partners, society/communities, government agencies	<ul style="list-style-type: none"> <li>Regularly make public announcement of information on new/amended laws and regulations.</li> <li>All units, according to identified relating laws and regulations, conduct regular review in response to changes and formulate compliance report.</li> <li>Regular tracking of laws and regulations, education and training, and promotion, offering reporting channels, self-inspection, and audit</li> <li>Maintain an open reporting channel of cases of unethical business conducts</li> </ul>	<ul style="list-style-type: none"> <li>Legal</li> <li>Corresponding responsible units of related laws and regulations, including: Risk and Environmental Safety Management, Accounting, Audit, Corporate Governance, and Procurement</li> </ul>	All employees invested as many as 6,758 hours in legal compliance education and training	<ul style="list-style-type: none"> <li>All units, according to identified relating laws and regulations, conducted regular review in response to changes and formulate compliance report.</li> <li>No major violation (Note)</li> <li>No case of unethical conducts</li> </ul>	<ul style="list-style-type: none"> <li>Enhance promotion of business code of conduct, and diverse channels for employees to voice opinions</li> <li>Monthly announcement of new/amended government laws and regulations for all employees to be aware</li> <li>Offer annual education and training of antitrust laws for sales and customer service personnel</li> </ul>

Note: Any single incident with accumulative fine over NT\$1 million.

Economic   Product   Environmental   Social

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
 Risk Control and Management	Significance and Purpose of Management → Ensure effective implementation of company's business strategy to achieve business goals and strengthen risk management culture of the organization, conduct corporate governance and establish risk management system, procedures, and methods, thus grasping quantitative and qualitative results of management as references for formulation of business strategy.				
VIS, shareholders/investors, employees, media	<ul style="list-style-type: none"> <li>Establish basic level reporting and proposal system to allow immediate discovery and reporting of abnormalities</li> <li>Formulate "Risk Management Policy" to strengthen risk management culture of the organization</li> <li>Board of Directors regularly reviews risk management outcomes according to risk management system, corporate governance and internal audit procedures.</li> </ul>	Risk Management Committee	Risk Management Committee	<ul style="list-style-type: none"> <li>Established Risk Management Committee</li> <li>Education and training for risk identification seed personnel, a total of 82 employees were required to attend the training, who were responsible unit heads and promotion personnel, achieving 100% completion rate.</li> <li>Board of Directors' Meeting passed "Corporate Risk Management Policy and Procedure," regulating the committee organization and operation.</li> <li>Completed annual regional risk management measures and implementation achievements, and added and amended risk items for review.</li> </ul>	<ul style="list-style-type: none"> <li>In response to the pandemic, Pandemic Prevention Committee was established, which devised Business Continuity Plan (BCP) for pandemic prevention, which included promotion of wearing mask and washing hands, disinfection of environment, social distancing rules in cafeterias, and related IT resources for working from home. VIS also implemented office zoning on February 7, when Singapore government moved up COVID-19 response to code "orange".</li> <li>Formulated emergency response plan for water conservation during drought, including regular water situation follow-up and emergency response meeting, plan and execution of water-saving measures, ensuring sufficient water supply for manufacturing and production.</li> </ul>

Economic   Product   Environmental   Social

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
Corporate Governance	Significance and Purpose of Management → Establish corporate governance system, enhance Board of Directors' Meeting's function, increase information transparency, protect shareholders' interests, and respect stakeholders' interests. Comply with laws and regulations and company bylaws.				
VIS, shareholders-/investors, government agencies	<ul style="list-style-type: none"> <li>VIS has formulated and implemented "Corporate Governance Best Practice Principles, "Audit Committee Charter," "Board of Directors Performance Evaluation Rules," CSR Practice Principles, "Ethical Business Management Principles," "Professional Code of Conduct," "Unethical Conduct Reporting and Handling Guidelines," and "Important Internal Information Process Procedures".</li> <li>Establish the Corporate Governance Department, appoint Chief Corporate Governance Officer and personnel to execute matters relating to corporate governance.</li> </ul>	Corporate Governance Department	<ul style="list-style-type: none"> <li>Board of Directors' Meeting</li> <li>Shareholders' Meeting</li> </ul>	<ul style="list-style-type: none"> <li>Top 5% and the highest honor in the Corporate Governance Evaluation of Listed Companies</li> </ul>	<ul style="list-style-type: none"> <li>Remain in the top 5% in the Corporate Governance Evaluation of Listed Companies</li> <li>VIS requires management team's succession plan to be regularly reported to the Board of Directors' Meeting, ensuring sustainable operations.</li> </ul>

Economic    Product    Environmental    Social

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
Supplier Sustainability Management	Significance and Purpose of Management	Assume the role of responsible buyer, and conduct and refine effective management of suppliers in the aspects of quality, costs, delivery time, sustainability, environment, safety, and health, striving for the development of sustainable supply chain of semiconductor.			
VIS, employees, investors, suppliers/partners, and customers	<ul style="list-style-type: none"> <li>Formulate "VIS Supply Chain Green Sustainability Policy," including goals, focuses, and practical methods, and promptly promote and execute.</li> <li>Review suppliers' achievements of sustainability management according to new supplier selection mechanism and regular supplier evaluation procedure.</li> </ul>	<ul style="list-style-type: none"> <li>Equipment Procurement and Logistics Management Division</li> <li>Material Procurement and Supply-Chain Management Division</li> </ul>	VIS supervises supply chain partners to comply with the company's green sustainability policy and targets and promptly promote execution; through supplier selection and evaluation procedures, VIS ensures outcomes of supplier sustainability management.	<ul style="list-style-type: none"> <li>100% suppliers signed guarantee to comply with "VIS CSR Policy".</li> <li>100% suppliers signed hazardous substance affidavit, and provided hazardous substances risk assessment report.</li> <li>100% suppliers performed conflict minerals due diligence and used compliant minerals.</li> </ul>	<ul style="list-style-type: none"> <li>In response to COVID-19, VIS has demanded all imported items from affected regions to complete disinfection prior to enter the fabs starting on January 30; VIS also asks all supplier personnel entering the fabs to wear masks and forbids those suffering fever to enter the fabs.</li> <li>Establish surveillance mechanism of supply sources of single materials. Through labelling suppliers' production locations, VIS monitors daily the magnitudes of global earthquakes and locations, as well as correlation with suppliers' production sites; one correlation is determined, VIS immediately launches impact investigation, and adjust delivery date according to actual situations, ensuring smooth operations and manufacturing of both parties.</li> </ul>

Economic    Product    Environmental    Social

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
 Innovation and R&D	Significance and Purpose of Management →			With the spirit of More than Moore, VIS continues to innovate and develop wafer fabrication technology, and executes global deployment of patents and trade secrets, protecting the fruits of VIS' R&D. VIS also promotes advanced intelligent manufacturing and management based on Industry 4.0 to achieve innovative production, operation, and management of "auto-decision" by making improvements in aspects of quality, costs, production cycle, personnel productivity, and utilization rates of facilities and capacities, and customer satisfaction.	
VIS, employees, customers, suppliers/partners	<ul style="list-style-type: none"> <li>Strives for the development of high-quality, low energy consumption manufacturing technology.</li> <li>Raises the share of fine pitch processes below 0.18 micrometer to increase high value-added revenue.</li> <li>Formulated "IP Management Policy" to protect R&amp;D fruits and facilitate innovation, utilizing IP to enhance competitiveness and avoid the risk of infringement.</li> <li>Board of Directors' Meeting evaluates and oversees operating performances annually.</li> <li>Through integration of a wide range of technologies, including automated production technology, RPA, big data analysis, machine learning, and AI, to coordinate operations.</li> </ul>	<ul style="list-style-type: none"> <li>R&amp;D</li> <li>Legal</li> <li>IT &amp; Intelligence Management</li> <li>Sales</li> </ul>	<p>VIS allocates 6% of revenue for R&amp;D expenses, investing in technological development.</p>	<ul style="list-style-type: none"> <li>Fine-pitch processes under 18 micrometer accounted for 46% of revenue.</li> <li>Accumulated 2,900 global patent applications.</li> <li>Starting in 2020, regularly reports to Board of Directors Meeting related matters of IP management.</li> <li>Used AI technology to enhance product quality, machine control, and employee productivity, saving approximately NT\$18.5 million and the manpower of 73 people.</li> <li>Used RPA to replace repetitive manual collection and compilation of data, saving the manpower of 20 people.</li> </ul>	<ul style="list-style-type: none"> <li>VIS cooperated with University of Washington and National Yang Ming Chiao Tung University to conduct the "AI wafer surface defect detection research project".</li> <li>Establishment of IP Management Platform is launched in phases, and made plan to formulate rules governing trade secret application and reward.</li> <li>Used BI (business intelligence) tools to establish the Vanguard Intelligence Dashboard for management of semiconductor performances, effectively converting the management's management wisdom into the company's operational competitiveness. Continued to promote new ecological chain of industry-academia cooperation.</li> <li>Combining resources of VMDA, AI, and advanced digital technology, VIS effectively enhanced overall capacity, increasing the overall sales.</li> </ul>

Economic  Product  Environmental  Social 

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
 Quality Management	Significance and Purpose of Management →	VIS strives to provide excellent services and product quality, becoming the top choice in foundry services of global customers. To ensure customer satisfaction, VIS pays attention to the quality of all products, and proactively target problems and deficiencies to propose effective preventive measures, ensuring the top quality products and best services for customers.			
VIS, employees, suppliers/partners, customers	<ul style="list-style-type: none"> <li>Through third-party audits and certification, VIS ensures that its quality management system and hazardous substance management system continue to meet the requirements of ISO 9001/IATF 16949 and IECQ QC 080000 standards. VIS continues to set and achieve annual improvement targets.</li> </ul>	<ul style="list-style-type: none"> <li>Quality and Reliability</li> </ul>	<ul style="list-style-type: none"> <li>Manage product quality using ISO 9001/IATF 16949 and IECQ QC 080000 standards.</li> </ul>	<ul style="list-style-type: none"> <li>Pass third-party audits of ISO 9001/IATF 16969 Quality Management System and IECQ QC 080000 Hazardous Substance Process Management System certifications.</li> <li>A total of 2,215 improvement proposals by employees and 487 CIT activities were implemented, deriving over NT\$1.89 billion in benefits.</li> </ul>	<ul style="list-style-type: none"> <li>Established “Continual Improvement Committee” to formulate short-, mid-, and long-term targets.</li> <li>Organized the 17th CIT Forum</li> <li>Established CIT Case Management and Experience Sharing Platform.</li> <li>Continued to promote high-quality production towards Zero-Defect.</li> </ul>
 Customer Privacy	Significance and Purpose of Management →	VIS highly regards the data value generated by R&D, manufacturing, sales and other functional units, and keeps its commitment to customers, suppliers and other business partners on information protection. VIS uses international information security standards to formulate management regulations, and establishes corporate safety preventive measures to ensure proper protection of all information assets of the company and customers, maintaining VIS' and customers' competitive edge.			
VIS, customers, employees, suppliers/partners	<ul style="list-style-type: none"> <li>Implement the management and protection measures formulated in accordance with the “Proprietary Information Protection Policy (PIP Policy),” “Personal Data Protection Policy,” and “Personal Data Protection and Management Rules”.</li> <li>Ensure continued compliance with ISO 27001 standards.</li> <li>No major violation or infringement of privacy Implement the management and protection measures formulated in accordance with the “Proprietary Information Protection Policy (PIP Policy),” “Personal Data Protection Policy,” and “Personal Data Protection and Management Rules”.</li> <li>Ensure continued compliance with ISO 27001 standards.</li> <li>No major violation or infringement of privacy</li> </ul>	<ul style="list-style-type: none"> <li>Customer Service</li> <li>Legal</li> <li>IT</li> </ul>	<ul style="list-style-type: none"> <li>Protect customer privacy through ISO 27001 ISMS</li> </ul>	<ul style="list-style-type: none"> <li>No major violation of “Personal Data Protection Policy,” and “Personal Data Protection and Management Rules”.</li> <li>Passed ISO 27001 ISMS certification.</li> <li>No case of privacy infringement</li> </ul>	<ul style="list-style-type: none"> <li>To enhance information security of working from home due to COVID-19, VIS added one-time-password dynamic password two-factor authentication mechanism for remote log-in.</li> <li>Use B2B secure encrypted connection for enhanced protection when transmitting data of relating to customers' designs, whereas customers' technical documents were encrypted and saved in the IT system for access management.</li> </ul>

Economic  Product  Environmental  Social 

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
 Climate Change	Significance and Purpose of Management →			Proactively promote carbon reduction projects related to issues of climate change; through risk management, green production, energy impact and water resource considerations, all VIS employees participate in the operation of energy management system to meet regulatory and customers' requirements, striving for the enhancement of energy efficiency, setting energy conservation targets, and marching towards energy conservation and sustainability.	
VIS, customers, employees	<ul style="list-style-type: none"> <li>Passed ISO 50001 Energy Management System and ISO14064-1 GHG Inventory certifications.</li> <li>Monitor variations of important parameters through the environment surveillance management system, discovering and reporting immediately abnormalities to prevent escalation.</li> <li>Report and monitor water consumption using monthly water balance chart and enhance water recycling rate.</li> <li>Continue to formulate, improve, and achieve annual targets.</li> </ul>	<ul style="list-style-type: none"> <li>Facility Engineering</li> <li>Operation &amp; Environmental Safety</li> </ul>	Use ISO 50001 Energy Management System and ISO 14064-1 GHG Inventory to conduct resource management within fabs.	<ul style="list-style-type: none"> <li>Passed ISO 50001 Energy Management System and ISO 14064-1 GHG Inventory third-party certifications.</li> <li>Completed 59 measures of energy conservation, saving 18.17 million kWh and NT\$43.29 million; total investment was approximately NT\$113.66 million.</li> <li>Power consumption per unit area of wafer dropped to 0.80 kWh/cm<sup>2</sup>, which was 20% lower than the 2015 level.</li> <li>GHG emissions per unit area of wafer dropped to 18% lower than the 2015 level.</li> <li>Water consumption per unit area of wafer reduced to 7.8% lower than the 2015</li> </ul>	<ul style="list-style-type: none"> <li>Replaced to large energy-saving UPS, enhancing efficiency from 94.4% to 99% and increased PUE by 4.6%.</li> <li>Chiller discharge temperature changed from the fixed 6°C to adjustable temperature according to needs, achieving the purpose of energy conservation.</li> <li>Process gas changed from C<sub>3</sub>F<sub>8</sub> to C<sub>4</sub>F<sub>8</sub>, enhanced gas utilization rate and reduced PFC emissions; after the replacement of gas, carbon emissions resulted from the process gas in Taiwan area dropped by 23%.</li> </ul>
 Occupational Safety and Health	Significance and Purpose of Management →			Safeguard occupational safety and health of all employees and contractors, continue to improve working environment, enhance safety culture and awareness, and strengthen autonomous inspection, in order to achieve the goals of zero occupational incident and zero injury.	
VIS, employees, suppliers/partners	<ul style="list-style-type: none"> <li>Each fab reports the implementation result of ESH plans during the monthly ESH Committee meeting</li> <li>Every quarter, each fab's implementation results of ESH plans are compiled and reported at the company-wide ESH Committee meeting, where President will give feedbacks.</li> </ul>	Risk and Environmental Safety Management	Conduct management of fabs utilizing ISO 45001 standards.	<ul style="list-style-type: none"> <li>Passed ISO 45001 certification.</li> <li>Disabling injury frequency was 0.35.</li> <li>Severity of disabling injuries was 10.</li> <li>No major occupational injury or disease.</li> </ul>	<ul style="list-style-type: none"> <li>According to Ministry of Labor's latest "Guidance of Respiratory Protection Program and Policies," VIS conducted physical assessment and fit test for all employees wearing half facepiece or full facepiece respiratory protective equipment, completing a total of 390 assessments and fit tests to ensure that all employees were using proper respiratory protective equipment, safeguarding operational safety and health.</li> <li>Applied AI system for safety inspection. Through image recognition aid, enhanced patrol inspection coverage rate, reducing violation rate to less than 1%.</li> </ul>

Economic   Product   Environmental   Social

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
 Employee-Employer Relations	<b>Significance and Purpose of Management</b> → Create 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.				
VIS, employees, colleges and universities, government agencies	<ul style="list-style-type: none"> <li>Offer benefits and comprehensive leave policies superior to legal requirements.</li> <li>Provide employees insurances in compliance with local regulations. In addition to offering all employees labor and national health insurances, VIS also provides group comprehensive insurance policy.</li> <li>Regularly conduct "Survey on Corporate Business Philosophy" so that employees recognize with VIS' business philosophy principles and continue to make improvement.</li> <li>In the long run, the ideal turnover rate is between 5% to 10%.</li> <li>Strive to provide investors above-average ROI, while also offer employees benefits better the industry average.</li> </ul>	<ul style="list-style-type: none"> <li>HR</li> <li>Heads of responsible units</li> </ul>	Life insurance, accident insurance, health insurance and cancer insurance, as well as flexible leaves, pension plan, emergency aid, wedding and give-birth benefits, funeral subsidy, birthday coupon, year-end banquet subsidy, designated store discounts, and irregular group travel, and club subsidies.	<ul style="list-style-type: none"> <li>Deepen ties with schools and diversify recruitment channels:</li> <ol style="list-style-type: none"> <li>Conducted six industry-academia collaborations in 2020.</li> <li>The 2020 summer internship program saw participation of 28 students from renowned domestic and overseas colleges and universities.</li> </ol> <li>Key talents retention rate was 96%.</li> </ul>	<ul style="list-style-type: none"> <li>Organized summer internship program, recruiting 28 students from domestic and overseas colleges and universities in 2020.</li> <li>Continued to be engaged in industry-academia cooperative projects, and launched "AI wafer surface defect detection research project," with the "UW-NCTU AI Lab" of National Yang Ming Chiao Tung University, College of Artificial Intelligence, National Yang Ming Chiao Tung University, which was jointly led by Professor Hwang Jeng-neng of UW, Professor Peng Wen-hsiao of National Yang Ming Chiao Tung University, and Associate Professor Ma Ching-wen of National Yang Ming Chiao Tung University. VIS continued to organize corporate visits.</li> <li>The Survey on Corporate Business Philosophy in 2020 achieved response rate of 98.2% and recognition level of 4.42/5.0, an increase of 0.03 compared to 2018 results. Significant increase could be observed in all questions.</li> </ul>

Economic   Product   Environmental   Social

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
 Employee Development	Significance and Purpose of Management →			Through numerous employee development policies and management guidelines, VIS enables talents to continue growth and nurture broader working perspectives to place the right talents at the right positions.	
VIS, employees, investors/shareholders	<ul style="list-style-type: none"> <li>• Prove working environment superior to industry standards and continue to enhance compensation competitiveness.</li> <li>• Establish comprehensive training system, encourage employees to learn, and incubate management talents.</li> <li>• Encourage employees to rotate positions, attract and retain key talents.</li> </ul>	• HR	<ul style="list-style-type: none"> <li>• Trained over 88,211 person-times</li> <li>• Training hours reach 86,256 hours</li> </ul>	<ul style="list-style-type: none"> <li>• Average training hours 14.55/person</li> <li>• Annual training plan completion rate 91.6%</li> <li>• Key talent retention rate ≥ 96%</li> </ul>	<ul style="list-style-type: none"> <li>• For the necessary management skills and share language of the management ability training roadmap for managers of different levels, VIS also organized a wide range of management classes and trainings, such as: new manager workshop, subordinate incubation and instruction, performance interview technique, effective motivation and communication and counseling, cross-departmental cooperation and situational leadership. A total of 25 cohorts were organized, which were participated by 527 person-times, amassing a total of 3,428 hours of training.</li> <li>• Promote the Six Sigma Quality Trainings (Green Belt/Black Belt), and by 2020, VIS had incubated 11 black-belt and 312 green-belt experts, who proposed guidance improvement projects achieving a total of NT\$139.39 million in project benefits.</li> <li>• To improve management leadership and establish leadership team, VIS develops the Advanced Management Development Program (ADMP); through talent evaluation tools, development related activities, and trainings, 1/5 of the program participants have been promoted to important positions in the company.</li> </ul>

■ Economic ■ Product ■ Environmental ■ Social

Scope of Impact	Policy and Commitment	Responsible Unit	Resources	2020 Achievements	Specific Actions and Performances
 Social Engagement	<b>Significance and Purpose of Management</b> <ul style="list-style-type: none"> <li>To cultivate sustainable values and realize the vision of common good, VIS proactively invests resources to encourage employees to make use of own expertise and enthusiasm, joining the company to help the disadvantaged groups, support education in remote area, participate in community building, and promote UN SDGs; VIS also encouraged supply chain participation to become the upward force that drives the positive development of the society.</li> <li>With the spirit of common good, and focusing on five main themes of "care for the disadvantaged," "care for senior citizens living alone," "support for diverse education," "sustainability initiatives," and "environmental protection," VIS continually launches charity actions and gives back to the society.</li> <li>Convene Corporate Sustainability Committee meeting quarterly to review implementation of social engagement; report to Board of Director's Meeting every six months and get feedback from the board.</li> </ul>	<b>→</b> Gather all types of resources within the company to work with employees for long-term support of the disadvantaged groups and participation in community development, deploying for the next-general talent incubation and giving back to the society through diverse concrete actions.	<ul style="list-style-type: none"> <li>PR</li> <li>Volunteer Program</li> <li>Risk and Environmental Safety Management Department</li> </ul>	Invested approximately NT\$10.2 million	<ul style="list-style-type: none"> <li>Invested approximately NT\$10.2 million in social welfare, which was 1.8 times of the investment in 2019.</li> <li>Volunteering hours reached 1883</li> <li>Organized 14 life education seminars and two extracurricular activities for disadvantaged children.</li> <li>Environmental education influenced 800 people.</li> </ul> <ul style="list-style-type: none"> <li>Launched Year-End Charity Donation through two projects, "New Year with Elders" and "Care for Children with Rare Disease," receiving nearly 800 more donations compared to the year before, and raised over NT\$3.5 million.</li> <li>Regularly dine with citizens living alone in the communicates every month; VIS and catering supplier sponsored meal boxes.</li> <li>Sponsored IC Broadcasting to produce the "Focus on Taiwan" program, promoting 11 UN SDGs.</li> <li>Donated PAPR and related supplies to medical testing personnel fighting on the frontline, procured children's masks and pandemic prevention kits to donate to communities and social welfare groups.</li> <li>Adopted Cherry Blossom Park and Qianjia Park.</li> <li>Organized on-campus environmental education classes and firefly restoration activities, influencing over 800 person-times.</li> </ul>
VIS, employees, investors/shareholders, society/communities					

### 2.3.3 Foreign and Domestic Associations

VIS has actively and selectively participated in domestic and foreign organizations and associations, or joined their boards as director over the past few years, to contribute to the industry and society. Also, through exchanging and sharing information with member companies of the organizations, VIS strives to make improvements and create win-win situation through “cooperation through competition” with other companies within the industry, jointly achieving common goods for the society, and carrying on the value of sustainability insisted by VIS.

	Unit: NT\$ thousand			
	2017	2018	2019	2020
Lobbying of Interest Groups	-	-	-	-
Contribution to local, regional, or national political activities, organizations, or candidates	-	-	-	-
Expenses for participation in NPOs, such as business associations or think tanks	2,731	2,546	4,338	4,107
Expenses relating to election or referendum	-	-	-	-
Total contribution/expenses of public affairs participation	2,731	2,546	4,338	4,107
Scope of Data	100%	100%	100%	100%

In 2020, VIS participated in 20 domestic and overseas organizations and associations; including initiatives of public policy issues, VIS invested a total of NT\$4,107,000 to focus on issues like industrial development, technological innovation, talent incubation, corporate governance, environmental sustainability, human rights, and supply chain management (Note); together

with our peers in the industry, VIS has promoted public affairs relating to the semiconductor industry in both Taiwan and Singapore, where VIS fabs are located, and participated in the formulation of public policies that benefit industrial and social developments. VIS has invested approximately NT\$1,548,500 with a specific focus on the promotion of public policies that benefit industrial and social developments through organizations and associations where VIS serves as director and has significant influences. The organizations and associations are listed below:

#### Taiwan Semiconductor Industry Association (TSIA)

Vanguard International Semiconductor Corporation (VIS) is a founding member of the Taiwan Semiconductor Industry Association (TSIA), and has participated in the association since 1996, jointly promoting a number of industrial policies with other members in the industry. VIS has also served on the Board of Directors and Supervisors since 1996, and is now in the 13th term. In 2020, President Tsai Ing-wen had an audience with VIS Chairman Leuh Fang and



Chairman Leuh Fang (R) elected as director of 13th TSIA BoD

Note: VIS maintains political neutrality, and does not make political donations in the name of the company; VIS only invests resources to support public affairs or promote public policies that benefit industrial and social developments.

TSIA chairman, in which they discussed semiconductor talent incubation policy that aimed to enhance the international competitiveness of Taiwan's semiconductor industry. In 2020, the public policies promoted by VIS through its participation in TSIA included:

- Promoted Environmental Protection Administration's (EPA) draft amendment of "Toxic Chemical Substances Hazard Prevention and Response Plan Regulations" and draft of "Regulations on the Management of Emergency Responders of the Toxic and Concerned Chemical Substances"
- Promoted EPA's draft amendment of "Permit Management Regulations for the Enterprises Adopting Self-clearance and Disposal of Industrial Waste"
- Promoted EPA's "Offset Principles for the Increased Greenhouse Gas Emissions Caused by Development Activities" and "Regulations Governing Greenhouse Gas Offset Program Management"

Amount Invested: NT\$890,000; Influence: Board of Directors

### **The Allied Association of Science Park Industries**

VIS has participated in the Allied Association of Science Park Industries since 1996, and has served on the Board of Directors and Supervisors since the fifth term, as well as chair and deputy chair of the functional committees under the association, pushing for the formulation of standards for the industries in the science park and promoting exchange of experience among member enterprises. In 2020, VIS not only served on the association's Board of Directors, but also as deputy chair of the Finance and Accounting Committee, Water and Electricity Supplies Committee-Water Resources,

Import/Export Bonding Service Committee, and Public Affairs Committee. In 2020, the public policies promoted by VIS through its participation in the association included:

- The Legislative Yuan passed the amendment of "Renewable Energy Development Act", setting the target capacity of 27GW of renewable energy by 2025 and terms for monetary substitute payment. The association suggested that the government should consider comprehensively actual supply and demand, and then formulate complete supporting measures and develop sound renewable energy trade market before demanding enterprises to install/procure renewable energy.
- Suggested that the Executive Yuan increase tax relief measures, relaunch five-year tax exemption, expand the scope of facility investment tax credit, lift ceiling of purchase amount and application deadline, raise R&D investment tax credit rate and expand applicable R&D items, cancel the 5% profit-seeking enterprise income tax on undistributed earnings, and restore the 17% profit-seeking enterprise income tax.
- Suggested Ministry of Science and Technology and the Executive Yuan to discuss employee stock bonus, and other talent retention tools.

Amount Invested: NT\$234,000; Influence: Board of Directors

### **Taiwan M&A and Private Equity Council**

In 2019, VIS joined Taiwan M&A and Private Equity Council and served on its Board of Directors, helping to build a sound investment environment in Taiwan for M&A and private equity, and acting as the channel of

communication that bridges Taiwan's private and public sectors. The council makes suggestions to competent authorities every year, and carries out extensive exchange and cooperation with related international organizations. In 2020, the public policies promoted by VIS through its participation in the council included:

- Promoted National Development Council's draft of "Guidelines for Guidance in Facilitation of Private Equity Fund Investment in Industry"
- Promoted Ministry of Economic Affairs' draft amendment of "Business Mergers and Acquisition Act"

Amount Invested: NT\$120,000; Influence: Board of Supervisors

### SEMI Taiwan

After participating in SEMI Taiwan's activities for many years, VIS finally became an official member in 2020. In addition to participating in technical forums at the annual SEMICON, VIS also joins other members in advocating industrial policies and making the industry's voice heard by the government. SEMI regularly holds "A Date of Official" Luncheon, setting specific topics and inviting government officials to communicate with senior executives in the industry. In 2020, the invited officials and respective topics are:

Target of Communication	Topic of Discussion
National Development Council Deputy Minister Cheng Cheng-Mount	National Development Fund Investment Assessment and Post-Pandemic Economic Trends
Bureau of Energy, MOEA, Director General Yu Cheng-Wei	Jumpstarting Taiwan's Energy Transition – Green Energy as the Main Driver

Amount Invested: NT\$304,500; Influence: SEMI Taiwan Power & Compound Semiconductor Committee

### Domestic and International Associations

Type	Organization	Role
Industrial	Taiwan Semiconductor Industry Association	Director
	The Allied Association for Science Park Industries	Director
	Taiwan M&A and Private Equity Council	Supervisor
	Singapore Business Federation	member
	Singapore Semiconductor Industry Association	Participant
	SEMI SG	Participant
	SEMI Taiwan	Member
	Taiwan IC Industry & Academia Research Alliance	Member
	Taiwan Electrical and Electronic Manufacturers' Association	Member
	Chinese National Association of Industry and Commerce, Taiwan	Member
Social	Electronic Industry Citizenship Coalition	Member
	Electronic Industry Citizenship Coalition	Member
	Responsible Business Alliance	Member
	Pan Wen Yuan Foundation	Director
	Friends of the Second Special Police Corps	Standing Committee Member
	WBCSD Global Network Partner	Member

Type	Organization	Role
Professional	The Institute of Internal Auditors-Chinese Taiwan	Member
	Taiwan Association of Occupational Health Nurses	Member
	Hsinchu Human Resource Management Association	Member
	Chinese Professional Management Association of Hsinchu	Member

## 2.4 Actions for UN SDGs

VIS' corporate sustainability actions will continue to respond to the 17 sustainable development goals set by the United Nations (UN SDGs), which is stipulated in the updated Corporate Sustainability Policy. In 2020, VIS' corporate sustainability actions complied with 12 UN SDGs.

SDGs	Responses in 2020
No Poverty 	<ul style="list-style-type: none"> <li>Aided women and children in midway houses: invited them to participate in Family Day and donated a total of NT\$1.4 million for charity.</li> <li>VIS employees organized "Year-End Charity Donation" to support children with rare disorders: raised NT\$2,205,659 for three social welfare groups dedicated to rare disorders.</li> <li>"Year-End Charity Donation" to sponsor Chinese New Year's Eve dinner for senior citizens living alone: raised NT\$1,303,660 for three social welfare groups dedicated to senior citizens living alone.</li> <li>Year-End Charity Fundraising on Dihua Street, donating NT\$256,595 to Children Are Us Foundation.</li> </ul>
Good Health and Well-being 	<ul style="list-style-type: none"> <li>Donated 2,000 children's masks to the halfway homes serviced by the volunteer program in response to COVID-19.</li> <li>Donated 31 PAPRs to Taiwan Association of Medical Technologists, Chiayi Catholic St. Martin Hospital, and Taitung Mackay Memorial Hospital.</li> <li>With the management goals of "Zero Accident and Occupational Disease," VIS constructed safe and healthy working environment.</li> <li>Health examination more frequent than regulatory requirement; examination rate reached 97% in 2020.</li> </ul>

SDGs	Responses in 2020
Quality Education 	<ul style="list-style-type: none"> <li>Visited Municipal Lung Shan Elementary School and Hsinchu HsinKe Junior High School to promote environmental education, introducing students to "water footprint".</li> <li>Participated in National Tsing Hua University's "Sunrise Program," providing scholarship of NT\$100,000 to two students from a disadvantaged family, and inviting company senior executives to serve as mentors.</li> <li>VIS volunteers held 14 thematic educational seminars for youths of Blue Sky House in remote area.</li> </ul>
Gender Equality 	<ul style="list-style-type: none"> <li>Balanced gender distribution of employees in fabs in Taiwan: male 48.3% and female 51.7%.</li> <li>The overall compensation will not differ due to gender, and ratio of compensations of basic level employees was nearly 1:1 in 2020.</li> <li>Offered both male and female employees parental leaves in compliance with "Act of Gender Equality in Employment," and "Regulations for Implementing Unpaid Parental Leave for Raising Children".</li> <li>Advocated "Women In Technology," encourage female students to opt for science and engineering and explore careers in the technology industry.</li> </ul>
Clean Water and Sanitation 	<ul style="list-style-type: none"> <li>Process water recycling rate in Taiwan fabs averaged 83%, reducing consumption of running water and saving water resources.</li> <li>Build water-accessible environment of Ke-Tzu-Hu Creek to offer a habitat for firefly restoration.</li> </ul>
Affordable and Clean Energy 	<ul style="list-style-type: none"> <li>Install solar PV systems from 2021 to 2022 to reach a capacity of 270kW.</li> <li>Projected renewable energy capacity of 500kW by 2025, saving approximately 550,000 kWh/year.</li> </ul>

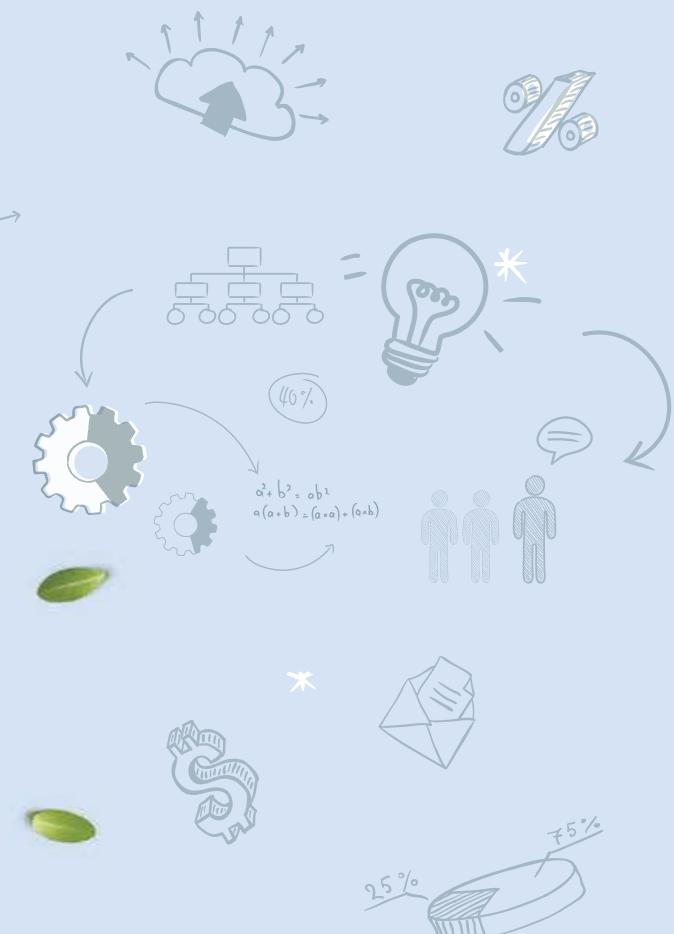
SDGs	Responses in 2020	SDGs	Responses in 2020
Decent Work and Economic Growth 	<ul style="list-style-type: none"> <li>• 2020 earning per share was NT\$3.81.</li> <li>• 2020 ROE was 21.3%.</li> <li>• 2020 employee retention rate was 93.7%.</li> <li>• Employed persons with disabilities, exceeding the regulatory requirement of 10%.</li> </ul>	Life on Land 	<ul style="list-style-type: none"> <li>• Adopted Qianjia Air Quality Purification Area in Hsinchu, as well as Cherry Blossom Park and nearby 800-meter section of the Ke-Tzu-Hu Creek in Jinshan Village, reaching a total area of approximately 5.56 hectares, building green and friendly community.</li> <li>• Adopted Ke-Tzu-Hu Creek and the nearby flood detention pond to create the most optimal environment for the restoration of fireflies.</li> <li>• Adopted four old trees in Cherry Blossom Park and applied for certificates; one old tree has passed certification, while the other three have submitted applications.</li> </ul>
Industrial Innovation and Infrastructure 	<ul style="list-style-type: none"> <li>• Allocate 6% of revenue for R&amp;D and technological development.</li> <li>• Continued to accelerate development projects relating to sensing devices, fingerprint sensor ICs, and high-power management ICs as well as embedded memory platforms, to satisfy market demand for automobile electronics and Internet of Things applications.</li> </ul>	Peace, Justice, and Strong Institution 	<ul style="list-style-type: none"> <li>• No child labors, and asked all suppliers to not hire child labors.</li> <li>• Complying with international human rights conventions and policies, VIS conducted human rights risk assessment and formulated mitigation measures for human rights topics; the results of the assessment showed that VIS was not exposed to high-level human rights risks.</li> <li>• Completed all investigations on maternity protection and sexual harassment cases.</li> <li>• Demanded the supply chain to sign "VIS Supplier Code of Conduct" and commitment guarantee letters to fulfill their corporate social responsibility.</li> </ul>
Responsible Consumption and Production 	<ul style="list-style-type: none"> <li>• VIS products are 100% compliant with related laws and regulations and customers' regulations on hazardous substances.</li> <li>• Pass third-party audits for ISO 9001/IATF 16949: Quality Management Systems and IECQ QC 080000 Hazardous Substance Process Management every year.</li> <li>• Local procurement ratio of fabs in Taiwan and Singapore reached 95% and 82% respectively.</li> <li>• Executed green procurement and prioritized energy-saving products with eco-protection labels.</li> <li>• Supervised suppliers to comply with VIS' hazardous substance policy, ESH policy, assume corporate social responsibility, due diligence for responsible mineral procurement, and domestic and overseas laws and regulations.</li> </ul>		
Climate Action 	<ul style="list-style-type: none"> <li>• Introduced TCFD framework to identify climate risks and opportunities.</li> <li>• Formulated short-, mid-, to long-term sustainable targets for GHG emissions, procurement of renewable energy, reduction of power consumption.</li> <li>• Continue to increase output of power-management products, which is beneficial to the overall energy saving and carbon reduction of all green end products.</li> </ul>		

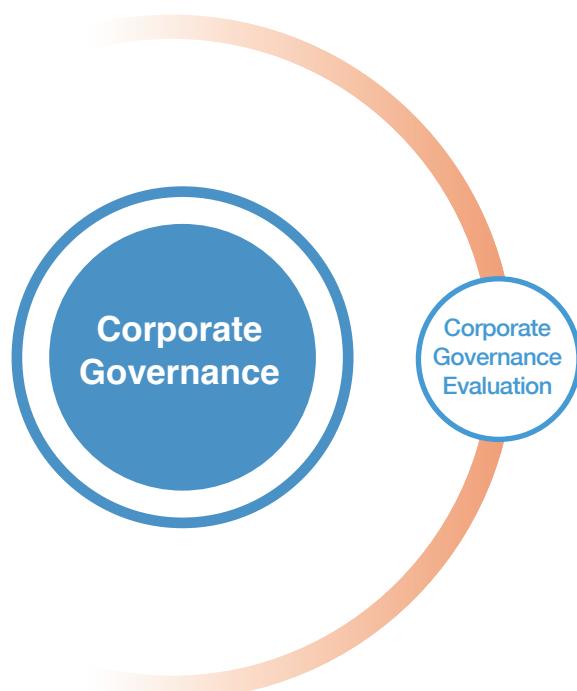
3

## Governance and Innovation

Allocate  
**6%**  
of Revenue for  
R&D

Overall Customer  
Satisfaction  
**92.8%**





## 3.1 Corporate Governance

### Sustainability Goals

#### Short-Term (2022)

- Rank in the top 5% and received the highest honor in the Corporate Governance Evaluation of Listed Companies

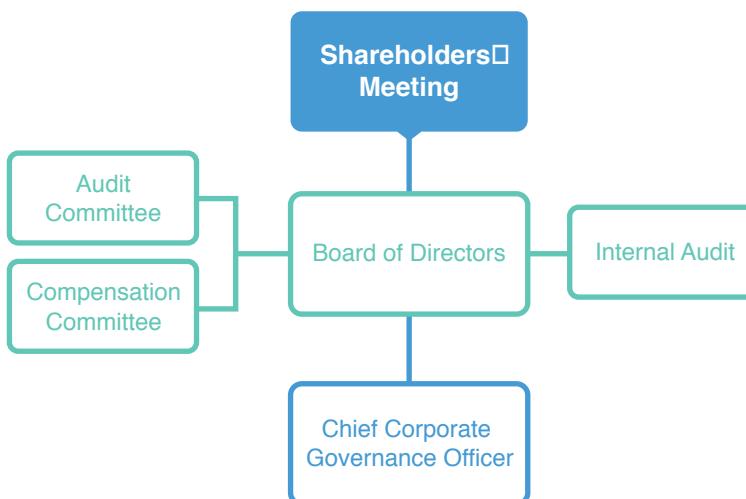
#### Mid-Term (2025)

- Rank in the top 5% and received the highest honor in the Corporate Governance Evaluation of Listed Companies

#### Long-Term (2025~)

- Rank in the top 5% and received the highest honor in the Corporate Governance Evaluation of Listed Companies

### 3.1.1 Corporate Governance Structure



The Board of Directors is the company's highest level of governing body. To better implement corporate governance and strengthen management of the Board of Directors, Audit Committee and Compensation Committee have been established under the Board of Directors. In 2019, the Board appointed the General Counsel as the Chief Corporate Governance Officer. Decisions related to economic, environmental, and social issues shall be made by "CSR Committee," which reports to the Board of Directors every six months.

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

### 3.1.2 Composition of the Highest Level Governing Body

VIS insists on operational transparency and cares about shareholders' equity. We also believe that a sound and efficient Board of Directors is an underlying requirement for optimal corporate governance.

### Organization of the Board of Directors

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

For the election of the Board of Directors, the company followed the principles of corporate governance and adopted the nomination system. Among the seven Directors, three are independent, they are as follows: Kenneth Kin, former Senior Vice President of Taiwan Semiconductor Manufacturing Company; Benson W.C. Liu, Chairman of Taiwan Corporate Governance Association; and Chintay Shih, former Chairman of the Industrial Technology Research Institute. Among the other four Directors, three are representatives of juristic persons, they are: TSMC Representative Leuh Fang (Chairman of VIS), TSMC Representative F.C. Tseng (Vice Chairman of VIS), and Representative of the National Development Fund Management Committee, Executive Yuan, Lai-shou Su. Six out of the seven directors do not serve as managers at the company.

### 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 the company's compliance with laws, Articles of Incorporation, the resolutions adopted in shareholders' meetings.

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 the management teams. VIS held a total of 7 board meetings in 2020.

Title	Name	Attended in Person	Attended by a Representative	Attendance Rate (%)
Chairman	TSMC Representative: Leuh Fang	7	0	100%
Vice Chairman	TSMC Representative: F.C. Tseng	5	2	71%
Independent Director	Benson W.C. Liu	7	0	100%
Independent Director	Chintay Shih	6	1	86%
Independent Director	Kenneth Kin	7	0	100%
Director	Edward Y. Way	7	0	100%
Director	Representative of the National Development Fund Management Committee, Executive Yuan: Lai-Shou Su	6	1	86%

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

## The Tenures of VIS Directors

Name	Date of First Appointment	This Term	Continued Tenure (Year)
TSMC Representative: Leuh Fang	2015.06.08	2018.06.14~2021.06.13	6
TSMC Representative: F.C. Tseng	2013.01.23	2018.06.14~2021.06.13	8
National Development Fund Management Committee, Executive Yuan Representative: Lai-shou Su	2017.07.01	2018.06.14~2021.06.13	4
Edward Y. Way	2010.05.26	2018.06.14~2021.06.13	11
Chintay Shih	2012.06.12	2018.06.14~2021.06.13	9
Benson W.C. Liu	2012.06.12	2018.06.14~2021.06.13	9
Kenneth Kin	2012.06.12	2018.06.14~2021.06.13	9
Average Tenure		8 Years	

Three VIS directors (F.C. Tseng, Kenneth Kin, Chintay Shih) have related experience in the information technology industry, whereas another three directors (Benson W.C. Liu, Edward Y. Way, Lai-shou Su) have related financials experience. Detailed experiences are listed below:

Director Name	Education and Experience	Current Positions at VIS and other Companies	GICS Global Industry Classification Standards
F.C. Tseng	Former Vice Chairman, TSMC Former President, TSMC Former President, Vanguard International Semiconductor Corp. Ph.D. in Electrical Engineering, National Cheng Kung University, Taiwan	Chairman of TSMC (China) Chairman of Global Unichip Corp. Director of TSMC Chairman of TSMC Foundation	Information Technology
Lai-Shou Su	Master of Business Administration, North Texas University, USA BBA, National Chung Hsing University	Executive Secretary of National Development Fund Management Committee, Executive Yuan Management Committee Member of the MOE University, College or Junior College Transition or Closure Fund Director of Taiwan Aerospace Corp. Eminent Venture Capital Corporation Investment Review Committee Member of Eminent Venture Capital Corporation	Financials
Edward Y. Way	Former Managing Partner & CEO, Deloitte Taiwan Master of Business Administration, University of Georgia, USA	Independent Director of Synnex Technology International Corp. Independent Director of Far Eastern Department Stores Independent Director of Cathay Financial Holdings Independent Director of Cathay United Bank Representative of Juristic Person Director of MITAC Holdings Corp. Director of Iron Force Industrial Co., Ltd. Chairman of YCSY Co., Ltd.	Financials
Chintay Shih	Former Chairman, Institute for Information Industry Former President, Industrial Technology Research Institute Former Dean, College of Technology Management, National Tsing Hua University Ph.D. in Electrical Engineering, Princeton University, USA	Chair Professor Emeritus, College of Technology Management, National Tsing Hua University Independent Director of FocalTech Systems, Ltd. Independent Director of Sercomm Corp. Supervisor of Ten Incubation Corporation	Information Technology
Benson W.C. Liu	Former Chairman, Taiwan Corporate Governance Association Former Chairman & GM, Bristol-Myers Squibb (Taiwan) Ltd Master of International Business Administration, University of Northrop, USA	Managing Director of Taiwan Corporate Governance Association Independent Director of Global Unichip Corp. Independent Director of Avantech Representative of Juristic Person Director of Maywufa Co.	Financials
Kenneth Kin	Former Senior Vice President, TSMC Former Vice President, Worldwide Sales & Services, IBM Microelectronics Division Former Vice Dean, College of Technology Management, National Tsing Hua University Ph.D. in Nuclear Engineering and Applied Physics, Columbia University, USA	Chair Professor Emeritus, College of Technology Management, National Tsing Hua University Independent Director of eMemory Technology Inc. Independent Director of Global Unichip Corp. Director, MediaTek Inc.	Information Technology

### 3.1.3 Internal Audit

#### Internal Audit

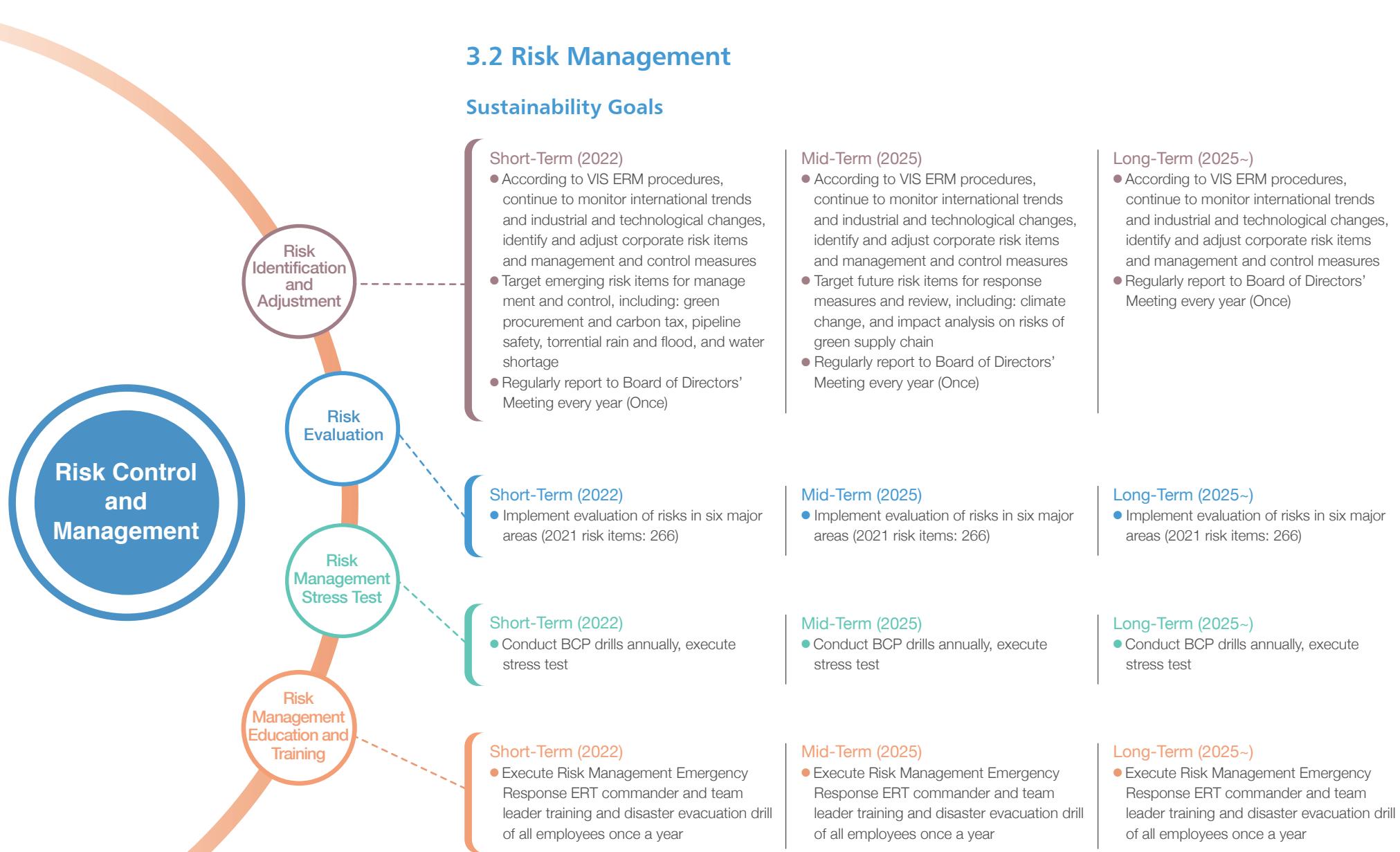
VIS has established under the Board of Directors the Internal Audit unit, which carries out various audits in accordance with the annual audit plan approved by the Board of Directors, and regularly reports to the Audit Committee and Board of Directors audit results and improvement outcomes, ensuring the reliability, timeliness, and transparency, of the company's financial, operational, and management information, as well as compliance with related laws and regulations. All units also conduct periodic self-assessment on the execution of internal control system; when there are major defects or items of improvement, the units shall propose improvement plan and projected completion time, and Internal Audit will follow up on and review the improvement results.

### 3.1.4 Conflict of Interest Regulations and Avoidance

The company has established provisions related to the prevention of conflict of interest, and has rules and regulations in place to prevent conflict of interest in the Rules of Procedure of Board of Director Meetings and Audit Committee Charter. If any Director or juristic person represented by a Director is a member of the interested party, or a Director's spouse or lineal blood relatives, or companies that have controlling and subordinate relation with a Director, whose involvement with a meeting agenda may have conflict

of the company's interests, they may not be present nor participate in any discussion or vote on that item, and may not act as another director's representative to exercise their voting rights. When engaging in activities within the business scope of VIS for him/herself or on behalf of others, the director or general manager shall acquire prior approval at the shareholders or Board of Directors' meetings in accordance with the laws and regulations; any transactions concerning related-parties must be disclosed.

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



### 3.2.1 Risk Management System

VIS has established complete risk management system and the Risk Management Committee, proactively implementing risk prevention and loss control. VIS has also incorporated risk management measures into daily internal control operations, and all units are required to periodically conduct self-assessment and participate in education and training, where the Board of Directors and senior executives will evaluate their performances so that risks can be effectively controlled within acceptable range. To implement risk management policy, the Risk Management Committee reports to the Audit Committee and Board of Directors on risk management policy and procedures.

#### Risk Management Committee Organizational Structure



#### Duties and Responsibilities

1. Formulate risk management policy and procedures, and submit to Board of Directors' Meeting for approval.
2. Report regularly to the Audit Committee and Board of Directors on risk management operation every year.

3. Formulate rules governing risk management.
4. Identify and approve priorities of risk management.
5. Plan, audit, and execute results of risk identification and control and management measures.
6. Supervise improvement of risk management.

#### Establishment of Risk Management Culture

##### VIS' Risk Management Hierarchy

**Board of Directors level:** Periodically review results and risk management according to ERM, and corporate governance and internal audit procedures.

**Senior Management Level:** Comprehensive ERM (enterprise risk management) system, as well as corporate governance and internal audit procedures, ensure effectiveness of corporate governance.

**First-Line Management Level:** VIS has established PDCA (Plan-Do-Check-Act) system of quality control in all regions and areas; VIS has also simultaneously introduced international standards and passed third-party audit and certification, ensuring the effectiveness of the management system.

**Operational Level:** Promote the Zero Defect policy, confidential information protection policy, information security policy, manufacturing process parameter real-time monitoring system, as well as pandemic prevention measures, and establish basic level reporting and proposal system to ensure minimization of the risk of human error on the operational level, and allow immediate discovery and reporting of abnormalities, preventing escalation of abnormalities.

Through hierarchical management, coupled with the comprehensive quality management system established through certifications of ISO 9001, IATF 16949, ISO 27001, ISO 14001, ISO 45001, ISO 50001, and QC 080000, VIS has established its risk management culture of "upholding the principle of honesty and the business philosophy of high level of business ethics, focusing on foundry production and manufacturing, avoiding high-risk and high financial leverage investments, and striving for the enhancement of VIS' overall competitiveness and pursuing sustainability of the company".

### Crisis Management Procedure

VIS has established comprehensive procedures of Business Continuity Plan (BCP) to evaluate the degree of influence and loss of emergency events, as well as designated unit to be in charge of communication with stakeholders, lowering the risk of losses caused by misinformation.

### Results of the Implementation of Risk Related Education and Training in 2020

Risk Scope	Content	Number of Sessions	Number of Trainees
Corporate Risk Management Procedure Training	Enterprise Risk Management – Risk Management Procedure and Risk Quantification	2	Target: Risk Management Promotion Seed Personnel Frequency: One-Off Number of Trainees: 82
Quality Abnormality Risk Control and Management Procedure	ISO 9001 and IATF 16949: Quality Management Systems	E-learning	Target: All Employees Frequency: Once a Year Number of Trainees: 4,765
	Zero Defect Concept and Automotive Quality Awareness	E-learning	Target: All Employees Frequency: Once a Year Number of Trainees: 4,767
Secret Leakage Risk Management and Control	PIP Promotion – Important Information Protection	E-learning	Target: All Employees Frequency: Once a Year Number of Trainees: 5,032
Legal Compliance Risk Control	Promotion of Business Ethics and Code of Conduct	E-learning	Target: All Employees Frequency: Retraining Every Two Years Number of Trainees: 5,032
Supply Chain Risk Management and Control Procedures	AEO Quality Supply Chain Security (Risk Management Preventing Threats of Supply Chain) Introduction	E-learning	Target: All Employees Frequency: Once a Year Number of Trainees: 4,811

Risk Scope	Content	Number of Sessions	Number of Trainees
EHS Risk Management and Control Procedures	Environmental Management – Introduction to ISO 14000 Family of Standards	E-learning	Target: All Employees Frequency: One-Off Number of Trainees: 172
	Occupational Health and Safety Assessment Series: Introduction to OHSAS 18001	E-learning	Target: All Employees Frequency: One-Off Number of Trainees: 162
Disaster Emergency Response/Loss Control Procedures Training	Emergency Rescue Scenario Drill/CPR, Triage Training	6	Target: Preliminary Rescue Technicians Frequency: 24 Hours every Three Years; 8 Hours a Year Number of Trainees: 149
	Minghu Fire Training Base Chemical Disaster Response Skills Training	3	Target: Fab Emergency Response Team Members Frequency: Once a Year Number of Trainees: 45
	Minghu Fire Training Base Firefighting Training	3	Target: Fab Emergency Response Team Members Frequency: Once a Year Number of Trainees: 45

### 3.2.2 Risk Identification

VIS' risk identification includes scope of risk management and risk management procedures.

#### Scope of Risk Management

**Strategic Risks:** Including but not limited to risks that have great influences on the company caused by domestic and overseas economic and political factors, technological and industrial changes, and market demand and competition.

**Operational Risks:** Including but not limited to risks that result in losses and damages of the company caused by malpractices of internal operations, systems, or personnel, such as production, R&D, quality management,

information security, and talent recruitment, or over-concentration of sales and procurement.

**Financial Risks:** Including but not limited to risks that have significant influences on the company caused by insufficient protection of financial assets and transactions, misrepresentation of financial statement, failure to respond to interest and exchange rate changes timely, inappropriate financing or investment, and nonperformance of contract by customers and suppliers.

**Hazardous Risks:** Including but not limited to risks that result in losses and damages of the company caused by natural disasters, infectious diseases, climate change, stoppage of water and electricity supplies, fire or chemical leakage, and insufficient preventions and responses.

**Compliance Risks:** Including but not limited to risks that damage the reputation or result in losses or damages of the company caused by failure to comply with related laws and regulations, failure to respond to regulatory changes timely, and inappropriate signing and execution of legal documents.

**Other Risks:** Risks not listed in the categories above that are likely to cause significance losses and damages of the company as deemed by the Risk Management Committee.

### Risk Management Procedures

Procedures	Description
Risk Identification	<p>Risk identification is the first step of risk management. According to the scope of risk management, all units shall discuss, analyze, compile, and predict, based on past experience, potential future risks within its business scope and procedure of cross-organizational operation, and identify and categorize these risks as references for further risk evaluation, monitoring, and management.</p> <ol style="list-style-type: none"> <li>1. Business scope and changes, past experience, internal and external resources and demands of each unit.</li> <li>2. Impact on business and change of future trend in response to the company's mid to long-term operation plan.</li> <li>3. Internal control and regulatory amendments and compliance.</li> <li>4. Peer experience and risk case studies.</li> </ol>
Risk Evaluation	<p>Under the current control measures, evaluate the likelihood and influence when a risk occurs; through the process of analysis, "Risk Map" may be used to quantify the frequencies of occurrence and respective level of impact on the company's operation. Other feasible evaluation methods may be devised to measure different types of risks.</p>
Risk Response	<p>Targeting the results of risk evaluation, devise management priority and risk management mechanism according to risk tolerance and cost effectiveness, so that the company's risks can be effectively controlled within acceptable range. Control and management measures include: avoidance (eliminate occurrence conditions: replacement or no execution), reduction (lower the likelihood of occurrence and losses), sharing (risk transfer: insurance, signing of contract), tolerance (tolerate the remaining risks after reduction and sharing of some of the risks).</p>
Risk Monitoring	Various activities of monitoring and control targeting the development and changes of risks.
Risk Report	VIS shall regularly complete risk report, which will be reported to appropriate management levels and properly filed for reference.

### 3.2.3 Emerging Risks

When identifying the emerging risks faced by the company, VIS considers whether this risk is a long-term external risk that may occur in the next two to three years but does not affect operation and reputation. Based on these criteria, the emerging risks that have been identified are:

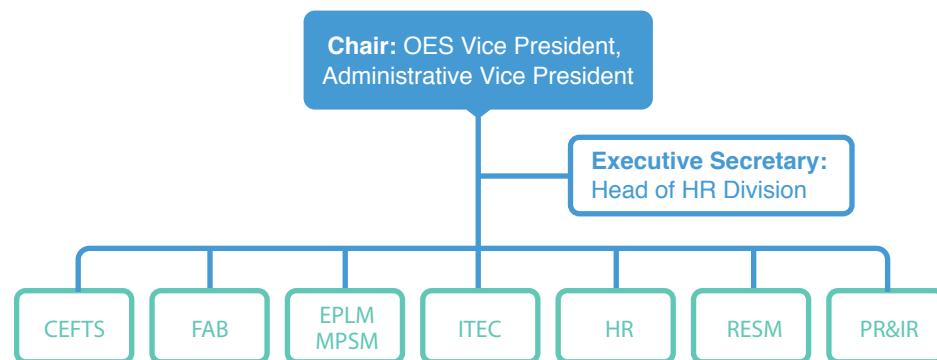
Taiwan's Renewable Energy Policy: Based on the amendments of the "Renewable Energy Development Act" in 2020, VIS has to procure renewable energy or install renewable energy facilities in accordance with the required capacity ration of electricity contract before 2025, which will result in significant increase of electricity cost. At the moment, VIS plans to respond to the regulatory requirements through installation of renewable energy facilities, and procurement of renewable energy and renewable energy certificates.

Singapore's Plan to Raise Carbon Tax in 2030: According to Singapore's regulatory requirement, VIS must start paying carbon tax in 2023. Furthermore, the Singapore government plans to double or even triple the carbon tax in 2030, and consequently, the production cost of the company will increase. In response, VIS has proactively initiated energy-saving project since 2020, installing energy-saving facilities to replace existing energy-consuming facilities, in aim to enhance power usage efficiency and reduce carbon emissions.

### 3.2.4 Infectious Diseases Response Mechanism

Since the outbreak of the COVID-19 pandemic, VIS has established Pandemic Prevention Committee. The committee has effectively integrated the company's resources and rapidly execute and promote measures of pandemic prevention to lower the risk of infection within the fabs, offering employees a safe working environment and maintain normal operations and productions of the company.

#### Organization of Pandemic Prevention Committee



#### Main Measures of Pandemic Prevention in 2020

The first confirmed case of COVID-19 infection was discovered on January 21, 2020, at Taoyuan International Airport (arrival). On January 22, the very next day, VIS convened pandemic response meeting, and launched the first-phase pandemic prevention measures, which included: daily measurement of body temperature of employees and vendors, and those with body temperatures reaching 38°C or above are prohibited from entering the fabs; investigation into the travel history of employees and vendors; promotion of preventive measures such as wearing a mask and washing hands.

On January 24, 2020, Taiwan's first local case was confirmed, and VIS immediately launched the second-phase measures of pandemic prevention, which included: daily pandemic prevention meeting for pandemic tracking and work reporting; disinfection of all working areas; social distancing in cafeteria and during meetings, trainings, employee activities, as well as on commute buses; planning and trial of zoning in office areas; establishment and expansion of working-from-home system.

On February 7, 2020, the Singapore government moved up its COVID-19 response to code "orange," and Fab VS 1 in Singapore launched office zoning mechanism to lower the risks of infection within the fab and impact on production.

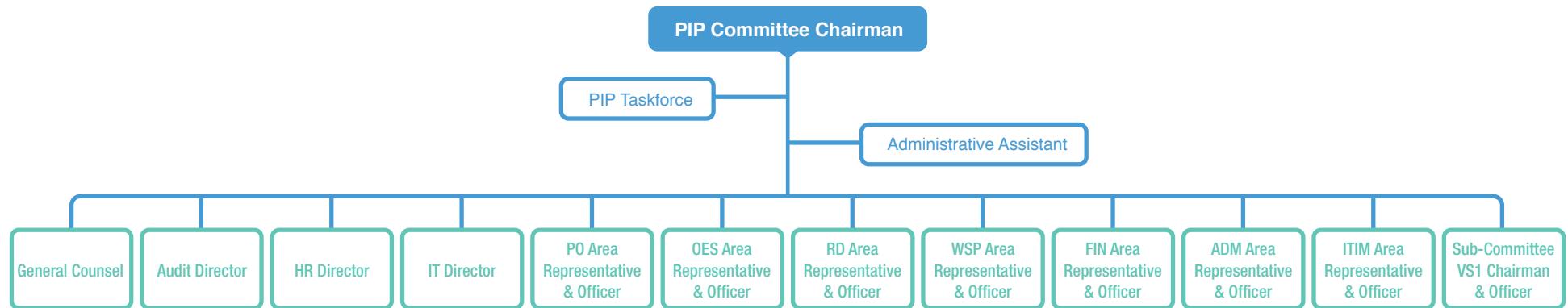
As of this Sustainability Report publication in June 2021,, VIS continues to hold regular pandemic prevention meeting, and implement related measures of pandemic prevention in accordance with the latest public announcements made by Central Epidemic Command Center to maintain effective pandemic prevention and control, lowering the potential risk of infection.

### 3.2.5 Information Security

Information Security Governance System, Targets, and Strategy

VIS has always strived to ensure information security. In 2003, VIS established the "PIP Committee" and formulated the "PIP Policy;" in 2013, VIS further introduced the "VIS Information Security Policy" to ensure thorough implementation of information protection. PIP Committee, as the highest-level supervising unit of VIS' information security, is chaired by General Counsel, and is responsible for the review and formulation of information security related issues and response strategy, demanding compliance by all employees and reporting to the Board of Directors on information security governance regularly.

## PIP Committee Organization Chart



## Information Security Management Mechanism

VIS has obtained the ISO/IEC 27001:2013 Certification for Information Security Management System (ISMS) in December 2015, and completed the three-year review in October 2018 for the certificate to remain valid.

Also, starting from 2019, VIS has purchased information security risk management insurance to lower the risk of business interruption; the policy covers the entire globe, ensuring the best possible protection for our customers when they access information services, as well as the security of their data.

## Information Service Business Continuity Plan (BCP)

To ensure proper response measures can be taken to restore operational continuity within the shortest time and minimize the impact when information services are hit by major disasters, VIS has formulated the "Business Continuity Plan (BCP)"; information system disaster recovery drills are conducted every year, including at least two recovery drills targeting attacks on information security, in order to enhance response capacity through regular drills.

Results of all related drills held in 2020 met the requirements.

## Information Security Protection and Inspection

In response to ever-changing paths of external attacks, VIS has adopted corresponding multilayered defense framework targeting DDoS, APT, and social engineering attacks. VIS also regularly conducts weakness scanning and social engineering exercise, and commissions third-party evaluation agencies

for website penetration test and system effectiveness review to ensure effectiveness of information security management.

Furthermore, many domestic and overseas enterprises were attacked by hackers using ransomware in 2020, and VIS now demands all employees working from home to enter an additional dynamic password in addition to their existing ID and password when they log into the company's system, achieving two-factor authentication, and enhancing information security protection of remote connection.

### Information Security Promotion and Education and Training

For employees to understand the related actions of the confidential information protection policy, VIS issues monthly promotion and distributes questionnaires to all employees, collecting over 3,300 questionnaires that achieved an accuracy rate of 96.6%. As for personnel training, all VIS employees must complete education and training courses and pass tests. VIS employees have achieved 100% training completion rate. There were also internal and external professional information security courses for IT personnel to attend.

### Information Classification

VIS conducts classification and control and management of information based on sensitivity and value. VIS controls and manages methods of information transmission, reception, utilization and preservation, while adhering to the Need to Know Basis for information disclosure. The classification of information is shown below:



### Information Security Incident Reporting and Handling

VIS has formulated reporting and handling procedures of information security incidents. When an incident of information security occurs, reports will be made according to the isolated scope of influence, and command center will be simultaneously established. The chief commander will assign taskforces to execute system recovery and conduct 8D analysis, as well as taking corrective actions and keeping records after the incident is resolved to avoid recurrence.

### Flow of Information Security Incident Reporting and Handling





### 3.3 Ethics and Transparency

#### Sustainability Goals

##### Short-Term (2022)

- Regularly make public announcement of information on new/amended laws and regulations
- All units, according to identified relating laws and regulations, conduct regular review in response to changes and formulate compliance report
- Complete education and training and promotion according to operational needs
- Conduct annual self-inspection, audit, and follow-up on improvement
- No major violations (Note)

##### Mid-Term (2025)

- Regularly make public announcement of information on new/amended laws and regulations
- All units, according to identified relating laws and regulations, conduct regular review in response to changes and formulate compliance report
- Complete education and training and promotion according to operational needs
- Conduct annual self-inspection, audit, and follow-up on improvement
- No major violations (Note)

##### Long-Term (2025~)

- Regularly make public announcement of information on new/amended laws and regulations
- All units, according to identified relating laws and regulations, conduct regular review in response to changes and formulate compliance report
- Complete education and training and promotion according to operational needs
- Conduct annual self-inspection, audit, and follow-up on improvement
- No major violations (Note)

Note: Major Violation: Any single incident with accumulative fine over NT\$1 million.

##### Short-Term (2022)

- Maintain completion rate "Professional Code of Conduct and Ethical Corporate Management Best Practice Principles" digital course  $\geq 98\%$

##### Mid-Term (2025)

- Maintain completion rate "Professional Code of Conduct and Ethical Corporate Management Best Practice Principles" digital course  $\geq 99\%$

##### Long-Term (2025~)

- Maintain completion rate "Professional Code of Conduct and Ethical Corporate Management Best Practice Principles" digital course  $\geq 99.5\%$

##### Short-Term (2022)

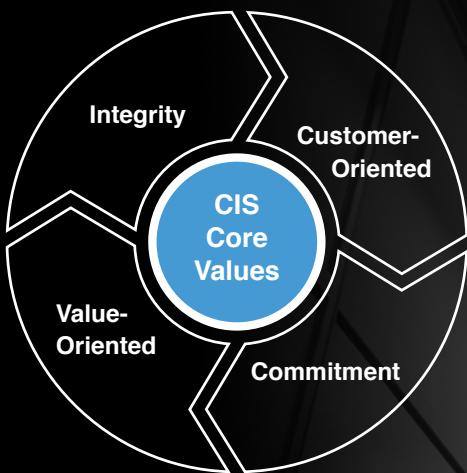
- Pass ISO 27001 Certification for Information Security Management System
- No privacy infringements

##### Mid-Term (2025)

- Continue to pass ISO 27001 Certification for Information Security Management System
- No privacy infringements

##### Long-Term (2025~)

- Continue to pass ISO 27001 Certification for Information Security Management System
- No privacy infringements



## Ten Articles of VIS Business Philosophy

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

## Ethical Corporate Management Best Practice Principles

VIS's core values are integrity, customer-oriented, value-oriented, and commitment, and the first article of VIS business philosophy is "upholding ethical business practices, which show how much emphasis VIS puts on integrity. In light of this, VIS has formulated "Ethical Corporate Management Best Practice Principles" to nurture corporate culture of ethical corporate management and establish sound business model, which is promoted through channels including company website, internal employee training materials, electronic announcement, bulletin board, and promotion videos, proactively building an honest, open, pragmatic, and cooperative working environment.

### 3.3.1 Business Ethics and Code of Conduct

VIS conducts a survey every two years to explore employees' recognition of the business philosophy. The 2020 survey results revealed that the first article of the business philosophy, "Upholding Ethical Business Practices" received an average score of 4.54 from all employees (5 being the perfect score), which was a 0.02 increase from the 4.52 in 2018. This shows that employees highly recognize the company's ethical business practices. The implementation of ethical corporate management will be reported to the Board of Directors at least once a year.

To strengthen ethical corporate management, VIS has formulated guidelines for reporting and punishment of non-ethical behaviors, and established three independent mailboxes for reporting: Chairman's Mailbox ([vis\\_chairman@vis.com.tw](mailto:vis_chairman@vis.com.tw)), Audit Committee Mailbox ([audit\\_committee@vis.com.tw](mailto:audit_committee@vis.com.tw)), and President's Mailbox ([vis\\_president@vis.com.tw](mailto:vis_president@vis.com.tw)). The mailboxes serve as channels for reporting violations of professional ethics, regulations, or misconducts, and the chairman as well as independent directors shall take necessary measures.

In 2020, all three of the above mailboxes did not receive any reports of non-ethical behaviors.

### Code of Conduct

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

### Code of Conduct Training and Promotion

Through diverse channels and formats, VIS continues to promote Professional Code of Conduct and Ethical Corporate Management Best Practice Principles to employees. VIS has also set up the "Professional Code of Conduct and Ethical Corporate Management Best Practice Principles" digital course, which was part of the required annual training of all employees, ensuring that all

VIS employees have agreed to and understood all related regulations; in 2020, the completion rate of the “Professional Code of Conduct and Ethical Corporate Management Best Practice Principles” digital course was 100%, and the goal in 2021 is to also achieve 100% completion rate.

### 3.3.2 Legal and Regulatory Compliance

#### Legal and Regulatory Compliance

VIS firmly believes that, for a company to achieve sustainability, it should not only maintain sound economic performances, but also value customer's opinions, satisfy customer's needs, and protect customer's privacy, in order to obtain recognition and long-term support of customers. Thus, VIS has established a Legal Department to deal with legal and IPR affairs and all the other departments are requested to pay close attention to any changes in policies, laws, and regulations that may potentially have a significant impact on VIS' operations, businesses, or finance activities. By offering the training courses, tracking amendments to laws and regulations, promoting the said policies and rules, providing channels for filing complaints, conducting legal compliance self-inspections and internal audits to corporate governance with emphasis on business ethics and legal compliance.

#### Establishment and Implementation of Policies and Rules

VIS has established policies and rules, according to relevant governmental policies, laws, and regulations on various business activities, including but not limited to, supply chain safety, information security, CSR, anti-sexual harassment, environmental protection, internal control, financial report compilation, document management and destruction, procurement of non-conflict minerals, ethics compliance, personal data protection and PIP policy,

and requested all employees to comply with such policies and rules while performing their job functions. To reinforce the implementation of legal and regulatory compliance and ensure VIS' compliance with relevant policies, laws, and regulations, VIS has also incorporated its internal working principles into its policies and rules.

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

In 2020, VIS did not have any litigations relating to Anti-Competition, Anti-Trust, and Anti- Monopoly laws and regulations.

#### Legal Compliance Training

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

## Laws and Regulations Tracking and Policy Promotion

VIS' Legal Department periodically reviews amendments to laws and regulations, and posts the amendment information on VIS' internal website for all departments to evaluate the possible risk and impact of such changes in laws and regulations on VIS, and revise or establish and their policies and rules accordingly. VIS also requests all departments to conduct legal compliance self-inspection periodically, which is conducting internal audits to reduce the impact and risks of regulatory violation on VIS.

## Reporting Regulatory Violation

In order to prevent the rights and interests of its customers and employees from being damaged by any regulatory violation, and to protect its corporate image, VIS offers multiple internal and external channels for its employees and third parties to report suspected regulatory violation. VIS adheres to the principle of confidentiality over the identity of such employees and third parties as well as the contents of the reported cases.

VIS did not have any material regulatory violation in 2020, which will also be the target for VIS in 2021.

### 3.3.3 Customer Privacy

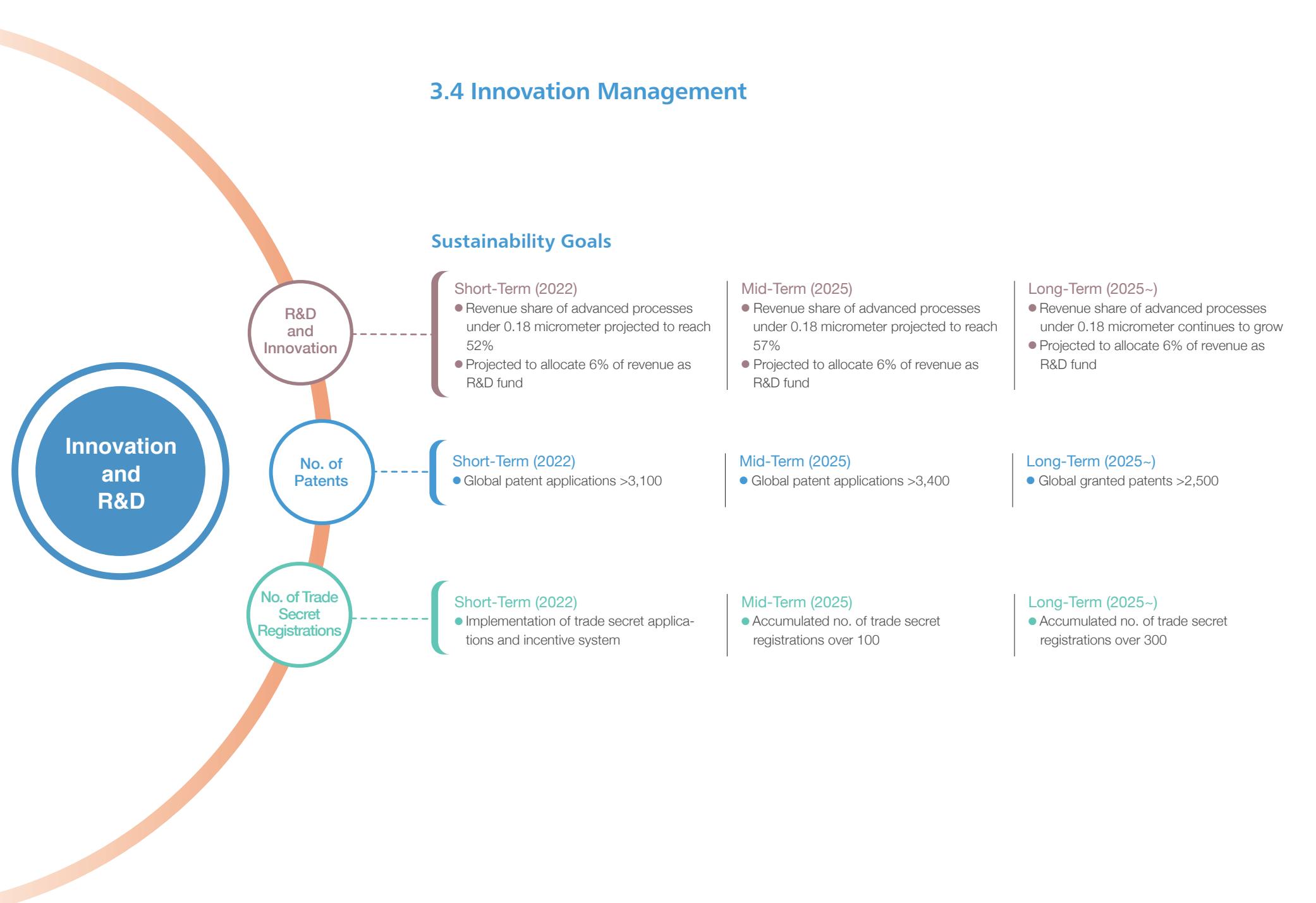
To ensure sufficient protection of customer privacy, VIS has formulated management guidelines in compliance with international information security standards and established corporate security prevention measures,

implementing the management and protection measures formulated in accordance with the "Proprietary Information Protection Policy (PIP Policy)," "Personal Data Protection Policy," and "Personal Data Protection and Management Rules." VIS continues to obtain ISO 27001 ISMS Certification, ensuring proper protection of customers' information assets to maintain competitive edge of the company and customers.

In 2020, it was necessary to enhance information and connection security with increased number of employees working from home due to the outbreak of COVID-19, and the company added a two-factor authentication mechanism that required an additional dynamic password when transmitting data relating to customers' designs, while also using B2B secure encrypted connection for enhanced protection; customers' technical documents were encrypted and saved in the IT system for access management.

VIS does not use personal data for secondary purposes.

No major violations or privacy infringements took place in 2020.



Adhering to the company's value-oriented core value, VIS develops More than Moore wafer fabrication technology; in addition to gradually shrinking process pattern dimension, VIS has developed a wide range of specialty technologies to help enhancing the performances of customers' products while saving costs. Thus, technological innovation and manufacturing innovation are the two innovative themes of VIS, coupled with our patent portfolio, Vis ensures proper protection of our innovative fruits, while also generating deserving commercial values.

### 3.4.1 Green Innovation

The top priority of VIS' green innovation is to assist customers in IC designs to ensure most effective utilization of power for various electronic products and meet the global trend of environmental protection, so that systems of various products, such as computer, communications, consumer, industrial, and car electronics, can meet the high-efficiency, high-performance, and energy-saving demands, or further extend the battery life of mobile devices.

VIS continues to refine a wide range of process technologies, including High Voltage, Ultra High Voltage, Bipolar CMOS DMOS (BCD), Silicon on Insulator (SOI), Discrete, Logic, Mixed-Signal, Analog, High Precision Analog, Embedded Memory, GaN, and MEMS & Sensor; all technology platforms have effectively helped customers to enhance competitiveness in the global market.



### Enhancing Driving Performance

In response to global warming resulted from climate change, all countries have proactively launched energy-saving actions, especially energy conservation on the demand end. The driving systems of motors consume significant power, accounting for approximately 50% of global electricity consumption; the industrial sector accounts for over 60% of power consumption by motor driving system. Thus, energy conservation of motor driving systems in the industrial sector represents great potentials. Enhanced motor efficiency can save more power, and help reduce CO2 emissions.

VIS' High Voltage and BCD components are used for control IC of BLCD motors; the enhanced efficiency of motor has limited contribution to the overall energy conservation, and it is necessary to also enhance the efficiency and performance of the driving system to achieve greater energy saving performance. BLDC motor, due to its highly reliable and energy saving properties, has become mainstream technology. Its output energy and efficiency can be increased from 60% – 70% up to over 90%; domestic appliances that consume the most electricity, such as TV, refrigerator, and laundry machine, are the earliest adopters of BLDC motors. Many countries have simultaneously devised regulations that require this type of motors be used for electronic products in response to energy saving demand.

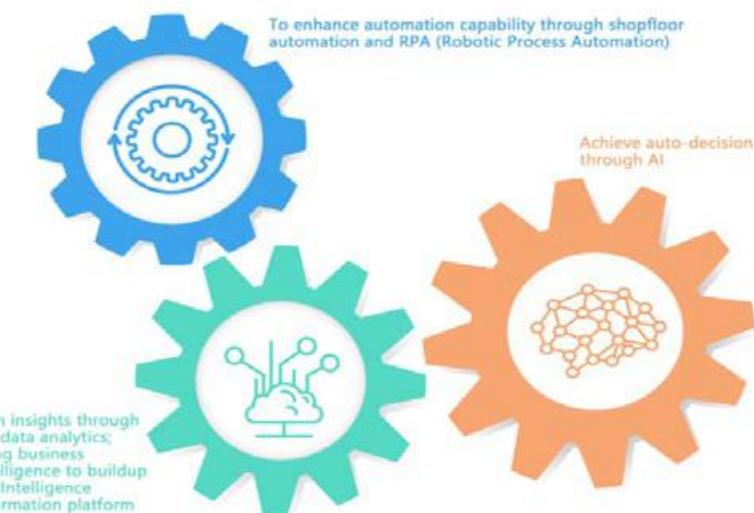
### Integrated Specialty Technology

For end products to have greater efficiency, lower energy consumption, and lighter power supply (ex: reduce the use of copper wire in system), the design of products must rely on highly integrated components of MCU, galvanic isolation, gate driver, and MOSFET/IGBT. The evolution of semiconductor processing technology has focused on the development of low-resistance components (such as BCD), and these specialty technologies are especially suitable for data center and cars, whose power supply framework is gradually transitioning from 12V to the power-saving framework of 48V high-voltage system. Through highly integrated components of specialty technology, it is possible to satisfy the demand of smaller end devices, while supporting a wider range of power; this will help customers to streamline the procedures originally required for PCB design and lower the cost of BOM, leading to effective utilization of resources by the entire industry. VIS has accumulated rich experience and manufacturing capability of the aforementioned electronic components, and has enhanced quality control in related

applications through cooperation with leading international companies to meet higher energy-saving standards.

### 3.4.2 Innovation Management Framework

As a foundry service provider, continued innovation of IC manufacturing technology is an important driver that enhances the company's core competitiveness. VIS has developed superior technologies and provided efficient foundry management and high-satisfactory customer integrated services based on its Industry 3.0 capability. Entering the Industry 4.0 era, VIS is developing its VIM<sup>2</sup>—VIS Intelligent Manufacturing & Intelligent Management—to further achieve optimal performances. VIM<sup>2</sup> is a data-driven, system-centric, and highly auto-decision based production, operation, and management system; it is remarkably productive, and widely applied in quality, cost, cycle-time, people productivity, tool utilization and customer satisfaction, comprehensively enhancing VIS' intelligent system.



Through the integration and coordinated operations of various innovative technologies, including highly automated production process, Robotic Process Automation (RPA), big data analytics, and AI, VIS achieves auto-decision based intelligent production. To achieve this goal faster, VIS enhances employees' abilities of future intelligent manufacturing and management through continued education and training and internal sharing and competition; also, through synergistic cooperation of industry, government and academia, VIS integrates and utilizes R&D energy to achieve mutual help and win-win situation.

In 2020, VIS actively promoted digital transition of all business units, achieving the following outcomes:

- In 2020, VIS replaced repetitive manual collection and compilation of data with RPA; all business units developed a total of over 300 RPA processes, saving approximately the manpower of 40 people in a year.
- In 2020, VIS used BI (business intelligence) tools to establish the Vanguard Intelligence Dashboard for management of semiconductor performances, unifying the company's definition and management method of performance indicators, and effectively converting the management's management wisdom into the company's operational competitiveness to save approximately the manpower of 25 to 30 people annually.
- From 2019 to 2020, VIS utilized big data and AI to develop intelligent manufacturing technology, which was applied to chiller energy conservation, saving approximately NT\$12 million/year in electricity fee.
- From 2019 to 2020, VIS applied AI technology for predicitive maintenance of pump, reducing the cost of pump overhaul by approximately NT\$1.8 million.



- In 2020, VIS introduced MR (mobile robot) POC to reduce manpower cost.
- In 2020, VIS introduced genetic algorithm POC to improve dispatching within fabs.
- In 2020, VIS entered industry-academia collaboration with National Chiao Tung University, introducing AI and optimization method to enhance efficiency of defect detection and delivery management.
- Through innovation of production procedure, VIS reduced cost by approximately NT\$297 million in 2020, among which the reduced costs of electricity/raw materials/maintenance and repair accounted for 0.52%, 0.46%, and 0.36% of COGS.

### 3.4.3 Strengthening Patent Portfolio

VIS continues to invest in innovative R&D and patent deployment to strengthen its intellectual assets to safeguard the commercial values of the company's innovations of technology and manufacturing capability.

VIS is a leading "specialty IC foundry service" provider, and continues to offer customers more competitive technology and services. VIS continues to develop diverse and specific process technology to expand application from core technology, including High Voltage, Ultra High Voltage, BCD, and SOI. VIS continues to invest in R&D of Embedded Flash, Fingerprint, and GaN processes, and carries out global patent deployment according to R&D strategy to ensure comprehensive protection of R&D results.

VIS has obtained over 2,000 patents in different countries. In recent years, the number of patents has been growing steadily. VIS ranked in the 61 place in the Top 100 Resident Patent Applications in 2020, and in the 41 place

in the Top 100 Resident Patent Grants in 2020, announced by the Taiwan Intellectual Property Office. Such achievements keep VIS obtaining leading position in specific technologies and gaining competitive advantage, also offering better and comprehensive protection of the interests of VIS and our customers.

Protection of patents and trade secrets are important aspects of the management strategy of modern enterprises, VIS offers employees online patent training course. To enhance the knowledge of R&D personnel on patent and trade secret infringement, Legal Department held two patent seminars for R&D personnel in 2020, which attracted nearly 100 participants respectively, helping employees to further gain concrete ideas on protection of patents and trade secrets, enhancing their awareness and knowledge, in order to effectively lower operational risks and increase competitiveness.

### 3.4.4 Cases of Innovation

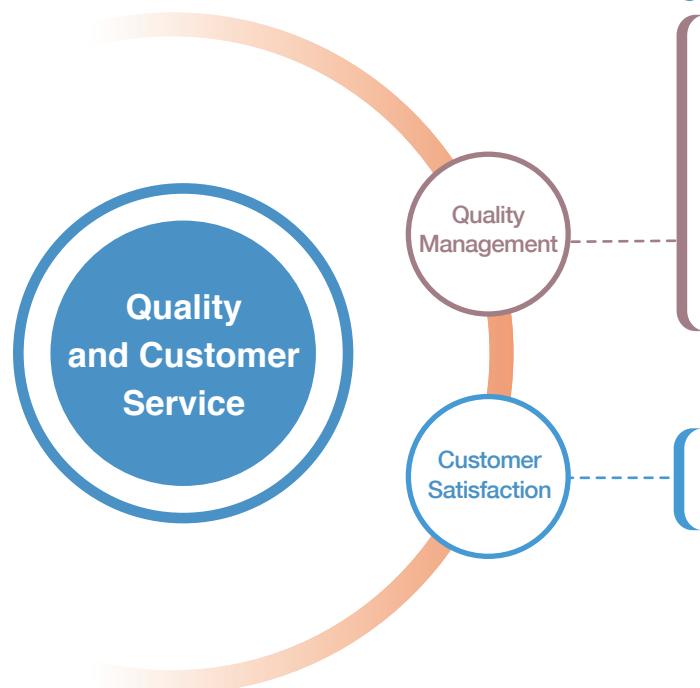
VIS has developed technological platforms including HV, BCD, UHV, and GaN, manifesting efficient utilization of energy and innovation of energy-saving technology. Through these platforms, the company is able to produce driver IC and power management IC, and wafers with lower energy consumption and higher efficiency. The revenue from HV and power management IC account for a significant share in the company's portfolio. The percentage of revenue of power management IC grew from 49% in 2017 to 56% in 2020, which indicates that the total energy saved by power management IC produced by VIS increased consistently.

Using its UHV technology developed over the years as the foundation, VIS has achieved significant results in the area of LED lighting. Now, VIS has applied this technology to motor. In addition to existing platforms that meet the demand of motor IC, VIS has also developed streamlined pre-gate driver circuit targeting singular pre-gate driver process; by providing an integrated IP that reduces latency resulted from metal wire connection, VIS offers integrated solution for the application of high-frequency GaN high-power components.

Using VIS's UHV products as an example, each IC can save 5W of energy, which converts to 125kW per one 8-inch wafer. VIS produces 23,000 wafers a year, and can save 5.2 billion kWh of power a year. Compared to the capacity of 10 billion kWh of Taiwan's nuclear power plants, VIS can save a nuclear power plant's one year generation in two years. VIS will continue to invest in UHV process technology, which will definitely help the lighting industry in the future in terms of energy saving and carbon reduction.

Moreover, it is expected that all types of traditional power electronic components can be replaced by wide bandgap components (SiC or GaN); since the technology of traditional silicon components has reached its limit in various areas of application, wide bandgap component technology is obviously the basis of future power electronics, and will give rise to innovative applications in different areas. VIS has also invested in the development of GaN technology, and hopes to satisfy customers' design

demand for new generation products in the future through GaN's properties of high frequency and high power density, such as long battery-life electrical vehicles, high-performance industrial motors, or DC conversion application for data center power system; the extremely low internal resistance of GaN can enhance the efficiency by 70% compared to silicon components of the same type, and at the moment, VIS' 650V GaN technology development has reach the stage of sample presentation and customer verification.



## 3.5 Quality and Customer Service

### Sustainability Goals

#### Short-Term (2022)

- Pass third-party audits for ISO 9001/IATF 16949: Quality Management Systems and IECQ QC 080000 Hazardous Substance Process Management every year
- Annual continual improvement benefits reach NT\$1.05 billion
- 100% product compliance with zero-hazardous substance related laws and regulations and customer requirements

#### Mid-Term (2025)

- Pass third-party audits for ISO 9001/IATF 16949: Quality Management Systems and IECQ QC 080000 Hazardous Substance Process Management every year
- Annual continual improvement benefits reach NT\$1.1 billion
- 100% product compliance with zero-hazardous substance related laws and regulations and customer requirements

#### Long-Term (2025~)

- Pass third-party audits for ISO 9001/IATF 16949: Quality Management Systems and IECQ QC 080000 Hazardous Substance Process Management every year
- Annual continual improvement benefits reach NT\$1.1 billion
- 100% product compliance with zero-hazardous substance related laws and regulations and customer requirements

#### Short-Term (2022)

- Customer satisfaction over 90%

#### Mid-Term (2025)

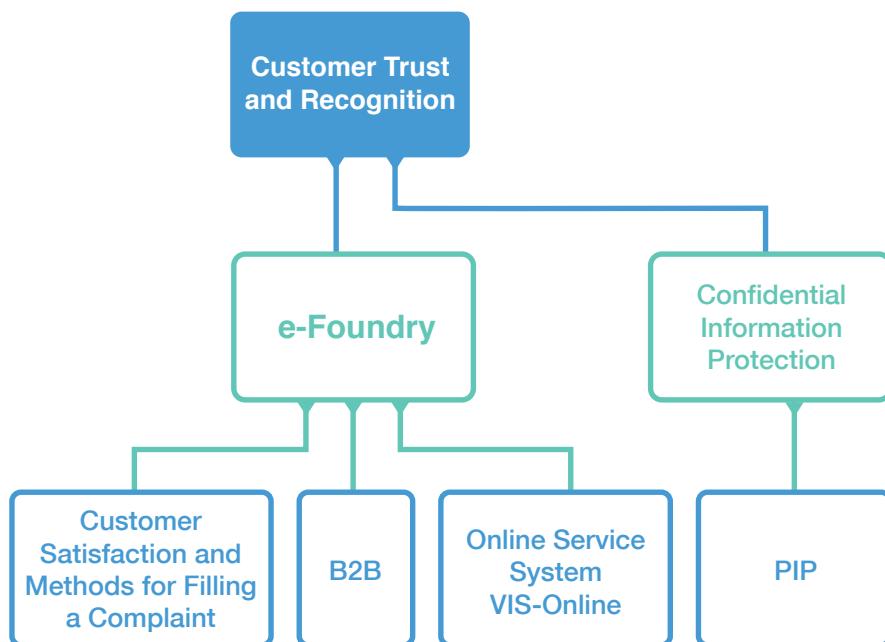
- Customer satisfaction over 90%

#### Long-Term (2025~)

- Customer satisfaction over 90%

## Customer Service

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

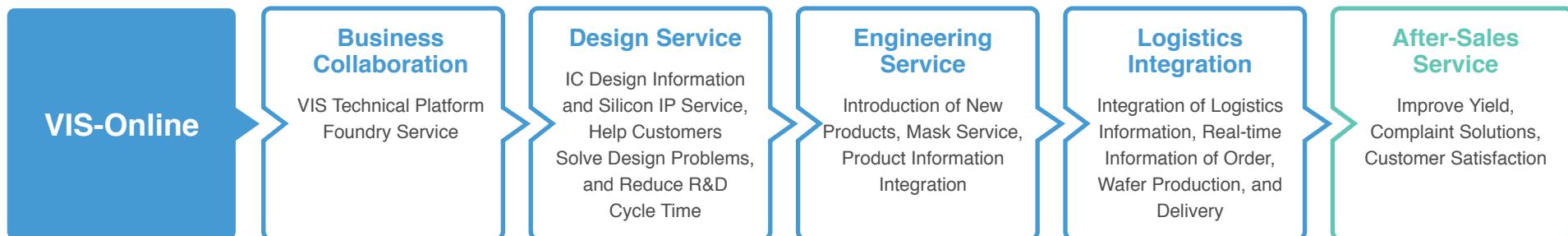


### e-Foundry

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

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

In 2020, all customers are satisfied with VIS' support to their requirement.

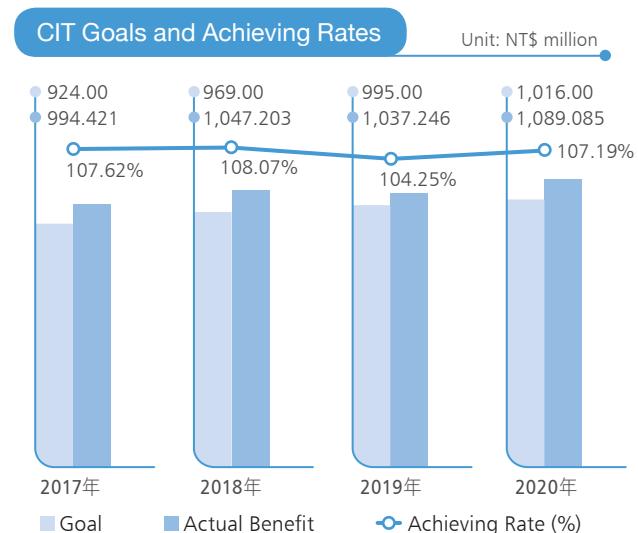


## Strengthen Quality Culture

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

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

Quality is the responsibility of all VIS employees, as well as the principle they adhere to when performing tasks and services. In addition to improving product quality, this principle also further raises customers' level of satisfaction.



**1.9**  
Nearly NT\$ **1.9** Billion  
of Benefit Generated by  
Quality Improvement Actions

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

In 2020, a total of 2,215 suggestions and 487 cases by CIT were proposed and implemented, generating a benefit as much as NT\$1,89 billion. Out of the 305 closed CIT cases, 33.1% (101 cases) were related to product quality improvement. In 2018, VIS launched Best Innovation Award, Teamwork Award, and Best Presentation Award to participating CIT's.

### Enhancing Quality Capability

VIS continues to optimize manufacturing capability, eliminate product flaws and refine manufacturing process control; Quality Reliability Assurance

Organization and Operations Organization cooperate to apply advanced statistical method and quality tools to build an immediate defense system to detect abnormalities in advance, preventing influences of quality incidents on customers.

In addition to meeting customers' demand, achieving customer satisfaction, and creating value for customers, product quality must also strive for environmental sustainability, to ensure ecological stability and sustainable development. To better comply with EU regulations and customers' demand for green products, VIS has introduced the IECQ QC 080000 Hazardous substance Process Management developed by International Electrotechnical Commission Quality Assessment System for Electronic Components, which has been integrated with Quality Management System ISO 9001, to establish hazardous substance management within manufacturing process R&D, raw material procurement, supply chain management, and manufacturing process control. VIS has also earned third-party certification, ensuring that the hazardous substance management system and quality management system continue to comply with the IECQ QC 080000 and ISO 9001 requirements. Also, all products produced by VIS are randomly sampled and tested by a third-party external lab, to ensure continued compliance with EU laws and regulations, and customer demands.

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

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



ISO 9001 Quality Management System  
Certification



IECQ QC 080000 Hazardous substance  
Process Management Certification

## Hazardous Substance Management

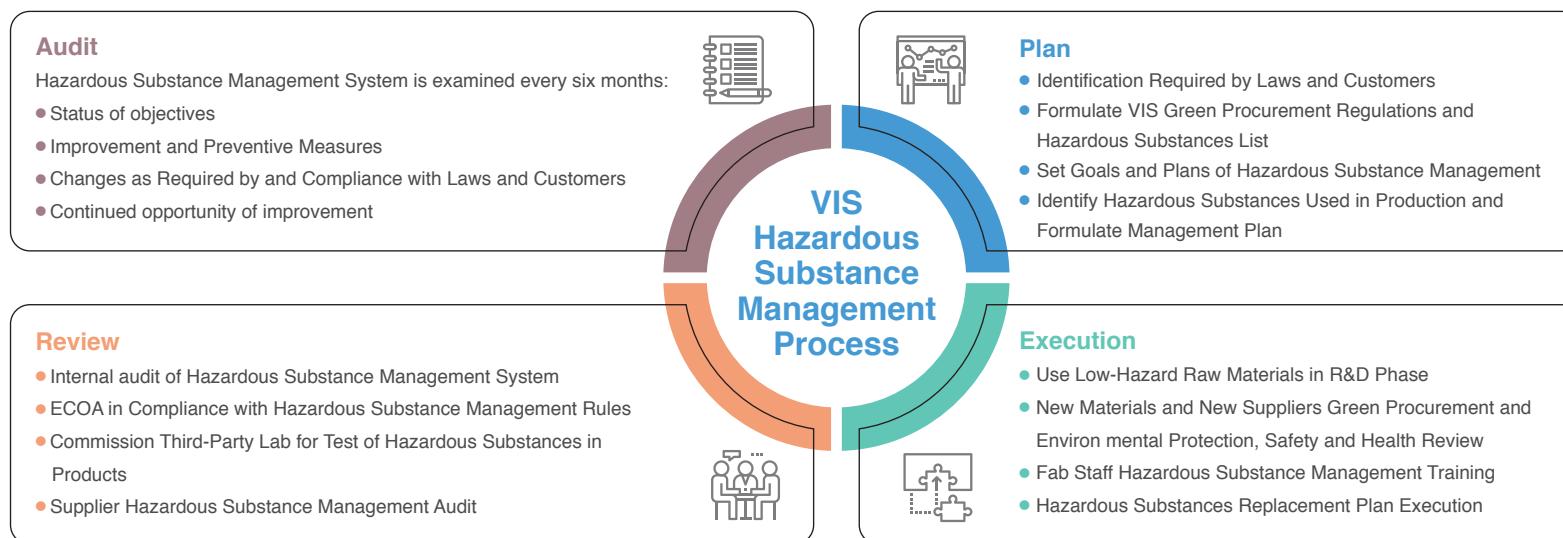
In accordance with international regulations on hazardous substance, VIS has established a hazardous substance management system (QC 080000) to ensure that wafers produced by us and subsequent outsourced processing meet the following international regulations as well as customer requirements for hazardous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

- EU & China Restriction of Hazardous Substances Directive (EU & China RoHS): 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. In 2020, VIS completed the replacement of 90% of PFOA and related substances, and is expected to complete the replacement of 100% by end of 2021.
  - Halogen-free requirement: all products of VIS comply with the halogen-free requirement.
  - EU Registration, Evaluation, Authorization, and Restriction of Chemicals (EU REACH): With respect to the list of hazardous substances specified by EU REACH and the list of Substances of Very High Concern (SVHC), it has been determined that all VIS products are compliant with these requirements.

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

## Vis Hazardous Substance Management Process



## Realizing Quality Application

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

## 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. In 2020, the coverage rate of the Annual Customer Satisfaction Survey was 100%, and the overall customer satisfaction was 92.8%, achieving the target of greater than 90%. Compared to 2019,

the customer satisfaction in 2020 dropped slightly, and VIS conducted further investigation and improvement according to customers' feedbacks, in aim to continually raise customer satisfaction and establish a win-win cooperative relationship.

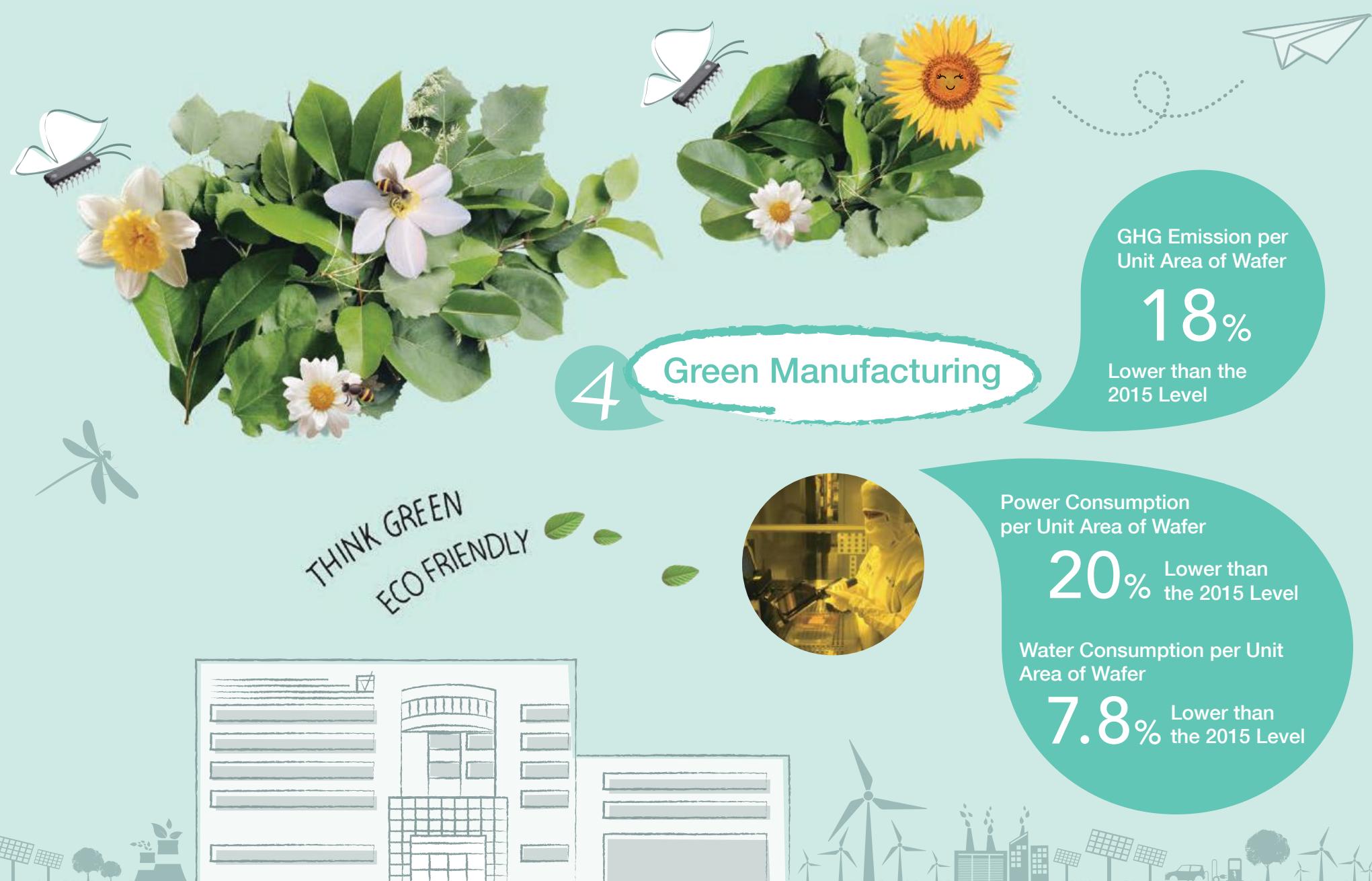
In addition to the Annual Customer Satisfaction Survey, VIS also conducts Quarterly Business Reviews with its key customers. Through face-to-face communication with our company executives, we are able to gain a better understanding of customer needs and their degree of satisfaction. At the same time,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

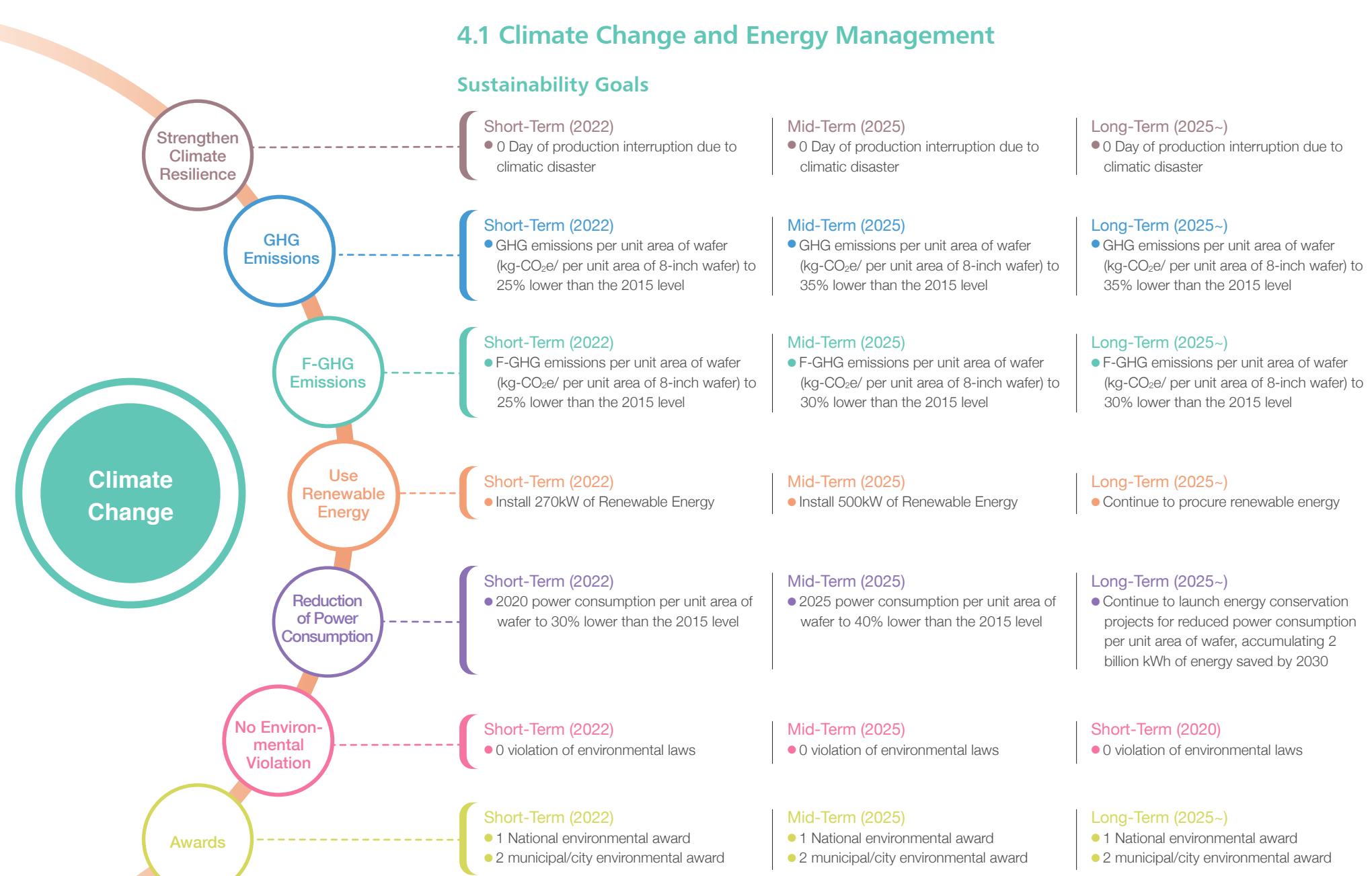
VIS has also established Guidelines for Handling Customer Complaints, which provides customers with transparent, effective channels to file complaints against our products and services. VIS handles all customer complaints in a fair and timely manner to protect the rights and interests of our customers. In 2020, all customer complaints received were properly handled according to the Guidelines for Handling Customer Complaints, and we have responded to each customer accordingly.

VIS has also established a product recall management mechanism, proactively notifying customers to recall products that have been proven to have reliability abnormalities, in order to ensure that the company's defected products will not end up in the hands of end consumers. Improvements will be made for incidents of product recall in accordance with the correction and prevention mechanism, and VIS also follows up and confirms whether the improvements are completed and effective. Through continued improvement of the quality system and daily monitoring, detecting, and preventive measures, VIS aims to discover abnormalities as early as possible to minimize the influences on customers resulted from quality abnormalities. There was no incident of product recall in 2020.



Note: The data includes all fabs in Taiwan and subsidiaries





## 4.1.1 Climate Change

Climate change is a major topic of discussion in the United Nations and among governments, societies, and corporate bodies worldwide. VIS introduced the framework of the Task Force on Climate-related Financial Disclosures Recommendation (TCFD) devised by the Financial Stability Board in 2019 to identify the risks and opportunities of the company brought by climate change.

### Climate Change Governance



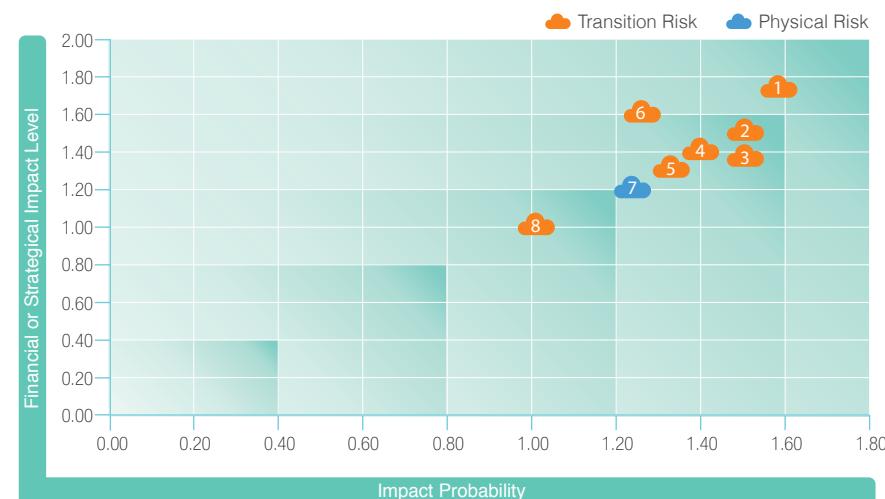
Level	VIS Actions
Governance	<ul style="list-style-type: none"> <li>Corporate Sustainability Committee conducts risk identification, and regularly reports to the Board of Directors' Meeting, where the Board and senior management review the outcomes of risk control and management and offer decisions and instructions.</li> <li>Corporate Sustainability Committee formulates policy and improvement goals based on the results of the Board's discussion, and assigns to different executive units for adjustment of operations; depending on different projects, the committee reports to the Board latest status on climate change topics, allowing the Board to understand and know the climate change risks faced by the company.</li> </ul>
Strategy	<ul style="list-style-type: none"> <li>Targeting the substantial risks of climate change to the company's assets, conduct simulation drills and education and training, establish broad and rigorous preventive measures and emergency response plan; when crisis or disaster occurs, immediately propose the most appropriate response and recovery plan to minimize the uncertainties and potential influences of the disaster.</li> <li>In terms of transition risks, follow the trend of energy diversification and comply with related regulations and targets set forth by the "Renewable Energy Development Act," investing significant cost to respond to the pressure of low-carbon economy brought by climate change. Related departments have started to plan procurement of renewable energy and green energy certificates.</li> </ul>
Risk Management	<ul style="list-style-type: none"> <li>According to the TCFD framework, VIS screens and selects topics of climate change risk based on reports of international institutions, analysis data of peers and research on related laws and regulations.</li> <li>Assess the risk values using the product of the financial or strategical impact level and probability for materiality ranking of risk topics.</li> </ul>
Indicators and Targets	<ul style="list-style-type: none"> <li>Reduction of GHS emissions</li> <li>Reduction of F-GHG emissions</li> <li>Strengthen climate resilience</li> <li>Use renewable energy</li> </ul>

## Climate Change Identification and Assessment

### VIS TCFD Analysis Flow



## Climate Risks Materiality Analysis Matrix



- 1. Impact on Company Image
- 2. Global Fuel Price Increase
- 3. Stakeholders' Increasing Level of Concern for Low-Carbon Products and Services
- 4. Policy/Regulatory Requirements
- 5. Cost of Innovative Technology Production
- 6. Supply Chain Breakage
- 7. Intensified Extreme Weather Events
- 8. Change in Customer Behavior

## Climate Change Risks and Opportunities Financial Impact Analysis and Responses

VIS has summed up 8 risk topics, and explained the impact and response of each risk. VIS also adopts the Well-Below 2°C (Note 1) and 1.5°C (Note 2) in BAU (business as usual) scenario (Note 3), NDC (nationally determined contributions), and SBT (science based targets), as the basis of scenario analysis, targeting some climate change risks for financial impacts assessment and continued management and improvement. The financial impact on VIS is approximately NT\$1.537 to 2.216 billion, and the management cost is about NT\$935 million.

Note 1: Well-Below 2°C is to hold the increase in the global average temperature to well below 2°C above pre-industrial levels.

Note 2: 1.5°C is to hold the increase in the global average temperature to within 1.5°C above pre-industrial levels.

Note 3: VIS' BAU assumptions are: historical annual average of 0.4% for the growth rate of Scope 1 emissions, 1.8% annually for the growth rate of power consumption; the change in electricity emission factor is assumed to reach the projected 2030 targets set by the government and continues to grow until renewable energy consumption reaches 50% and replaces coal-fired generation in 2050.

Ranking	Climate Risk	Impact Description	Financial Impact	Climate Opportunity	Measure	Corresponding Section
1	Impact on Company Image	Cannot satisfy stakeholder expectations resulting in negative impact on company reputation or image	Stakeholders willingness to invest lowers	Increase stakeholders' willingness of long-term investment, stabilize shareholder structure	<ul style="list-style-type: none"> <li>Satisfy stakeholders' demand of energy-saving products, engage in green design of products</li> <li>Targeting manufacturing process, enhance green management, obtaining ISO 50001 Energy Management System, ISO 14001 Environmental Management, and ISO 14064-1 GHG Inventory certifications</li> </ul>	Awards and Recognitions 4.1 Climate Change and Energy Management
2	Global Fuel Price Increase	Fluctuation of fuel price affects production and operation costs	Fuel price increases resulting in increased production and operation costs	Develop renewable energy in advance to facilitate corporate energy diversification	<ul style="list-style-type: none"> <li>Introduce renewable energy, plan installation of renewable energy facilities, such as solar PV system, and purchase RECs</li> </ul>	4.1 Climate Change and Energy Management
3	Stakeholders' Increasing Level of Concern for Low-Carbon Products and Services	Cannot satisfy stakeholders' needs for low-carbon products and services, resulting in lowered purchase intention	Development cost for low-carbon products and services increase	Offer low-carbon products and services to earn stakeholders' trust	<ul style="list-style-type: none"> <li>Utilize specific wafer manufacturing technology to develop low-carbon design products; enhance product efficiency to respond to market demands</li> <li>Currently mainly invest in areas of DC-AC and AC-DC power convertors, which have wide applications in computer, smartphone, TV, domestic appliances, and lighting devices</li> </ul>	3.4 Innovation Management
4	Policy/Regulatory Requirements	Greenhouse Gas Reduction and Management Act	If Taiwan implements "Carbon Emissions Cap and Penalty" or "Carbon Tax," financial expenses will increase.	Improve energy efficiency to lower operation cost	<ul style="list-style-type: none"> <li>We adopt ISO 50001 Energy Management System to examine the possibility of energy saving measures within fabs, and Proactively implement GHG emissions management measures. Achieving 20% GHG emissions reduction per unit area of wafer in 2020.</li> </ul>	4.1 Climate Change and Energy Management
		Renewable Energy Development Act	Install renewable energy power generation facilities resulting in increased operation cost	Develop renewable energy in advance to facilitate corporate energy diversification	<ul style="list-style-type: none"> <li>Introduce renewable energy, plan installation of renewable energy facilities, such as solar PV system, and purchase RECs</li> </ul>	4.1 Climate Change and Energy Management
5	Cost of Innovative Technology Production	Cannot develop innovative technology and consequently eliminated by the market	Cost of innovative technology production increase	Proactively develop innovative technology in response to industrial pulses and market growth demands	<ul style="list-style-type: none"> <li>Continue to increase investment in R&amp;D of products and manufacturing processes; develop power management related BCD and UHV technology</li> </ul>	3.4 Innovation Management
6	Supply Chain Breakage	Cannot deliver on time or keep the promise of stable supply to customers	Compensate customers' losses, resulting in increased operation cost	Proactively enhance stability of supply chain	<ul style="list-style-type: none"> <li>Implement supplier audit mechanism, enhance supplier quality and environmental management capacity</li> <li>Require suppliers to submit post-disaster impact and recovery plan to lower the risk of supply chain breakage</li> </ul>	5. Responsible Supply Chain

Ranking	Climate Risk	Impact Description	Financial Impact	Climate Opportunity	Measure	Corresponding Section
7	Intensified Extreme Weather Events	Short-term physical risks	Shortage of water, as the result of climate change, is growing more serious. VIS has conducted analysis on operational and financial impacts in various stages of water rationing.	Enhance production line's resilience of natural disasters	<ul style="list-style-type: none"> <li>To avoid the situation of scarce water resource, VIS strives to implement water-saving measures and enhance water resource efficiency.</li> <li>Implement wastewater recovery in fabs to reduce the company's reliance on water resource.</li> <li>To mitigate the impact of drought on production, VIS formulated the "VIS water vehicle transportation contingency response plan during water shortages," initiating related responses according to water situation, reducing the impact on capacity.</li> </ul>	4.2 Water Resource Management
		Long-term physical risks	Due to change in precipitation mode and long-term climate change, when the semiconductor industry, which uses massive amount of water, faces drought, there is the risk of production shutdown, resulting in reduced revenue.	Proactively raising the water recovery rate and formulate emergency response mechanism	<ul style="list-style-type: none"> <li>Conducted 500-year-cycle precipitation analysis on the potential of floods at production sites, and installed 138 floodgates according to the results of simulation. Combined with "Flood Prevention and Rescue Plan Implementation Regulations, VIS manages the risk of flood in fabs.</li> <li>Formulate crisis management procedure, establish disaster prevention and response system, including employee flood drill, typhoon prevention measures, establishment of river level monitoring system, and installation of floodgates.</li> </ul>	4.2 Water Resource Management
8	Change in Consumer Behavior	Consumers aware of effects of climate change, and refuse to purchase products and services that are not energy-saving or low-carbon	Consumers' willingness to buy lowers, resulting in decreased revenue	Offer low-carbon products and services to earn stakeholders' trust	<ul style="list-style-type: none"> <li>Utilize specific wafer manufacturing technology to develop low-carbon design products; enhance product efficiency to respond to market demands</li> </ul>	3.4 Innovation Management

## Scenario Analysis and Financial Impacts of Physical/Transition Risks

Taiwan has high mountains with steep slopes and uneven precipitation, and therefore is prone to experience seasonal and regional water shortage. In recent years, torrential rain, flood, and drought, have become growingly serious due to climate change, and to cope with the impacts of flood and water shortage, VIS has completed risk factor identification, and planned in advance response mechanism and related measures to lower operational risks.

The identification of flood risk due to torrential rain was based on the potential flood analysis using 500-year rainfall cycle; floodgates were then designed based on the analysis results to prevent floods. The resulting financial impacts include: (1) Hardware investment for the installation of floodgates; (2) Annual maintenance expenses for software and hardware of flood prevention, such as personnel flood prevention and response training, flood and typhoon prevention preparation, and monitoring of retaining wall for collapse prevention; (3) Flood and typhoon prevention insurance expense of approximately NT\$20 to 30

million. As for other remaining risks, VIS has also planned to purchase related insurances for risk transfer.

Climate change has led to severe water shortage. VIS has targeted different stages of water rationing to complete analysis on operational influences and financial impacts. The results of financial impact analysis are: when water rationing is at 10%, there will be an additional NT\$500,000 of daily expense; when water rationing is at 20%, the additional daily expense reaches NT\$1 million; when water rationing is at 30%, the additional daily expense is NT\$2 million. In general, VIS' response strategy to water rationing and water shortage crisis includes: (1) Implementation of everyday water-saving measures to enhance the efficiency of water consumption; (2) During water rationing, water vehicles will be utilized to transport water to make up for the insufficient production water.

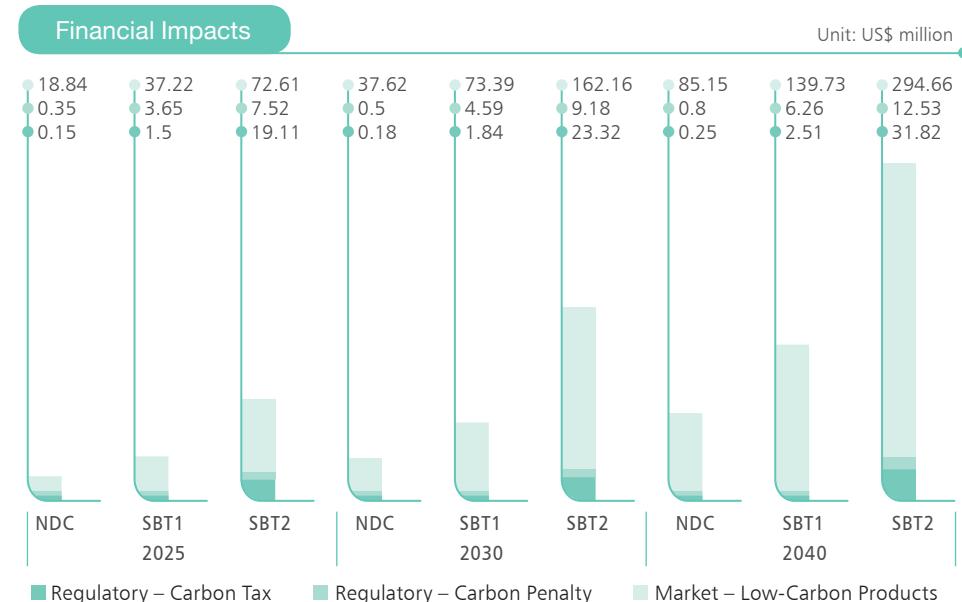
## Scenario Analysis and Financial Impacts of Transition Risks

Using current climate change policy and strategy, as well as operational situation, as the baseline scenario, VIS evaluates the financial impacts on the company of two transition risk factors — “Carbon Tax” and “Carbon Emissions Cap and Penalty;” among which, the growth rate of Scope 1 emissions is assumed to be the historical average of 0.4%, whereas the growth rate of power consumption is assumed to be 1.8%; the change in electricity emission factor is assumed to reach the projected 2030 targets set by the government and continues to grow until renewable energy consumption reaches 50% and replaces coal-fired generation in 2050.

The results show that, with BAU, financial impacts resulted from market risk will be the most significant under the NDC, SBT1, and SBT2 scenarios in 2025,

2030, and 2040, followed by carbon tax. In terms of impact level, SBT2 will be the highest, whereas NDC is the lowest; under all three scenarios, financial impacts increase as time progresses.

Transition Risk Factor	Description
Carbon Tax	Carbon tax is the tax imposed on companies based on unit carbon emissions in different scenarios. Because the tax rates differ significantly, and therefore this risk comes with high uncertainty. This assessment mainly considers the carbon tax in three scenarios: 1. NDC: USD1/ton 2. SBT1 (Well-below 2°C): USD10/ton 3. SBT2 (1.5°C): USD127/ton
Carbon Emissions Cap and Penalty	Excess emissions will be penalized (NTD/kg CO <sub>2</sub> e), and the analysis is conducted based on different cap levels. The carbon emissions caps are designed based on three scenarios: 1. NDC 2. SBT1 (Well-below 2°C) 3. SBT2 (1.5°C)



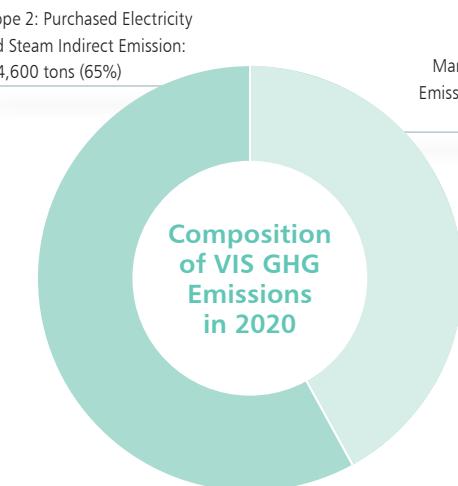
## GHG Inventories and Verification

Reducing GHG emissions is a key method for mitigating global warming and climate change, and conducting an inventory provides supporting data for reduction. An accurate inventory allows us to set priorities and reduction goals, raise the efficiency of the reduction process, and confirm reduction results.

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

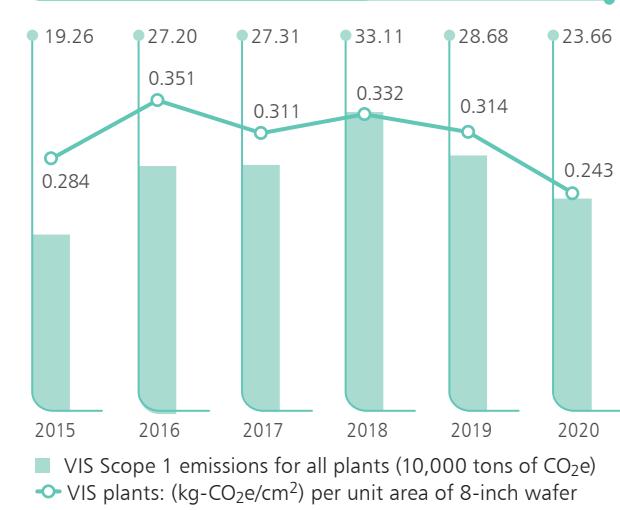
VIS conducts its GHG inventories by following ISO/CNS 14064-1 standards, the Executive Yuan Environmental Protection Administration (EPA) Greenhouse Gas Validation Guidelines (Note), "Greenhouse Gas Emission Inventory Registration Guidelines," and the WBCSD/WRI GHG Protocol, with 100% control over operation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

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

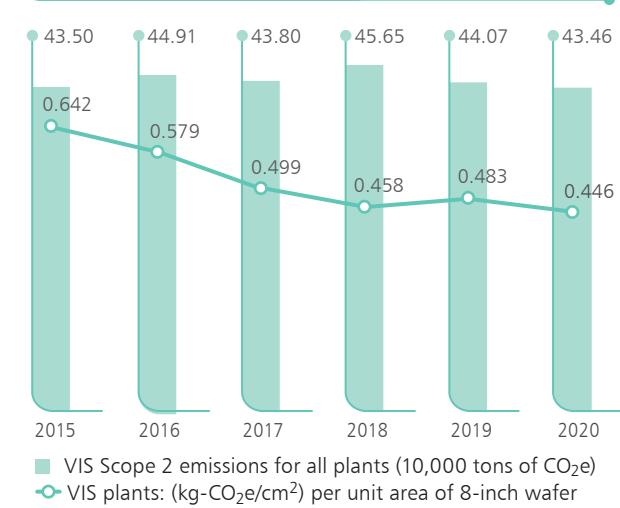


Note: For the 2020 GHG inventory, GHG emissions were calculated according to the Fourth Assessment Report (AR4) by the IPCC (Intergovernmental Panel on Climate Change); before (including) 2015, GHG inventory calculated GHG emissions according to AR2.

VIS Scope 1 GHG Emissions



VIS Scope 2 GHG Emissions



Direct GHG Emissions (Scope 1) (Unit: Ton CO <sub>2</sub> e)	DGHG	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020
	Total DGHG Emissions (Scope 1)	273,142	331,108	286,831	Taiwan: 233,996
					Singapore: 43,439 Third-party certification in June
Indirect GHG Emissions (Scope 2) (Unit: Ton CO <sub>2</sub> e)	IGHG (Scope 2)	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020
	Purchased Electricity and Steam Indirect Emissions	438,022	456,471	440,694	Taiwan: 431,365
					Singapore: 73,842 Third-party certification in June
Perfluorocarbon Emissions (Unit: Kg/Ton of Product)	Direct PFC Emissions	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020
	Direct PFC Emissions	2,019	2,273	2,290	Taiwan: 2,125 (Singapore: Third-party certification in June)

VIS referenced carbon footprint calculation to project the following Scope 3 GHG emissions, and passed SGS third- party verification, identifying other indirect GHG emissions other than Scope 1 and Scope 2. The following chart is the result of 2020 Scope 3 GHG emissions inventory; 2020 inventory verification has been completed in May 2021.

Category	Description	2020 Scope 3 GHG Emissions (tCO <sub>2</sub> e)
Purchased goods and services	Carbon emissions generated by main materials and auxiliary materials in the process procured for the production of 8-inch wafer, not including outsources services.	158,194
Fuel- and energy-related activities (not included in Scope 1 and 2)	Fuel and energy used in fabs. Calculated based on lifecycles with results of Scope 1 and 2 deducted.	77,241
Upstream transportation and distribution	Main materials and auxiliary materials procured for the production of 8-inch wafer. The carbon emission generated through the ton-kilometers as materials are transported from suppliers to the fabs (including air, land, and sea).	1,291
Waste generated in operations	Carbon emission generated by the wastes through the production process, including transportation and processing of wastes.	2,959
Business travel	Carbon emission resulted from domestic and international business trips by employees. Calculated with the round-trip distances via land and air to domestic or international destinations from Fab 1.	70
Employee commuting	Calculated using passenger-kilometer from local civic centers of employees' household registrations to each fab.	9,440
Downstream transportation and distribution	First-tier point of sales of 8-inch wafers	508
Total		249,704

## GHG Reduction

The Company has devoted great efforts in the reduction of GHG. In 2005, VIS signed the "Memorandum of Cooperation for the Reduction of Perfluorinated Compound Emissions" with TSIA and the EPA of Executive Yuan. To reduce our Scope 2 GHG emissions, VIS will continue to promote various energy-saving plans (Please refer to "Energy Management") to reduce GHG emissions per unit area of wafer. VIS has achieved the 2020 GHG reduction goal in Taiwan of reducing GHG emissions per unit area of wafer to 18% lower than the 2015 level.

VIS acquired GLOBALFOUNDRIES' Fab 3E 8-inch fab in Singapore on January 1, 2020 (now Fab VS1), the future GHG reduction goal in 2025 is 35% lower than the 2015 level of GHG emissions per unit area of wafer.

## 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.

### 4.1.2 Energy Management

#### Energy Policy

VIS is a specialty foundry service provider specializing in IC design, R&D, manufacturing and sales. To ensure corporate sustainability and perform the duties of a good corporate citizen, VIS involves all employees in the operation of energy management system, emphasizing risk management, green production, and energy shock, to achieve the goals of meeting regulatory requirements, answering customers' demands, and enhancing power usage effectiveness. To achieve these goals, VIS is committed to continue implementing and improving the following:

1. Compliance with energy regulations – comply with related laws and regulations;
2. Effective Utilization of energy – treasure and properly utilize resources, such as electricity and natural gas;
3. Realization of management by objectives – Set energy performance indicators and adopt PDCA model for management;
4. Continued Improvement of Performances – Inspect and review regularly to continue improving PUE;
5. Support for Green Procurement – Support procurement of energy-saving facilities or products;
6. Promotion of Internal and External Communications – Establish internal/external communication channels to facilitate information transmission;
7. Provide proper resources to achieve objectives and targets;
8. Strive for energy conservation and sustainability.

VIS continues its efforts in lowering carbon emissions. Between 2015 and 2020, VIS' power consumption per unit area of wafer was reduced from 1.01 kWh/cm<sup>2</sup> to 0.8 kWh/cm<sup>2</sup>, which was a 20% reduction. Starting from 2020, this power consumption per unit area of wafer includes Fab VS1 in Singapore; excluding the power consumption of Fab VS1, the power consumption per unit area of wafer dropped from 1.01 kWh/cm<sup>2</sup> to 0.7 kWh/cm<sup>2</sup>, which was approximately 30% reduction.

VIS continues to conserve energy within its public facilities. In response to the government's energy-saving policy, VIS has invested in replacement of large energy-conserving equipment, investing NT\$110.64 million and saving 18.17 million kWh of power in 2020. A total of 64 energy conservation projects were proposed in four major categories of public facilities/air conditioning/adjustment of process parameters/replacement of energy-saving auxiliary equipment of machines, among which 59 improvements were made. All three fabs obtained ISO 50001: 2011 certification in 2017, and transitioned to ISO 50001: 2018 certification in 2020; all three fabs continue to pass SGS third-party certification. The systematic management processes and energy utilization rate comparison across fabs of ISO 50001: 2018 have enabled VIS to identify new opportunities for improving our energy-saving capabilities, thus enhancing the company's energy conservation efforts.

Through continuous implementation of multiple energy-conservation schemes, VIS invests in more energy-conserving measures and responds to national energy conservation goals. According to the "1% Energy-Saving Target Formulated by Energy Users" promulgated by Ministry of Economic Affairs on August 1, 2014, VIS has achieved annual power-saving rate above 1% in the past five consecutive years.

Year	Annual Consumption (kWh) (A)	Energy Saved (Note 1) (kWh) (B)	Power-saving Rate % (Note 2) (C)
2015	665,151,616	34,807,041	5.0%
2016	669,187,185	13,398,931	2.0%
2017	666,279,086	12,154,982	1.8%
2018	676,454,309	21,135,294	3.0%
2019	667,686,839	18,603,787	2.7%
2020	855,037,203	18,171,696	2.1%

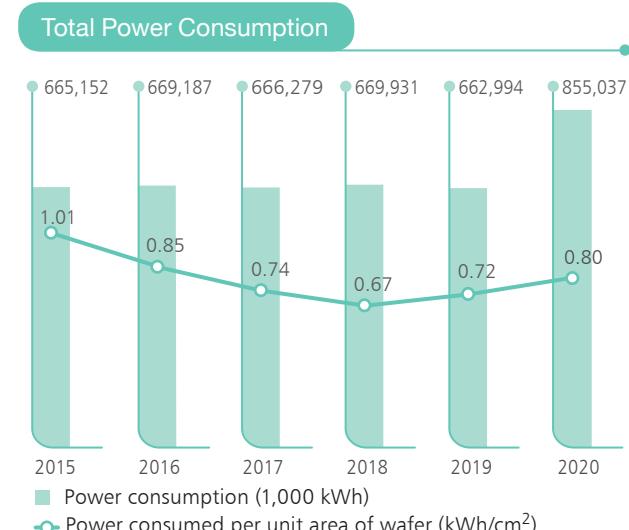
Note 1: Energy saved is the sum of all energy-saving results from the year's energy conservation measures.

Note 2: Power-saving Rate  $C=B/(A+B)\times 100\%$

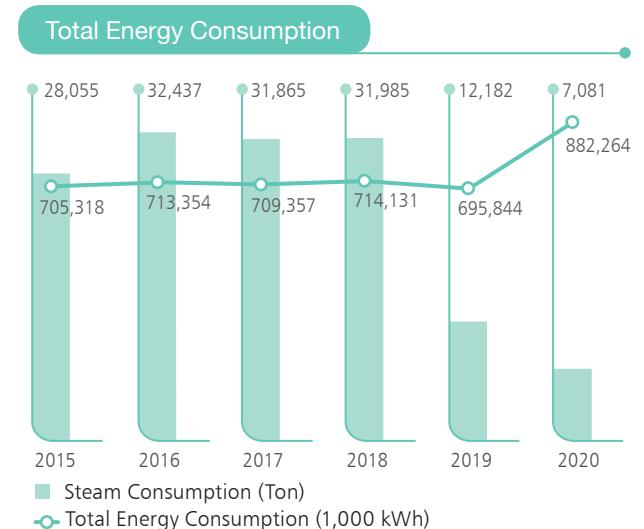
Note 3: 2020 statistical boundary for energy consumption also includes Fab VS1.

## Renewable Energy

To comply with the government's promotion of utilization of renewable energy through Renewable Energy Development Act, enhance energy diversity, improve energy mix, lower GHG emissions, and improve environmental quality, VIS proactively respond to the government's policy of developing renewable energy, and strives to use clean and pollution-free green energy, demonstrating the spirit of generating power for own use. From 2021 to 2022, VIS will install 270 kW of solar PV system annually, and continue to purchase renewable energy and renewable energy generation facilities. VIS projects to reach 500 kW in renewable energy capacity by 2025, generating 550,000 kWh of electricity every year.

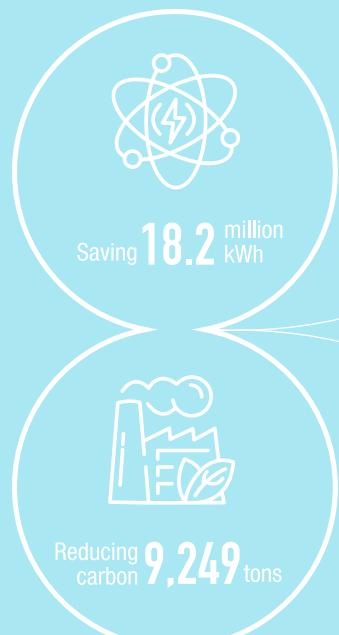


Note: VIS' 2020 statistical boundary for energy consumption also includes Fab VS1, and there the total consumption increased.



Note 1: Total Energy Consumption includes procured steam consumption  
Note 2: Conversion unit is 1m³ of natural gas=10.5 kWh; 1 kWh=3,600 KJ  
Note 3: VIS' 2020 statistical boundary for energy consumption also includes Fab VS1, and there the total consumption increased.

# 2020 Primary Energy Conservation Measures and Their Effectiveness 59 measures



**Energy Conservation of Utility Equipment**

**Energy Conservation of Production Facilities**



**Unit Replacement**

- Replaced Accessory Equipment of Energy-Saving Machines 19 measures
- Saving 8.1 million kWh  
Reducing carbon 4,137 tons



**Enhance Facilities Energy Efficiency**

- Adjustment and Correction of Facility Parameters
- 16 measures  
Saving 2.7 million kWh  
Reducing carbon 1,389 tons

Note: CO<sub>2</sub> equivalent was 0.509 Kg/kWh.

## Energy Conservation Measures

### 2020 Primary Energy Conservation Measures and Their Effectiveness

The most efficient means of conserving energy and reducing carbon emission is by lowering power consumption. Through real-time equipment management, while maintaining proper usage/quality and normal equipment operations, optimal operating conditions can be achieved, which shortens power-usage time and reduces power consumption. Moreover, equipment efficiency can be increased by using high efficiency equipment (lighting, transformers, motors, air compressors, etc.), and by installing variable-frequency devices in electrical equipment to reduce energy consumption and improve the power factor. VIS' energy-conservation measures in 2020 resulted in 18.17 million kWh in reduced electricity consumption, which was an energy conservation rate of 2.1% and translated to NT\$43.22 million in savings as estimated internally.

## Energy Management Plans

VIS' energy management plans are shown in the table below. VIS has set the 2025 target of reducing energy per unit area of water to 40% lower than the level of 2015. By 2020, VIS has reduced energy per unit area of wafer to 20% lower than the level of 2015.

### The Energy Management Plans to be Implemented by VIS from 2021 to 2023

Project Name	Implementation Year	Project Name	Implementation Year
F2 CDA Waste Heat Recovery, HOT DI Energy Conservation	2021	F2 UPW Pump INV Installation	2022
F1/F2/F3 High-Efficiency UPS Replacement – Phase 2	2021	F1/F3 CDA Variable-Frequency Controller Replacement	2022
F1/F2/F3 Variable-Frequency Dry Pump Replacement	2021	F1/F2/F3 Water Tank Energy-Saving Fan Installation	2022
F2 2D Office LED Lighting Replacement	2021	F3 Chilled Water System Divided into Two Temperatures (6°C/14°C)	2022
F1/F2/F3 Elevator Power Recovery	2021	F1/F2/F3 High-Efficiency Motor Replacement	2022
F1/F2/F3 C/R Replacement of Fluorescent Light (White/Yellow) with LED Lighting	2021	F1/F3 HV Motor Replaced with Variable-Frequency Motor	2023
F2 Chiller Cooling Water Pump Common Pipe	2021	F1/F2F/3 UPS Replacement of Energy-Saving Machine-Phase II	2023
F2/F3 Smart Factory – Power Saving – Chiller AI Energy Conservation	2021	F1/F2F/3 Rotating Equipment Motor Replaced with IE3 High-Efficiency Energy-Saving Motor – Phase I	2023
F1/F3 Smart Factory – Smart Meter + Energy Management System – Phase I	2021	F1/F2F/3 Green Dry Pump replacement-Phase V	2023
F1/F2/F3 UPW System Transmission Pump Energy Conservation	2022	F1/F2/F3 High-Efficiency Chiller Replacement	2023

## Data of Energy Conservation

	FY 2017	FY 2018	FY 2019	FY 2020
Energy Conservation	29,780	46,700	41,110	43,220
Data Coverage	100%	100%	100%	100%

Unit: NT\$ thousand

## Total Energy Consumption

	FY 2017	FY 2018	FY 2019	FY 2020
Total Energy Consumption				
(A) Non-Renewable Fuels (Procured or Used)	18,624	18,871	18,808	21,792
(B) Non-Renewable Electricity (Procured)	666,279	669,931	667,687	855,037
(C) Other Procured Energy (Steam)	24,455	25,330	9,349	5,434
(D) Total Procured or Generated Renewable Energy	0	0	0	0
(E) Total Sold Renewable Energy	0	0	0	0

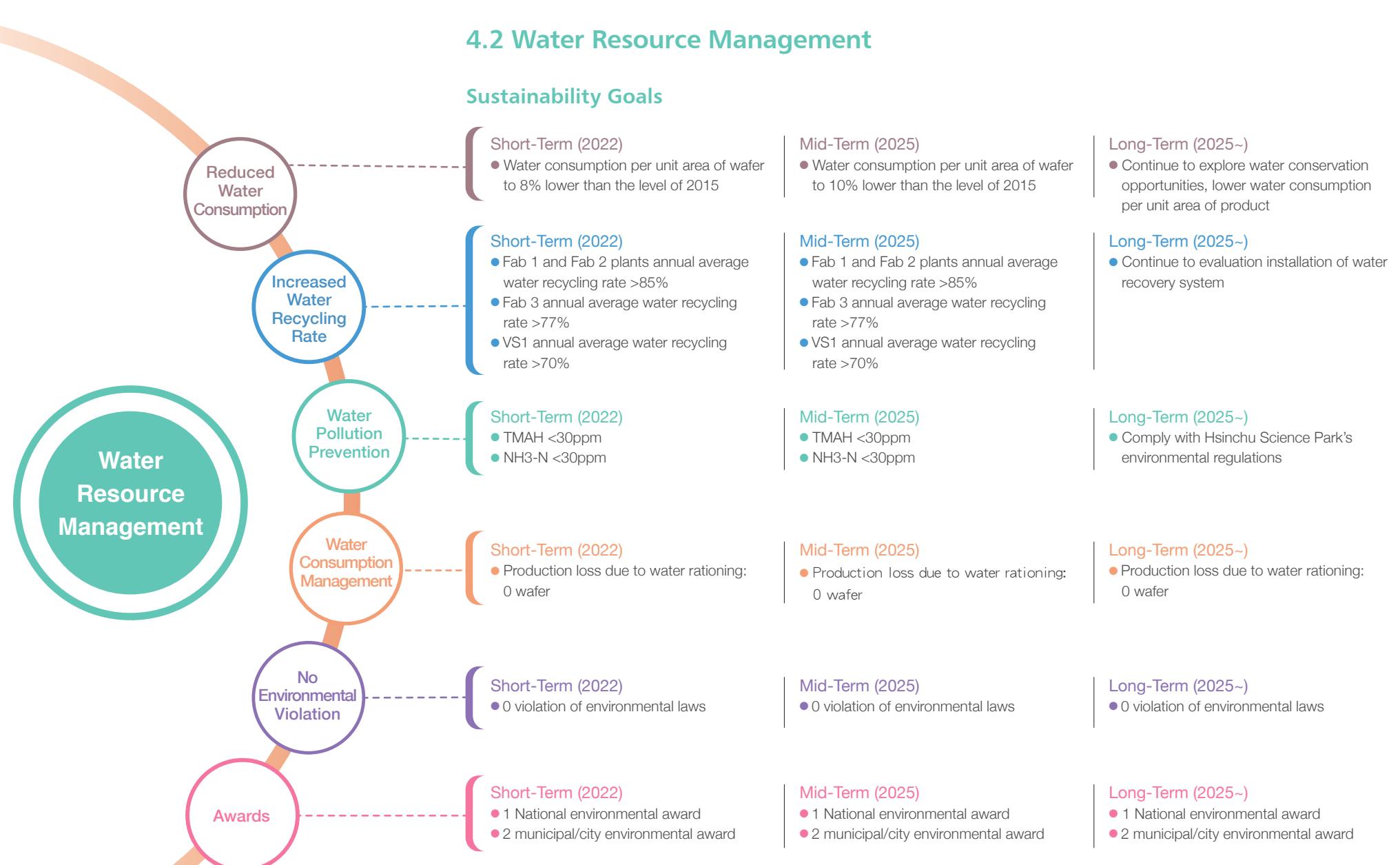
Unit: MWh

## Total Energy Consumption

	FY 2017	FY 2018	FY 2019	FY 2020
Total Non-Renewable Consumption(A+B+C-E )(Unit: MWh)	709,357	714,131	695,844	882,264
Total Amount of Energy Procurement (Unit: NT\$ thousand)	1,471,654	1,514,022	1,507,383	2,024,625
Data Coverage	100%	100%	100%	100%

## Carbon Footprint

In recent years, VIS has proactively promoted carbon-reduction projects, and implemented carbon footprint inventory since 2016, checking if it has achieved its targets. VIS conducts product carbon footprint verification biennially, and the most recent one was done in August 2020; 2020 data will be verified in 2022.



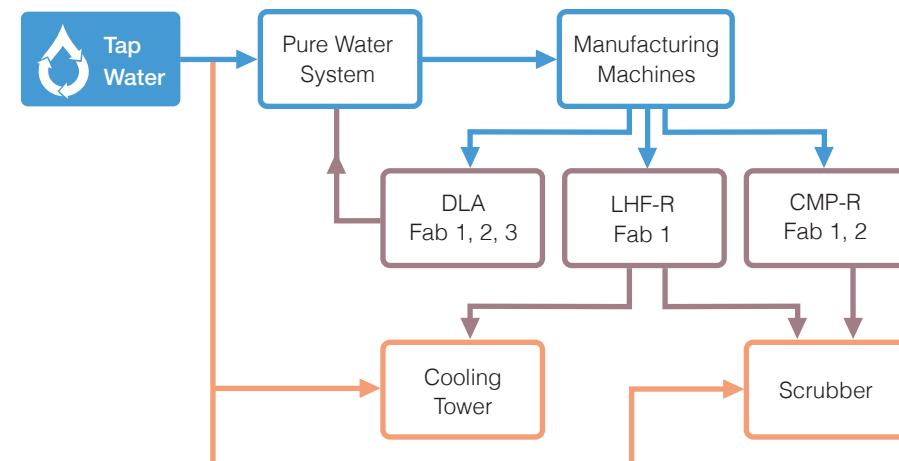
## Water Information

Located within the Hsinchu Science Park, the VIS' 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.

VIS maximizes the reuse of water discharged from its manufacturing processes. Based on the characteristics of the discharged water, VIS has established over 10 types of water discharge pipes according to water quality and user demands. Recycling systems are used to reduce wastewater discharge and ease the burden on the environment, as well as prevent the use of tap water as refills, thereby conserve water resources.

## Schematic Diagram of Water Recycling



## Water Recycling Management

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 2020, VIS' Fab 1 and Fab 2 plants recorded an average water recycling rate of 86.7% and 85.3% (Note), respectively, which were both higher than the science park's requirement of 85%. Fab 3 is located in Taoyuan and outside the science park; however, the water recycling goal for Fab 3 was 75%, and Fab 3 achieved 77.1% water recycling rate in 2020. After acquiring Fab VS1 in

Note: Water recycling rates were calculated based on each fab's water balance chart, and therefore were not converted into the water recycling rate of the entire company.

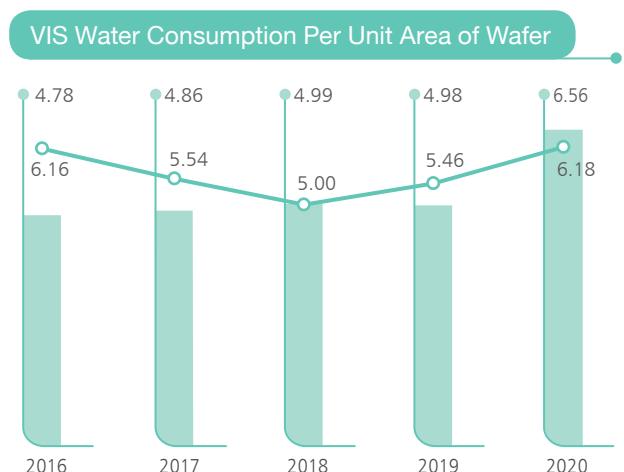
Singapore in 2020, VIS proactively planned water-saving measures and equipment to enhance the water recycling rate, which reached 59.8% in 2020.

With regard to the volumes of water recycled from the production process between 2020 and 2015, Fab 1 increased by approximately 14.3%, Fab 2 increased by around 6.3%, and Fab 3 increased significantly by 127.9%, whereas Fab VS1 is currently implementing improvement of water recycling. From 2015 to 2020, VIS has accumulated nearly 50 million metric tons of recycled water.

Year	2016	2017	2018	2019	2020
Fab 1 average water recycling rate (%)	86.8	86.7	86.4	86.4	86.7
Fab 1 amount of recycled water (million metric tons)	2.69	2.71	2.77	2.76	2.87
Fab 2 average water recycling rate (%)	85.5	85.4	85.3	85.5	85.3
Fab 2 amount of recycled water (million metric tons)	3.55	3.61	3.66	3.71	3.70
Fab 3 average water recycling rate (%)	71.8	76.7	77.0	77.0	77.1
Fab 3 amount of recycled water (million metric tons)	1.72	1.98	2.01	1.97	1.96
Fab VS1 average water recycling rate (%)					59.8
Fab VS1 amount of recycled water (million metric tons)					1.30
Total amount of recycled water (million metric tons/year)	7.96	8.31	8.43	8.45	9.83

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

VIS has set the goal of reducing water consumption per unit area of wafer to 8% lower than the 2015 level by 2021, which is the company's water-saving target. With the acquisitions of Fab 3 in 2015 and Fab VS1 in 2020, VIS carried out production water recycling improvement projects and therefore, the water consumption per unit area of wafer has dropped from 6.7L in 2015 to 6.18L in 2020, achieving approximately a 7.8% reduction of water consumption.



■ Total water consumption (million tons/year)  
● Water consumption per unit area of wafer (liter/square centimeter)

Note: Water consumption per unit area of wafer increased due to the acquisition of Fab VS1 in 2020; VIS will devise water-saving measures to lower the water consumption per unit area of wafer.

The amounts of tap water consumed VIS in 2019 and 2020 changed with the acquisition of Fab VS1, capacity and recycling rate of water discharged through the process. The amount of tap water consumed by VIS was 4.98 million and 6.56 million metric tons in 2019 and 2020 respectively.

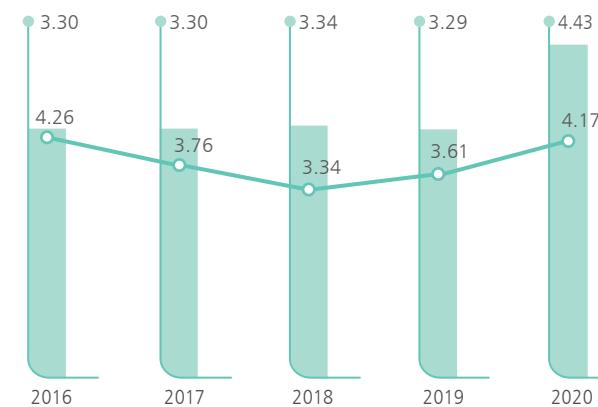
VIS' water conservation and recycling efforts are also reflected by the reduction of discharged wastewater. With the acquisitions of Fab 3 in 2015 and Fab VS1 in 2020, VIS carried out production water recycling improvement projects and therefore, the trend reflected the decline in wastewater discharge per unit area of wafer from 5.08L in 2015 to 4.17L in 2020, achieving approximately a 17.9% reduction of wastewater.

### Water Resource Management Plans

Water resource management plans of VIS are listed in the chart below. VIS has set the goal of reducing water conservation per unit area of wafer to 8% lower than the level of 2015 by 2021. By 2020, VIS has reduced water consumption per unit area of wafer to 7.8% lower than the 2015 level.

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

VIS Wastewater Discharge Per Unit Area of Wafer



■ Total wastewater discharged (million tons/year)  
● Wastewater discharge per unit area of wafer (liter/square centimeter)

Note: Wastewater discharge per unit area of wafer increased due to the acquisition of Fab VS1 in 2020; VIS will devise water-saving measures to lower the wastewater discharge per unit area of wafer.

Water Consumption per Unit Area of Wafer Lower than the 2015 Level

7.8%

VIS' 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 ( $\text{NH}_3\text{-N}$ ) in water discharges in order to mitigate the harmful effects of water discharge.

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

Analysis results of wastewater discharge quality show sound stability of every fab's wastewater treatment facilities. The results are shown below:

Item	Fab Location		Control Standards	2016	2017	2018	2019	2020
	Inside the Science Park	Fab 1/2		300	9.0~50.5	6.8~170.0	5.9~44.5	5.7~255
Suspended Solids (SS) Concentration in Wastewater (mg/L)	Outside the Science Park	Fab 3	30	1~15.9	2.3~18.3	12.1~17.0	4.0~29.0	4.5~29
	Inside the Science Park	Fab 1/2	500	19.0~124	29.9~131.0	22.5~202.0	31.2~127	27.3~147.0
Chemical Oxygen Demand (COD) Concentration in Wastewater (mg/L)	Outside the Science Park	Fab 3	100	5.5~44.8	5.9~53.9	35.1~55.0	9.0~54.5	12~63
	Inside the Science Park	Fab 1/2	30	1.7~27	0.5~19.3	10.4~26.4	1.3~26.4	7.57~26.5
TMAH Concentration in Wastewater (mg/L)	Outside the Science Park	Fab 3	NA					
	Inside the Science Park	Fab 1/2	50	25.2~72.4	8.3~46.1	12.7~37.5	10.9~29.8	14.7~31
Ammonia Nitrogen Concentration in Wastewater (mg/L)	Outside the Science Park	Fab 3	75(Before 06/30/2015) 30(After 07/01/2015)	13.9~16.2	16.4~18.6	16.8~19.8	4.7~29.0	11~25

Note: Fab 1/2 data come from samples taken twice a month by Hsinchu Science Park Bureau; Fab 3 is located outside of the Science Park, the data come from samples taken twice a month by an outsourced agency.

Each fab's wastewater treatment facilities are equipped with proper backup systems, including emergency power, to ensure normal operation in the event of equipment failure. All wastewater treatment facilities of VIS are included in the central monitoring system, which is closely monitored around-the-clock by on-shift personnel; in case of abnormal water quality or quality values exceeding limits, the system will send out warning and temporary stop wastewater discharge until the abnormal situation is resolved.

## Ultra Pure Water (UPW) Consumption

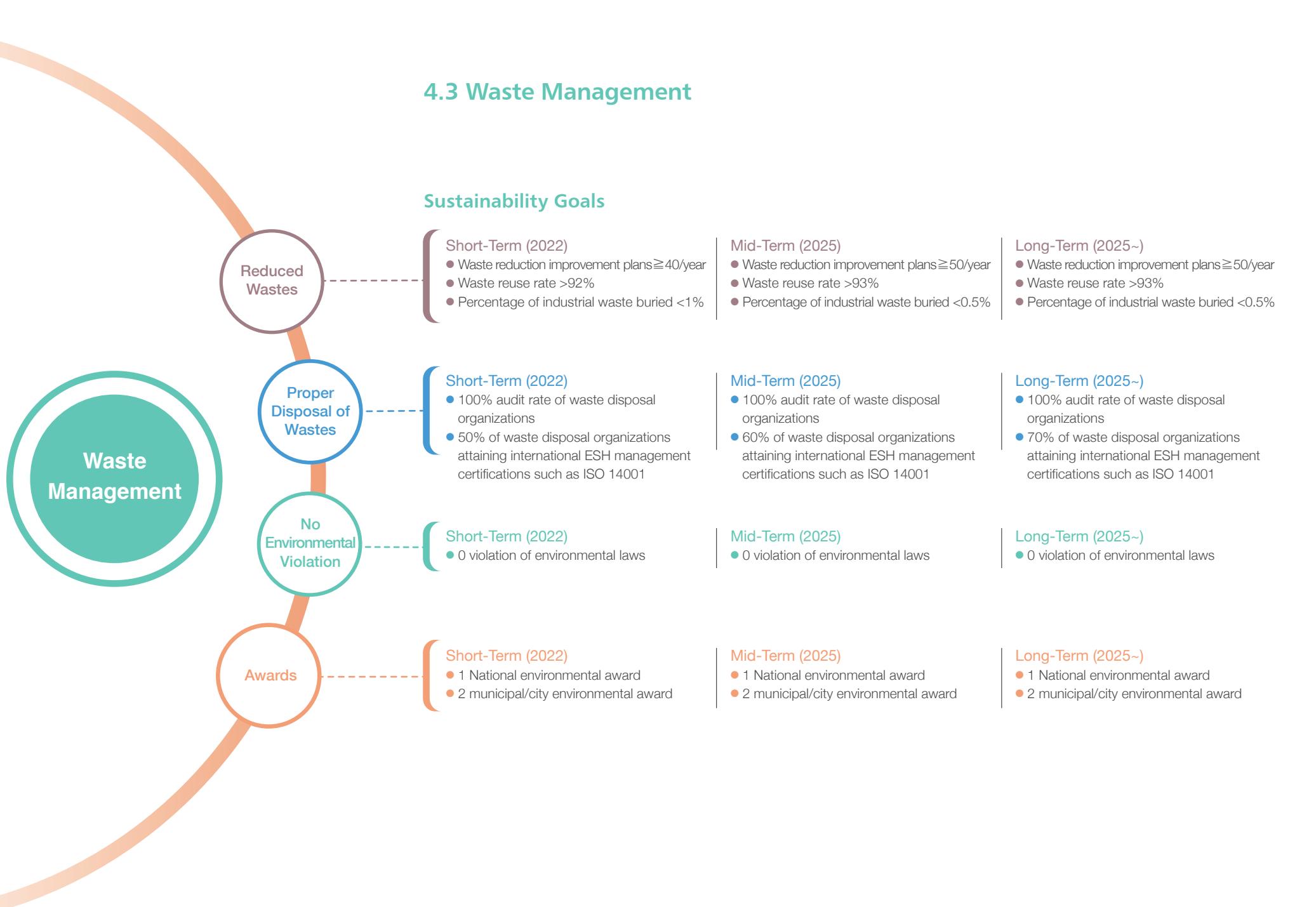
	2017	2018	2019	2020	2020 Target
UPW Consumption (m³)	7,051,927	6,992,666	6,979,430	Taiwan: 7,040,769 Singapore: 1,677,314	8,710,000
Data Coverage	100%	100%	100%	100%	

## Water Consumption

	2017	2018	2019	2020	2020 Target
(A) Quantity of Water Intake: From Taiwan Water Corporation (or other water supply system) (million m³)	3.51	3.44	3.47	Taiwan: 3.49 Singapore: 1.55	
(B) Quantity of Water Intake: Surface water (lake, river, etc.) (million m³)	1.35	1.55	1.51	Taiwan: 1.52 Singapore: 0	
(C) Quantity of Water Intake: Ground water (million m³)	0	0	0	Taiwan: 0 Singapore: 0	
(D) Discharge: Water returns to sources that have the same or better water quality compared to the original source of water (applicable to only B and C) (million m³)	0	0	0	Taiwan: 0 Singapore: 0	
(E) Total Freshwater Consumption (A+B+C-D)	4.86	4.99	4.98	Taiwan: 5.01 Singapore: 1.55	6.55
Data Coverage	100%	100%	100%	100%	

## Water Footprint

VIS is proactively engaged in water source management of recycling and reusing water. VIS conducts water footprint verification biennially, and the most recent one was done in November 2020; 2020 data will be verified in 2022.



## Life Cycles and Management of Substances/Resources

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 adhered to the spirit of ISO 14001 to formulate detailed management regulations. In addition, VIS requires its employees to comply with requirements mandated for the classification, collection, storage, and clearance of wastes, doing our best to recycle and reuse wastes as valuable resources. 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.

To properly manage VIS' wastes, 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, we encourage employees to provide suggestions based on the results of ISO 14001 for reducing the use of resources in order to minimize waste production at the terminal end.

Waste Disposal Vendors Audited

**27**

## Waste Reuse Methods

The waste we produce is mainly composed of waste acid liquid, waste solvent, 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. In 2020, a total of 0.951 ton was shipped by sea for recycling.

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 7,697 computers and monitors (Note).

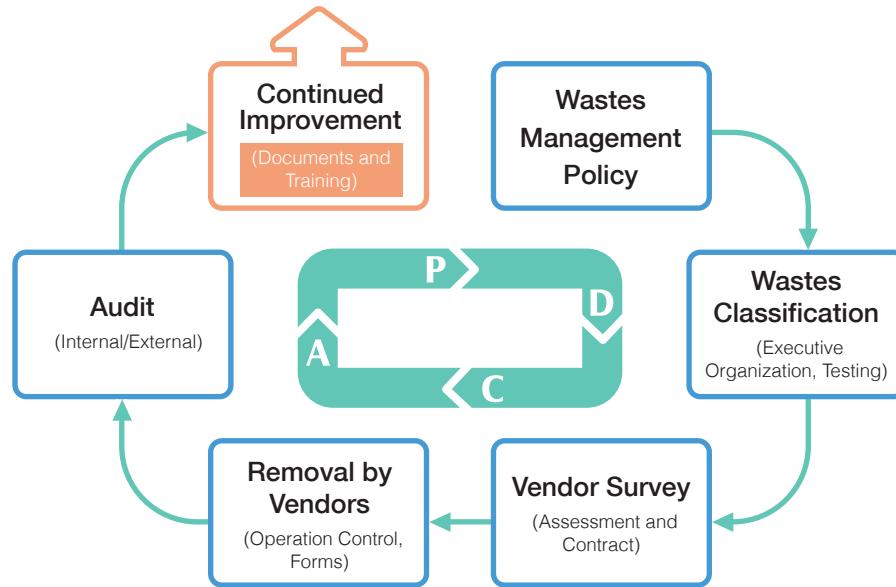
## Management of Waste Disposal Organizations

In the management of external waste treatment vendors, VIS conducts annual audits on cooperating vendors, completing auditing on 27 vendors in 2020. 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

Note: Link to Asus' "Computer Recycling and Education Project": <http://www.asusfoundation.org/recycling.aspx>

waste is also evaluated to ensure that material reuse, the products they sell, and their method of waste disposal conform to legal requirements. VIS has teamed up with high-tech companies to formulate evaluation and audit regulations for waste treatment vendors, thus enhancing the quality of audits and facilitating selection of reliable waste treatment vendors.

### VIS Waste Management Process



VIS Waste Disposal Organization Audit includes aspects of "Safety and Health Management," "Environmental Management" (including: requirements for organizations of waste clearance/processing/recycling and reuse, air pollution prevention, water pollution prevention), "Loss Control Management," and "Onsite Inspection". The 2020 audit demanded 16 vendors to make improvements for a total of 25 weaknesses (see table below). All improvements have been completed.

Type of Vendor	Weakness	Number of Cases
Waste Solvent	Unfastened seatbelt when operating forklift	2
	Missing warning and hazard signs	2
	Incomplete training records	2
	Errors in scope of checklist	1
	No safety covers for operating part of motor	1
	No water supply for emergency eye-washing/shower station during inspection	1
	No drinking water testing	1
Waste Acid Liquid	Missing warning and hazard signs	3
	Leakage at flange of pump in waste sulfuric acid storage area	1
	Incomplete health examination records for special operations	1
	Random objects placed on emergency eye-washing/shower station making access difficult	1
	Unfastened seatbelt when operating forklift	1
	Vehicle not parked in designated place	1
Sludge	No warning sign on the outdoor ladder to the 2F fire protection system	1
	Random objects placed on emergency shower station making access difficult	1
	Protective cover should be installed on conveyor belt in processing area	1
Waste Non-Hazardous Mixed Liquid	Onsite record of drinking water testing not updated	1
	Damage on floor in processing area; should switch to waterproof material	1
Mixed Metal Scrap	Unfastened seatbelt when operating forklift	1
Waste Container	Incomplete education and training records for new employees	1
Total		25

## Waste Management Goals

A waste reuse rate greater than 90% is required for all VIS plants. Monthly plant reuse rate reports are submitted to supervisors and environmental safety committee monitors to track our progress. Currently, all VIS wastes are properly removed, processed or reused by qualified institutions. 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.

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. VIS' waste production is shown in the table below:

### Waste Production

Category	2016	2017	2018	2019	2020
General industrial waste (metric tons/year)	2,540	2,715	3,135	2,670	4,046
Hazardous industrial waste (metric tons/year)	3,849	3,801	3,798	3,823	4,494
Total industrial waste (metric tons/year)	6,389	6,516	6,933	6,493	8,540
Amount of industrial waste recycled (metric tons/year)	5,961	6,077	6,505	6,098	7,906
Amount of industrial waste incinerated (metric tons/year)	411	432	396	390	617
Amount of industrial waste buried (metric tons/year)	17	7	32	4	16
Waste reuse rate (%)	93.31	93.25	93.82	93.92	92.58
Percentage of industrial waste incinerated (%)	6.44	6.64	5.71	6.01	7.23
Percentage of industrial waste buried (%)	0.26	0.11	0.47	0.06	0.19

Note: Waste reuse rate (%) = Amount of industrial waste recycled (metric tons/year)/Total industrial waste (metric tons/year) x 100

Percentage of industrial waste incinerated (%) = Amount of industrial waste incinerated (metric tons/year)/Total industrial waste (metric tons/year) x 100

Percentage of industrial waste buried (%) = Amount of industrial waste buried (metric tons/year)/Total industrial waste (metric tons/year) x 100

## General Solid Waste

	2017	2018	2019	2020	Target for FY 2020
(A) Total waste generated (metric tonnes)	2,548	2,965	2,509	Taiwan: 2,981 Singapore: 888	3,740
(B) Total waste used/recycled/sold (metric tonnes)	2,142	2,521	2,144	Taiwan: 2,541 Singapore: 720	
Total waste disposal (A-B) (metric tonnes)	406	444	365	Taiwan: 440 Singapore: 168	
Data Coverage (as % of denominator)	100%	100%	100%	100%	

## Hazardous Waste

	2017	2018	2019	2020	Target for FY 2020
Hazardous Waste Generated (metric tonnes)	3,801	3,798	3,823	Taiwan: 4,066 Singapore: 428	4,350
Data Coverage (as % of denominator)	100%	100%	100%	100%	

## 4.4 Air Pollution Control

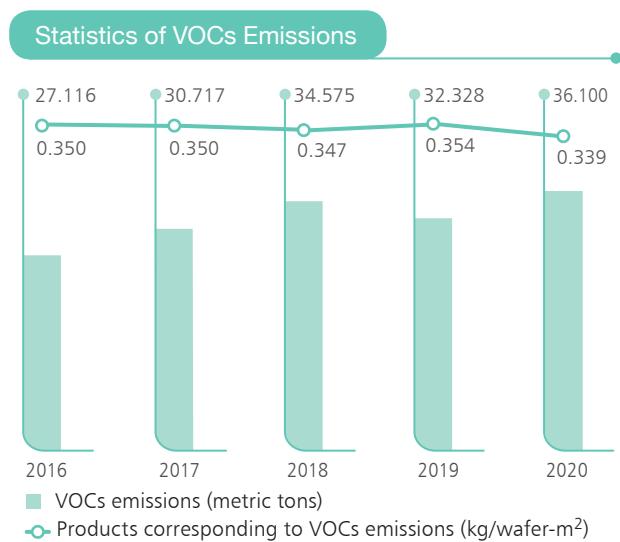


The air pollutants generated by the semiconductor industry are VOCs and acidic or basic gases. VIS adopts classification at source, and best feasible technology in multiple phases to implement air pollution control. Then VIS processes the pollutant before effectively treating it using high-performance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

All VIS plants have VOCs systems that are equipped with rotor processing equipment. In 2020, Fab 2 added a new VOCs system and Fab 3 plans to add another VOCs system in 2021, in order to achieve removal rate better than the legal requirement (>90%). The average removal efficiency of VOCs in plant areas in Taiwan was 93.77% last year, which was better than the 92% established by the environmental impact assessment best available control technology.

According to estimated air pollutant emission coefficients of VOCs formulated by the EPA with respect to the semiconductor industry, VIS fabs in Taiwan and Singapore combined to report VOCs emissions of 36.10 metric tons in 2020.

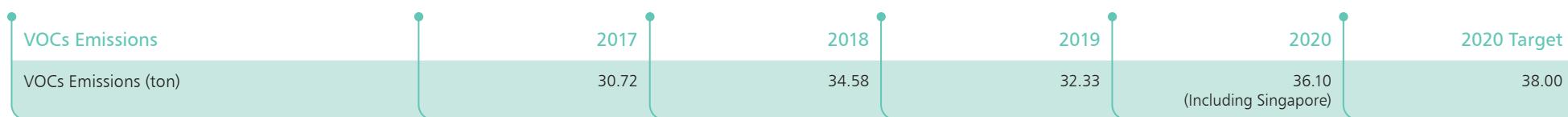


Average Removal Efficiency of VOCs in Taiwan Fabs

**93.77%**

VIS has set the 2022 goal for all fabs in Taiwan and Singapore to reduce VOCs emissions per unit area of wafer by 5% compared to the 2015 level. By 2020, VOCs emission per unit area of wafer has been reduced by 1% lower than the 2015 level.

At VIS, natural gas and minor amounts of diesel fuel are used (for power generators). According to estimated air pollutant emission coefficients of NOx and SOx formulated by the EPA with respect to the semiconductor industry, VIS reported NOx emissions of 13.28 metric tons and SOx emissions of 7.65 metric tons in 2020.



## 4.5 Environmental-Friendly Products

Adhering to the ideal of corporate sustainability, VIS strives to develop environmental-friendly products, and has formulated related measures for procurement, production and manufacturing, logistics, and disposal and recycling, in aim for reduction of consumption of resources, as well as energy conservation and carbon reduction, continually improving the environment.

Environmental Consideration	Stage in Lifecycle				
	Procurement	Production and Manufacturing	Logistics	Product Use	Disposal and Recycling
Hazardous Substances	V				
Energy Efficiency		V		V	
Material Reduction		V			
Material Recycling		V			V
Water Saving		V		V	
Carbon Emissions Reduction		V	V		

Stage in Lifecycle	Implementation Direction	2020 Method
Procurement	Cooperate with vendors to comply with environmental protection laws and regulations, as well as to maintain ecological environment and system and lower influences	All newly established qualified raw materials comply with RoHS requirements
Product Manufacturing	Launch energy conservation projects to enhance product PUE	Energy consumption per unit area of wafer to 20%
	Adjustment of machine operation conditions	Saving O2 consumption by 947kg/year
	Recycle and reuse materials of emission pipes, gas pipes, and chemical pipes	Reduced wastes by 0.397 metric tons/year
	Reuse of process water to reduce wastewater discharge, while also lowering intake of running water to save water resource.	Water consumption per unit area of wafer to 7.8% lower than the 2015
Logistics	Based on trade terms, delivery date, quantity, and destination, VIS plans shared delivery routes to replace frequent/small-quantity transportation.	
Disposal and Recycling	Reuse raw material packaging materials and some used product packaging materials to reduce amount of packaging materials and wastes	Recycled 7,063kg of used packaging materials
	Recycle empty boxes after tape-out of raw materials and packaging boxes of semi-finished products delivered to outsourced vendors, and reuse them for (finished) product packaging.	Achieved recycling rate of 94.9%

## Environmental Protection Expenditures

In 2020, VIS did not suffer any loss due to environmental pollution. Moreover, in addition to striving for daily maintenance and management of existing facilities, VIS continued to expand preventive facilities of wastewater, waste gas, and emission of air pollutants. In 2020, the total investment in environmental protection was approximately NT\$423 million.

## 5

## Responsible Supply Chain



Green Mark Product  
Procurement NT\$

**26.57** Million

100%

Suppliers Signed  
Guarantee to Comply  
with VIS CSR Policy





## 5.1 Types of Supply Chain

VIS' supply chain covers an extensive range that includes international and domestic equipment suppliers, parts suppliers, raw material suppliers (8-inch wafer substrates, process chemicals, process gases, photoresist materials, and sputtering targets), engineering services, office supplies (including computer, communication, and consumer electronics), information technology software, and outsourced manpower (security services, cleaning, dormitories, and transportation shuttles). VIS has 1,470 supply chain partners worldwide and we have been dedicated to support local companies in recent years. More than 95% and 82%, respectively, of our suppliers are domestic suppliers (including manufacturers with branch offices, agents, and distributors) in Taiwan and Singapore.

### Types of Supplier Products and Service



Among them, raw material suppliers have the most significant influences on the daily operation and production of VIS.

Suppliers are categorized into four types: raw materials, equipment and parts, facility engineering, and automation and merchandise. To effectively manage suppliers and allocation of resources, VIS screens and selects tier 1 suppliers that need to be included in control and management based on annual procurement amount, while also strengthening management and cooperation with critical tier 1 suppliers. In 2020, a total of 552 suppliers met the criteria of tier 1 suppliers; 115 suppliers met the criteria of critical tier 1 suppliers.

Note: 1. Tier 1 supplier refers to:  
 (a) A supplier trading with VIS directly;  
 (b) A supplier has more than 1 VIS purchase order per year and exceed NT\$2 million in annual transaction.

2. Critical tier 1 supplier refers to:  
 (a) A suppliers in the top 80% of total procurement amount;  
 (b) Single source or irreplaceable suppliers.

**95% and 82%**  
 More than  
 respectively, of our suppliers are domestic  
 suppliers in Taiwan and Singapore.

## 5.2 Supply Chain Management

### Supply Chain Developing Commitment

The supply chain management of VIS aims at sustainable development, and our commitment to ESG has been publicly disclosed on the company's website to convey VIS' management requirements for the supply chain. VIS advocates cooperation with supply chain partners to jointly establish sustainable supply chain, strive for responsible procurement and proper development of supply chain, hoping to generate positive influences on the global semiconductor supply chain, while continually providing responsible and excellent services to our customers. For more details on VIS' commitment on supply chain development, please visit: [https://www.vis.com.tw/en/cs\\_supplychain](https://www.vis.com.tw/en/cs_supplychain)

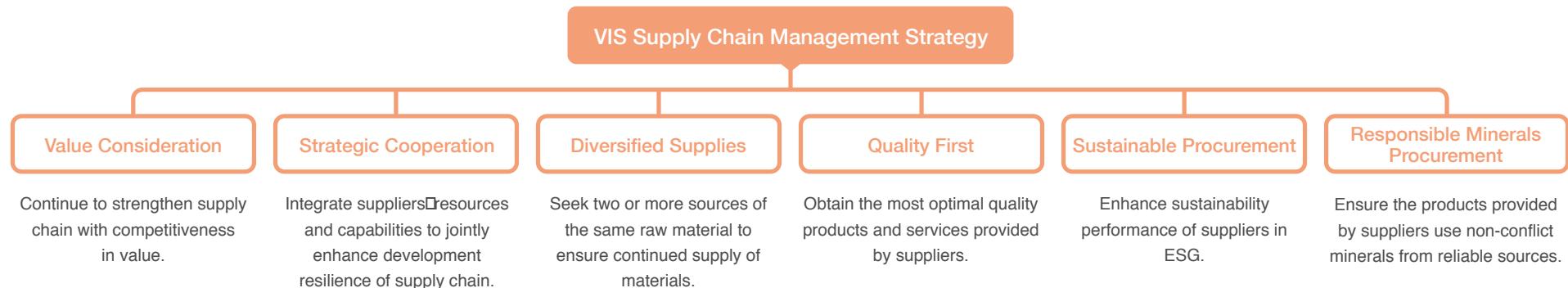
### Supplier Code of Conduct

VIS treats all suppliers as business partners and has long-term cooperation with suppliers to jointly establish and develop a stable, competitive and sustainable supply chain partnership. For this purpose, we proactively involve in supply chain development to ensure we can realize the SDGs with our suppliers, formulating VIS Supplier Code of Conduct for all suppliers to comply with; in addition to demanding suppliers to comply with local laws and regulations of respective countries/regions, VIS has

devised rules governing business conducts in various aspects, including labor, health and safety, environment, business ethics, and management system. At the same time, suppliers must pass on this Code of Conduct to the next tier suppliers and oversee their compliance. For "VIS Supplier Code of Conduct," please visit: [https://www.vis.com.tw/assets/pdf/vis\\_supplier\\_code\\_of\\_conduct.pdf](https://www.vis.com.tw/assets/pdf/vis_supplier_code_of_conduct.pdf)

#### 5.2.1 Supply Chain Management Strategy

Through steady developing the partnership with suppliers, VIS looks to continually enhance overall resilience of supply chain, while also practicing responsible procurement. Therefore, in daily procurement, in addition to considerations of costs, delivery time, and quality, VIS also evaluates the overall sustainable value of supply chain, and continues to grow together with suppliers. In recent years, we examine the overall supply chain management strategy and analyze the current supply chain status, and then conduct assessment based on both aspects of risks and opportunities, launching several projects of responsible procurement, enhancement of diversified supplies of supply chain, and lowering possible interruption risk of supply chain. VIS hopes to create a win-win situation through these projects with our supplier, and work together towards a sustainable and better future.



## 5.2.2 Supplier Selection

With regard to supplier selection, potential material suppliers must be selected and assessed by the VIS supplier management procedures according to the "New Supplier/Material Evaluation Guidelines," "Vendor Safety, Health, and Environment Audit Management Regulations," and "Purchase Operation Instructions"; Potential suppliers must sign and guarantee compliance with the "VIS Corporate Social Responsibility Policy" and complete relevant evaluation procedures before they become VIS qualified suppliers. Only then can purchases be made from that qualified suppliers.

The evaluation process includes preliminary survey and on-site audit. Our Supplier Quality Management organization conducts the preliminary surveys and specification reviews, then invites our Risk and Environment Safety Management Department, as well as any other relevant departments to conduct audits. The audits include areas such as quality, environmental protection, health and safety, labor rights etc. Finally, our supplier quality management, procurement, material planning, and risk and environment safety management organizations jointly select compliance suppliers as qualified suppliers based on the survey, audit and evaluation results.

To ensure that all suppliers comply with our green product policy, we required suppliers to submit product test reports and safety data sheets (SDS) in accordance with our regulations; the reports are reviewed by designated VIS authorities. In addition, we required suppliers to sign a RoHS pledge, in which they guarantee 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.

### 5.2.3 Supplier Management

To fulfill its commitment to supply chain development, VIS has established a four-stage cycle of the supplier sustainability management mechanism. Through the cycle, VIS facilitates positive development annually, to not only ensure suppliers' continued compliance with the "VIS Supplier Code of Conduct," but also lead the continual improvement and commitment of supply chain, and proactively establish sustainable actions with upstream suppliers, jointly creating responsible and sustainable supply chain of the semiconductor industry.



#### Codes and Norms for Suppliers

Not only has VIS established and implemented own corporate sustainability policy, in order to expand its social influences and contributions, VIS also requires all suppliers to comply with and sign the "VIS Corporate Social Responsibility Policy" and "VIS Supplier Code of Conduct" guarantee, and further asks its supply chain to implement these rules on par with the company's standards.

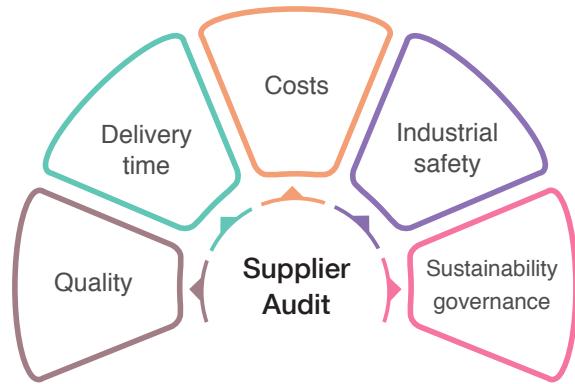
Especially for the management of tier 1 suppliers, VIS conducts sustainability questionnaire survey on aspects of statutory and regulatory compliance, labor and human rights, environmental protection, health and safety, conflict minerals management, business ethics, and sustainability management system, in order to understand the sustainability risks of suppliers; when necessary, VIS will conduct on-site audits to ensure all suppliers are in compliance with the company's sustainability standards, and looks forward for suppliers to continually enhance and strengthen sustainability management performances. Therefore, VIS asks and encourages new suppliers and existing suppliers to establish proper management system, and pass and obtain certifications of related international standards, such as ISO 9001, IATF 16949, ISO 14001, ISO 14046, ISO 14064-1, ISO 14067, ISO 45001, ISO 50001, IECQ QC080000, etc.

The percentage of VIS suppliers that have signed the "VIS Corporate Social Responsibility Policy" guarantee is 100%. Starting from early April 2021, VIS asks all suppliers to sign the "VIS Supplier Code of Conduct" guarantee, and within a month, the percentage of signed suppliers surpassed 70%. It is projected that by the end of 2021, the percentage of signed suppliers will exceed 90%.

## Supplier Risk Assessment

To understand the status of sustainability development of supply chain, and grasp the sustainability risks of supply chain, VIS has conducted supplier sustainability risk survey and assessment through three risk identification stages annually starting from December 2020, in aim to identify suppliers with high risks in environment, social and governance aspects, and conduct audit on and provide guidance to those suppliers with higher risks, ensuring their risks can be effectively controlled and lowered.





Note: Evaluation factor “sustainability governance” has been added in 2021.

## Sustainability Risks Investigation Items

### Environment

- Environment management system
- Carbon management
- GHG management
- Resource utilization efficiency
- Waste management

### Social

- Labor rights
- Labor management mechanism
- Human rights management
- Social engagement
- Occupational safety and health management system

### Governance

- Sustainability management policy and organization
- Risk management
- Business ethics
- Conflict minerals management
- Supplier management

## Supplier Audit Confirmation

To effectively manage the product quality, delivery time, costs, services, industrial safety and environmental protection practices of suppliers, the procurement, material planning, quality management and industrial safety organizations conduct joint reviews of qualified suppliers listed in the VIS qualified vendors list (QVL) every six months. The review focuses on the factors as product quality, delivery time, costs, services, industrial safety practices, and environmental protection (a new review factor “sustainability governance” has been added in 2021). 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 still requires the supplier to make continual improvement and enhance its competitiveness.

Regarding management of key suppliers, the Risk and Environment Safety Management Department holds annual onsite audits to ensure suppliers comply with “Safety, Health, Environmental Protection, and Fire Prevention” laws, regulations and guidelines. In the past three years (2018~2020) 67 on-site audits were conducted. More specifically, in 2018: 29 times; 2019: 25 times; 2020: 13 times. Results from audits in the past three years showed that suppliers’ overall performance has been stable and all suppliers were able to meet VIS’ requirements; Nevertheless, each audit competent authorities of audit still provided suppliers with recommendations against complacency and to continuously improve so that suppliers are able to continue to make progress and successively enhance their overall competitiveness.

### 2018-2020 Supplier ESH Audit Results—Taiwan Fabs

Taiwan Fabs	Method	Wafer	Process Chemicals	Process Gases	Sputtering Targets	Contractor	Pump
2018	On-Paper	5	16	6	5		8
	On-site	4	6	5		8	6
	Total	9	22	11	5	8	14
2019	On-Paper	3	10	7	6	2	12
	On-site	1	8	6	2	8	
	Total	4	18	13	8	10	12
2020	On-Paper	7	19	11	8	6	6
	On-site	2	4			2	5
	Total	9	23	11	8	8	11
Total		22	63	35	21	26	37

### 2020 Supplier ESH Audit Results—Singapore Fab

Singapore Fab	Method	Wafer	Process Chemicals	Process Gases	Sputtering Targets
2020	On-Paper	1	25	7	8
Total		1	25	7	8

Furthermore, VIS continues to enhance the sustainability performances of supply chain, and has established supplier sustainability audit system, conducting regular or irregular on-paper or on-site audits targeting suppliers' sustainability accomplishments, or commissioning a third party to implement RBA validated assessment program (VAP) or to act for VIS to conduct second party audit. Targeting the deficiencies identified through audits, VIS demands suppliers to propose improvement plans, and they must complete the improvement actions within given time. VIS will review the implementation of improvement plans, and check again the fulfillment statuses of the improvement actions of the deficiencies in the following year.

## Continual Improvement of Supplier

In 2020, we conducted sustainability on-site audit for 84 critical tier 1 suppliers, and adopted the results of RBA VAP on-site audit of one supplier. All 85 audited suppliers completed improvement actions of deficiencies within given time. After assessment, all complied with VIS regulations and none supplier has been ceased supply cooperation with VIS.

### 5.2.4 Demonstration/Coaching/Education and Training

VIS continues to strengthen suppliers' capability to face the every-changing trends of sustainability through on-site demonstration activities, coaching projects, and education and training courses, helping suppliers to establish awareness and capability of sustainability for enhancement of sustainability.

#### On-site Demonstration Activity (Open Fab)

In September 2020, visitors were invited to VIS Fab 3 to observe on-site the main energy conservation measures launched by the company. VIS demonstrated on how to effectively utilize the waste heat of air compressor for hot UPW system and air conditioning, turning waste into gold and effectively reducing purchased steam by 65%. Total energy cost saved in a year surpassed NT\$22 million, and combined reduction of carbon emissions was 8,000 metric tons, equivalent to the carbon reduction of 20.6 Daan Forest Parks.

In December 2020, VIS organized water-saving demonstration, where visitors were taken to VIS Fab 1 to observe the main water-saving measures launched by the company, among which the low-concentration hydrofluoric acid recovery system was used as an example: low-concentration hydrofluoric acid was collected and filtered, then processed through ACF and ion exchange resin tower, and finally recycled as makeup water for waste gas washing tower or cooling water tank, saving 306,000 tons of water consumption in a year. This not only enhanced recycling rate, but also achieved the benefits of reduced wastewater discharge and reduced chemical use.



Up/ Waste heat recovery demonstration activity in September 2020  
Down/ VIS Organized Water-saving demonstration activity in December 2020

Through irregularly organizing annual demonstration activities as exchange platform of sustainability practices, VIS facilitates supply chain partners to interact and learn from each other, avoiding unnecessary trial and error and waste of investment, so that sustainability actions can be further implemented and refined.

### Business Continuity Coaching Project

To keep our promise to customers regarding steady supply of goods, VIS has established the Business Continuity Plan and the Aftermath 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 2020, both Japan and Taiwan experienced frequent earthquakes, and VIS immediately conducted investigation and took responsive measures, so that we were able to immediately provide customers answers whenever they had inquiries.

### Education and Training

In 2020, VIS compiled new teaching materials of the VIS Supplier Code of Conduct, and distributed to 1,470 suppliers, with which VIS conducted direct transaction. The teaching materials provided detailed explanation on the content of the VIS Supplier Code of Conduct, while also compiling and listing audit deficiencies commonly seen in the environment, social, and governance aspects in the semiconductor supply chain in recent years, offering suppliers attending the training some lessons to learn from. This enabled suppliers to quickly identify the potential blind spots in the practices of sustainability promotion and proved the effectiveness of sustainability training.

## 5.3 Responsible Procurement

### 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 asking suppliers to employ no child labor in accordance with the VIS Corporate Sustainability Policy and VIS Supplier Code of Conduct, VIS also requires suppliers to conduct self-assessment using the sustainability self-assessment questionnaire. The questionnaires also clearly state that a supplier who violates this policy shall be identified as an unqualified supplier, even if they fulfill all other requirements.

In 2020, VIS collected questionnaires from a total of 326 tier 1 suppliers (including the suppliers of VIS Taiwan and Singapore premises), upon review, none of the suppliers employed child labor; VIS will ask suppliers to immediately make improvement when it learns that there is potential risk of child labor.

### **Responsible Minerals Management**

As for the management of responsible minerals, VIS is in accordance with the requirements of 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 regulated in the future by the RMI (Responsible Minerals Initiative) from specified countries (Democratic Republic of the Congo and neighboring countries).

In addition to declaring responsible minerals management policy to suppliers, VIS requires all suppliers to assure their minerals are from certified refineries (Conflict-Free Smelter) that recognized by the RMAP (Responsible Minerals Assurance Process) of the international organization, RMI, establish a mechanism of reasonable certainty, exercise their due diligence, and acquire

relevant certifications. For refineries not certified by the RMI, VIS requires the refineries via suppliers to obtain certification from RMI or an accredited third-party audit organization, which will ensure that the minerals used by the VIS and its suppliers are all in compliance with due diligence and responsible minerals management.

In consideration of customer concern over information on the management of conflict minerals, the procurement department provides the most up-to-date Conflict Minerals Reporting Template (CMRT) and Cobalt Reporting Template (CRT) on the official website of VIS Online (<http://online.vis.com.tw/online/login.do?method=list>) to facilitate customer inquire, access and download the relevant management information.

In compliance with the RMI CMRT revision in 2020 (v.6.01: released on May 19, 2020) and the RMI CRT reversion in 2020 (v.2.2: released on Oct. 28, 2020), VIS completed related supply chain surveys and confirmed them in compliance with the regulations that prevent the procurement of conflict minerals from conflict regions. The latest CMRT and CRT tables of VIS were disclosed on the VIS Online System for customers to make online queries.

Note: Starting in May 2021, in support of the legislative spirit of the (Dodd-Frank Act) of the U.S., and strengthen for the fulfillment of corporate social responsibility, VIS adds "Conflict-Free" labels on the packaging of own foundry products, to declare that VIS does not use conflict minerals for its foundry products.

## Local Procurement

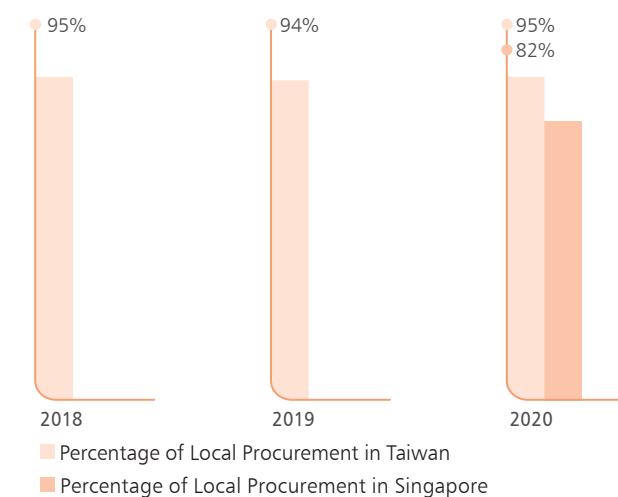
The semiconductor industry in both Taiwan and Singapore mainly remains reliant on foreign imports for machinery equipment, raw materials, and software. However, VIS has long launched procurement localization policy, fostering related industry chains and creating the local employment opportunities in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

In 2020, VIS collaborated with over 1,000 partners worldwide, and procured from over 95% and 82% of domestic suppliers (including manufacturers with branch offices, distributors, and wholesalers) in Taiwan and Singapore respectively. Our domestic purchases amounted to NT\$9.5 billion and NT\$2 billion in Taiwan and Singapore, accounting for 91% and 66% of respective total procurements.

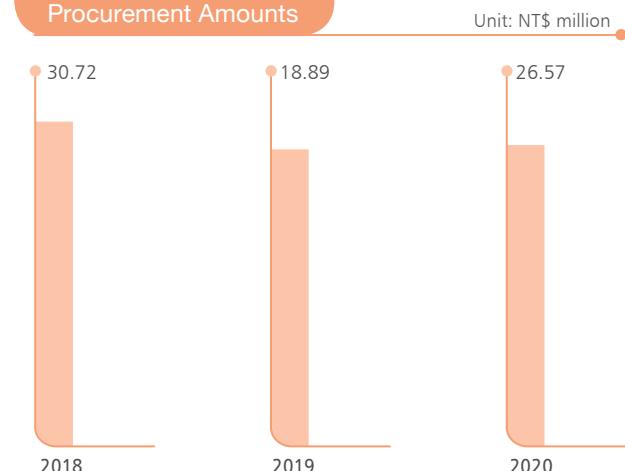
## Green Procurement

VIS prioritizes the purchase of energy-saving products with Green Mark, and engages in the green procurement of government-promoted energy-saving environment-friendly products with Green Mark including computer equipment, office papers, and electrical appliances.

Local Procurement



The Annual Green Procurement Amounts



Note: Local procurement refers to VIS suppliers of direct transaction, whose profit-seeking business registration location and VIS' production sites are located in the same country/region. For example, if a supplier's profit-seeking business registration location is in Taiwan/Singapore, it is considered local procurement to VIS' production sites in Taiwan/Singapore.

6

## Friendly Workplace

Key Talent  
Retention Rate

**96%**

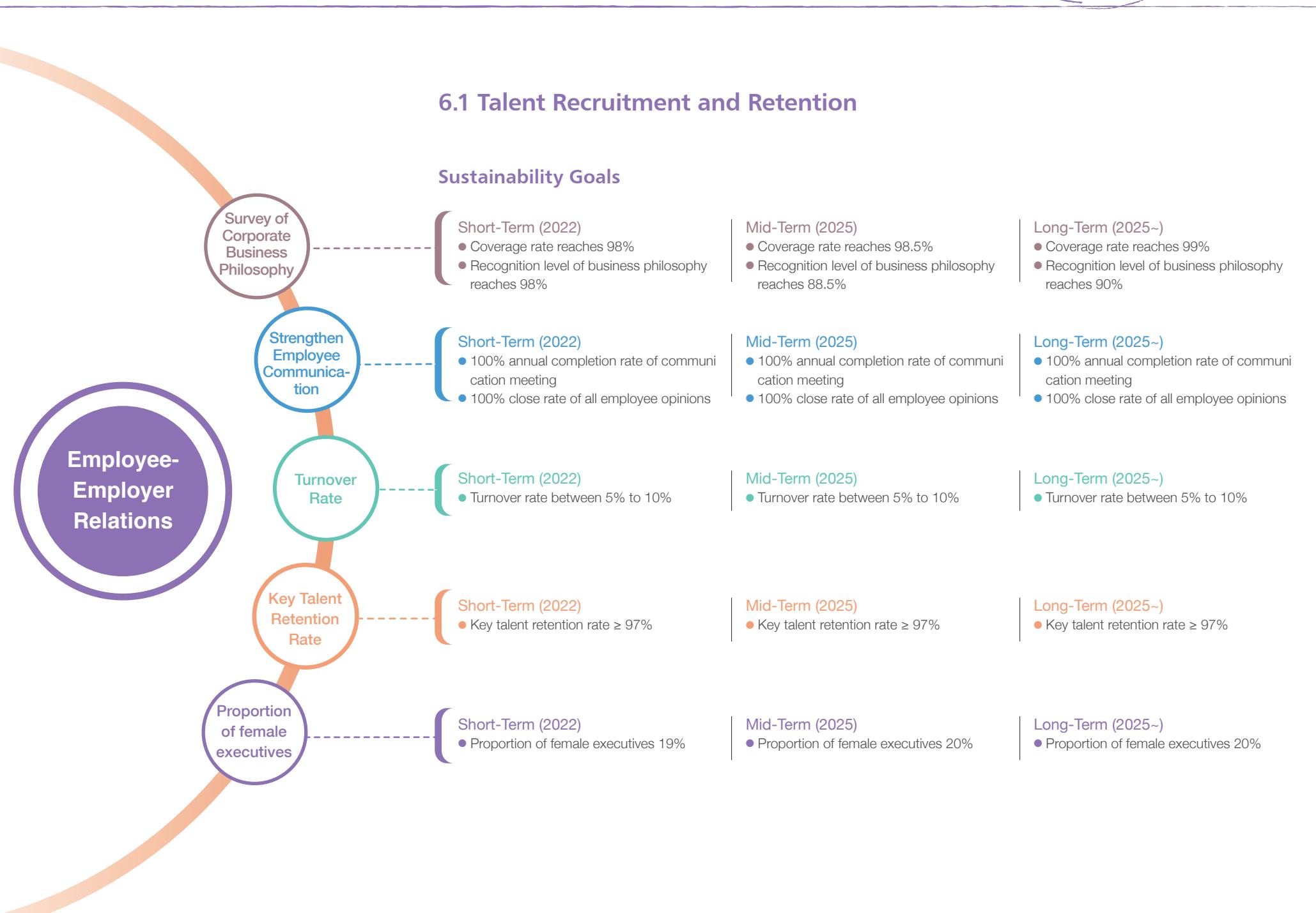
Annual Training Plan  
Completion Rate

**91.6%**

0

Major Occupational  
Injury and Disease





Through performance review, VIS awards outstanding employees with promotions and raises; moreover, VIS offers competitive benefits to recruit and retain competitive talents. In terms of benefits, VIS advocates balance between work and life, and by organizing diverse company activities and health seminars, VIS establishes a friendly working environment. VIS also provides employees diverse channels to reflect their opinions, and holds trainings and classes to encourage employees to continuously enhance own capability and further develop personal career.

## Talent Management Guidelines

### Strategy



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

### Commitment



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

### Vision



To Be The Specialty IC Foundry of Choice



## Results and Goals

Results of VIS' deepening of connections with schools in 2020 include:

1. Six industry-academia collaboration projects in 2020.
2. A total of 28 students from renowned domestic and overseas colleges and universities participated in the summer internship program in 2020.

## Recruitment Strategy

### Short-term Goals

- (1) Deepen connections with schools: Enhance connections with target schools and organize a variety of on-campus activities.
- (2) Establish diverse recruitment channels: Enhance recruitment efficiency through social media, on-campus activities, and incubation institutions, and recruit talents from a variety of channels.

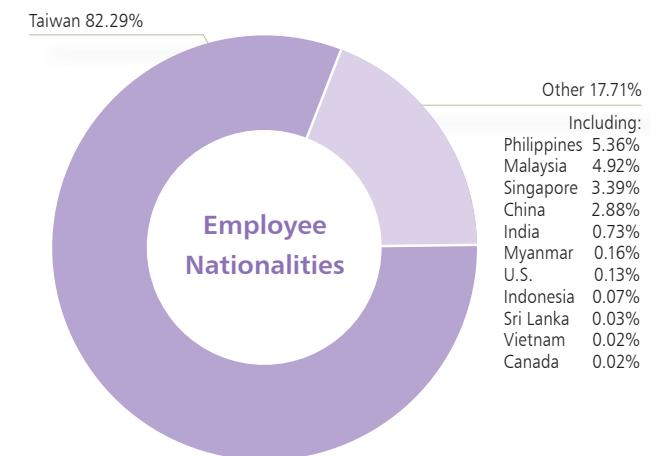
### Mid to Long-term Goals

- (1) Become top employer brand to attract outstanding talents.
- (2) Offer most competitive compensation to attract and retain the top talents, while also rewarding employees with outstanding performances and long-term contributions.

## VIS Workforce

Complying with international human rights conventions, and human rights and employment related laws and regulations, VIS conducts hiring process: no child labor, and no discrimination against races, religions, skin colors, nationalities, ages, genders, sexualities, marital status, looks, disabilities, and other situations protected by laws. Also, VIS Strives to create a friendly working environment that respects diverse groups for its employees from 12 countries around the world, fusing diverse cultures and continually facilitating exchange and interaction between employees of different ethnicities.

By the end of 2020, VIS had 5,929 total employees, and those working in Taiwan accounted for 86.8%, and those working in Singapore accounted for 13.2%. 96.1% of VIS employees were non-fixed term employees, whereas 3.9% were fixed-term employees. In terms of job positions, 481 were executives, 2,906 were professional workers, and 2,542 were technicians.



## Workforce Distribution

Employment Type\Category	Male		Female		Group Subtotal and Percentage		
	Number of People	Percentage of Group	Number of People	Percentage of Group	Number of People	Percentage of Total Workforce	
Subtotal by Gender	2,970	50.1%	2,959	49.9%	5,929		
Nationality	Taiwanese	2,472	50.7%	2,407	49.3%	4,879	82.3%
	Foreign	498	47.4%	552	52.6%	1,050	17.7%
Position	Executives	394	81.9%	87	18.1%	481	8.1%
	Professional workers (indirect labor)	2,139	73.6%	767	26.4%	2,906	49.0%
	Technicians (direct labor)	437	17.2%	2105	82.8%	2542	42.9%
Status	Non-fixed term	2,875	50.5%	2,821	49.5%	5,696	96.1%
	Fixed-term	95	40.8%	138	59.2%	233	3.9%
Age	30 and below	551	55.2%	447	44.8%	998	16.8%
	30-50 years old	2,094	48.8%	2,200	51.2%	4,294	72.4%
	50 and above	325	51.0%	312	49.0%	637	10.7%
Education Background	High school or below	340	20.0%	1,362	80.0%	1,702	28.7%
	University/College	1,419	51.8%	1,321	48.2%	2,740	46.2%
	Master's Degree	1,169	81.2%	270	18.8%	1,439	24.3%
	PhD	42	87.5%	6	12.5%	48	0.8%

Note: This table includes VIS employees in both Taiwan and Singapore.

## Regional Workforce Distribution

Employment Type\ Category		Taiwan						Singapore					
		Male		Female		Group Subtotal and Percentage		Male		Female		Group Subtotal and Percentage	
		Number of People	Percentage of Group	Number of People	Percentage of Group	Number of People	Percentage of Total Workforce	Number of People	Percentage of Group	Number of People	Percentage of Group	Number of People	Percentage of Total Workforce
Subtotal by Gender		2,485	48.3%	2,661	51.7%	5,146	86.8%	485	61.9%	298	38.1%	783	13.2%
Nationality	Local	2,463	50.6%	2,403	49.4%	4,866	94.6%	9	69.2%	4	30.8%	13	1.7%
	Foreign	22	7.9%	258	92.1%	280	5.4%	476	61.8%	294	38.2%	770	98.3%
Position	Executives	348	81.7%	78	18.3%	426	8.3%	46	83.6%	9	16.4%	55	7%
	Professional workers (indirect labor)	1,834	73.4%	666	26.6%	2,500	48.6%	305	75.1%	101	24.9%	406	51.9%
	Technicians (direct labor)	303	13.6%	1,917	86.4%	2,220	43.1%	134	41.6%	188	58.4%	322	41.1%
Status	Non-fixed term	2,471	48.2%	2,655	51.8%	5,126	99.6%	404	70.9%	166	29.1%	570	72.8%
	Fixed-term	14	70.0%	6	30.0%	20	0.4%	81	38.0%	132	62.0%	213	27.2%
Age	30 and below	493	57.0%	372	43.0%	865	16.8%	58	43.6%	75	56.4%	133	17%
	30-50 years old	1,736	46.5%	1,998	53.5%	3,734	72.6%	358	63.9%	202	36.1%	560	71.5%
	50 and above	256	46.8%	291	53.2%	547	10.6%	69	76.7%	21	23.3%	90	11.5%
Education Background	High school or below	180	13.3%	1,170	86.7%	1,350	26.2%	160	45.5%	192	54.5%	352	45%
	University/College	1,134	48.0%	1,228	52.0%	2,362	45.9%	285	75.4%	93	24.6%	378	48.3%
	Master's Degree	1,132	81.4%	258	18.6%	1,390	27.0%	37	75.5%	12	24.5%	49	6.2%
	PhD	39	88.6%	5	11.4%	44	0.9%	3	75.0%	1	25.0%	4	0.5%

VIS has balanced distribution of gender of employees, where male employees accounted for 50.1% and female employees 49.9%. As for the managerial level, male employees accounted for 81.9%, and female employees 18.1%. In 2020, with the addition of the Singapore subsidiary, the percentage of female employees dropped by 2% from the previous year, and the percentage of female managers slightly declined by 0.4%. Due to factors such as nature of the industry and supply and demand of the job market, the majority of executives and professional workers were men, whereas most of the technicians were female.

### Female Employees Distribution

Year	2017	2018	2019	2020				
No./Percentage	No. of Female	Percentage						
Overall Workforce	2656	50.9%	2889	51.8%	2758	51.9%	2959	49.9%
Management	53	15.4%	63	16.2%	72	17.7%	87	18.1%
First-level Management (Section)	29	16.1%	33	16.3%	35	17.1%	44	18.4%
Middle Management (Division)	18	15.00%	22	16.1%	27	17.5%	32	18.1%
Executive Management (Department/Region)	6	13.6%	8	16.3%	10	20.4%	11	16.9%
Executives of Production and Revenue related Units	30	10.5%	36	9.9%	41	12.2%	54	13.3%
STEM related Employees	558	21.6%	584	21.4%	586	22.1%	696	22.8%

Note: STEM: Science/Engineering/Mathematics/Information

### Talent Recruitment and Retention

#### Employer Brand Diverse Marketing

Employer brand is a major factor influencing talent recruitment, VIS is actively managing employer brand via various channels to explore the talent market, nurturing future employees in the next 3 to 5 years. Methods adopted by VIS include homecoming by VIS executives to alma maters to promote the Company and share practical industrial experiences; inviting students of universities and graduate institute to visit the Company; gathering fans of recruitment fanpages via social media.

VIS set up the "Vanguard International Semiconductor Corporation" fanpage to share company news, various employee activities, and recruitment information; by 2020, the fanpage has accumulated 4,348 fans, and every post reached an average of over 4,238 people (a growth of 46% compared to the average of 2,900 people in 2019). The main audience was between ages 18 to 44. Furthermore, the LinkedIn page, "Vanguard International Semiconductor Corporation," has accumulated 5,559 people in network. Both social media have become main channel of employer brand that reached out to job seekers and the public.

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

### 2017-2020 Recruitment Cost

Year	2017	2018	2019	2020	Unit: NT\$
Fabs	Taiwan	Taiwan	Taiwan	Taiwan	(Including Singapore)
Average Cost	6,340	6,351	8,904	9,699	9,783

Note: Newly employee recruitment cost = Annual recruitment cost/annual number of new recruits



Facebook QR code

LinkedIn QR code

### Summer Internship Program

In 2020, a total of 28 students participated in VIS Summer Internship Program. Through recruitment channels of university professors, internal employees, and social media, VIS selected outstanding students from Taiwan and abroad for internship program at the Company's key development units. During the internship, the students were instructed by mentors, helping them to utilize what they learned in school, while also incubating potential semiconductor talents for the industry. To deepen the connections with outstanding talents, and recruit those who shared the same vision, VIS presented pre-offer letter for those interns with outstanding performances during the internship program; in 2020, the acceptance rate of the offer letters reached 94%.



Summer Internship Program Employee Orientation

 王皓威  
2020年8月16日 · ...  
||世界先進暑期實習||  
今年很幸運地能成為2020世界先進暑期實習生，在實習的過程當中，學著如何運用人工智慧的技術，增加公司的效益，著實是非常棒的經驗，感謝部門內帶領我的工程師，在百忙的時間抽空給予我專屬的指導與建議。  
也非常感謝世界先進HR團隊細心安排的高階主管經驗分享講座，讓幾位高階主管敘述他們的人生經歷，增進了我人生的見識，讓我在未來生涯能夠用更多更廣的層面看待任何事物，而非只在既有的框架中思考，令我獲益良多！  
最後謝謝一同參與這項專案實習同學，和你們交流互動過程中，接觸了不同領域的知識，提升了我的視野，是一個非常難得的經歷。  
[世界先進積體電路股份有限公司](#)  
#懷謹的實習連結  
#高階主管經驗分享講座  
#專案指導

 龍亭聿—和 Lin Yen Chu ·  
2020年8月13日 · ...  
在世界先進積體電路股份有限公司實習從7/1到現在，已經進入倒數階段不到一個月的時間，距離最終專案報告的日子也只剩一個多禮拜。回憶暑假前還很擔心自己找不到實習，沒想到會錄取這次的實習生，真的很感謝我們三廠製造部的主管們以及HR願意給我這個機會😊  
从兩天的新生訓練就感受到公司氣氛很歡樂，其實原本以為大公司應該會很嚴肅又緊張，但真的比我想像中的氣氛輕鬆許多，不管是每一級的人員姓氏們還是在三廠製造部遇到的每一位主管及同事，真的都非常非常照顧以及關心我們，就算自己工作繁忙還是會積極解決我們任何問題，在工作上的任何疑問主管們也都很願意回答，這是我不一樣實習也是第一次實際進到半導體廠觀摩，真的學到很多，同時也認知到自己的不足。  
公司也有為我們實習生安排許多活動，像是主管們的講座，我甚至參與了製造部的幹部旅遊還有掉下來的員工旅遊，應該可以說是最幸福的實習生了  
最後真的非常非常榮幸可以成為世界先進第一屆實習生的一份子，也非常開心能夠認識在這裡遇到的每一位同學、主管、人資、同事們，大家都真的很優秀，從這些人身上也學習到了很多，希望大家能夠順利完成專案報告，在8/21那天有個完美的收尾😊

Interns Sharing Thoughts and Reflections

## Co-Op Program

Not only does VIS continue to develop more specific processes and technical platforms, we have also cooperated with domestic universities for research on manufacturing processes and component applications. The main collaboration in 2020 was the "AI wafer surface defect detection research project," where VIS cooperated with the "UW-NCTU AI Lab" of National Chiao Tung University (now National Yang Ming Chiao Tung University) in aim to develop a universal, highly accurate, and self-monitoring AI development platform through industry-academia cooperation. VIS hoped to shorten the development time of AI model in the semiconductor industry and improve its reliability, which could be applied to wafer manufacturing of different product lines to assist the company's intelligent manufacturing and management and effectively enhance the efficiency and yield rate of wafer manufacturing, creating values for customers and strengthening VIS' wafer manufacturing capability and efficiency.

## Employment of Persons with Disabilities

VIS has hired persons with disabilities since 2009. In 2020, VIS created new positions of janitor in the factory area and administrative positions, and actively established high-quality and diversified job opportunities. In 2020, VIS offered 56 positions, which was approximately 10% more than the regulatory requirement. In addition to having senior employees to provide persons with disabilities on-job instructions, VIS also invited local employment service agencies to design specific jobs for individual cases, and also visit and provide guidance to help them get used to the jobs.

## Rate of New Hires and Turnover Rate

### Domestic and Foreign Recruitment

By the end of 2020, VIS had 5,929 total employees. 532 new employees were hired and the employment rate was 9.5%. Of the new recruits, 58.5% were men and 41.5% were women. In terms of age distribution, most of the new recruits were aged 30-50 (51.5%), followed by those under 30 (44.7%), while new recruits 50 years old or older accounted for the lowest percentage (3.8%).

## 2020 New Employees by Nationality and Age

Category	Group	Male		Female		Group Subtotal and Percentage	
		Number of People	Percentage of the Group	Number of People	Percentage of the Group	Number of People	Percentage of the Group
Nationality	Taiwan	179	68.8%	81	31.2%	260	48.9%
	Non-Taiwanese	132	48.5%	140	51.5%	272	51.1%
Age	30 and below	139	58.4%	99	41.6%	238	44.7%
	30-50 years old	158	57.7%	116	42.3%	274	51.5%
	50 and above	14	70.0%	6	30.0%	20	3.8%
Total		311	58.5%	221	41.5%	532	100.0%

Note 1: New recruits refer to non-fixed term full-time employees who have completed the initial registration process.

Note 2: Rate of New Hires = 2020 New Employees / {(Employees at Beginning of Year) + (Employees at End of Year)/2}

## 2020 Rate of New Hires by Gender and Age

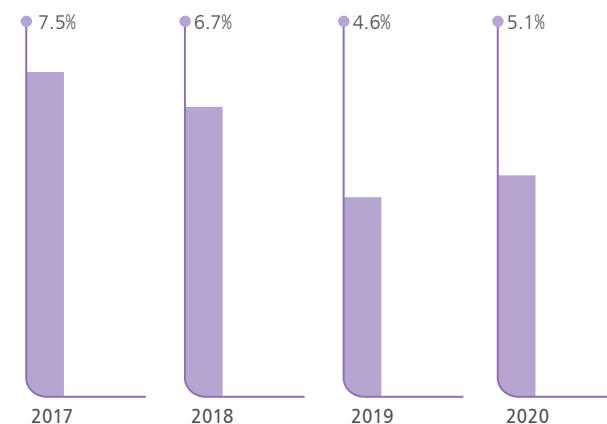
Category	Group	Number of New Hires	Ratio of New Hires in Each Group
Gender	Male	311	11.3%
	Female	221	7.7%
Age	30 and below	238	24.2%
	30-50 years old	274	6.7%
	50 and above	20	3.7%
Total		532	9.5%

Note: Rate of new hires of each group = Total number of new employees in each group hired during 2020 / {(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}

## Turnover Rate

In Taiwan, 267 employees had resigned in 2020 and the turnover rate was 5.1%. For a company that exhibited continued performance growth, the results remained relatively stable and healthy. To examine the 2020 turnover rates more closely, the average turnover rate was 7.0% among male employees and 3.4% among female employees. By age group, the average turnover rate was 12.4% among employees under age 30, 3.2% among those between 30 and 50 years old; and 6.3% for employees 50 years of age or older (including 27 retired).

Turnover Rates of Last Four Years – Taiwan



### Turnover Rate – Gender – Taiwan

Gender/Item	2017		2018		2019		2020	
	Number of People	Turnover Rate						
Male	254	10.3%	237	9.1%	154	5.9%	176	7.0%
Female	127	4.9%	126	4.6%	94	3.3%	91	3.4%
Total	381	7.5%	363	6.7%	248	4.6%	267	5.1%

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

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

### Turnover Rate – Age Group – Taiwan

Gender/Item	2017		2018		2019		2020	
	Number of people	Turnover rate						
Under 30	105	9.9%	129	10.3%	113	10.1%	114	12.4%
30~50	268	7.2%	214	5.7%	124	3.2%	122	3.2%
Above 50	8	2.6%	20	5.6%	11	2.7%	31	6.3%
Total	381	7.5%	363	6.7%	248	4.6%	267	5.1%

In Singapore, 108 VIS employees resigned in 2020 and the turnover rate was 15.5%. In terms of gender, the average turnover rate was 16.0% among male employees and 14.7% among female employees. By age group, the average turnover rate was 15.8% among employees under age 30, 16.4% among those between 30 and 50 years old; and 8.8% for employees 50 years of age or older.

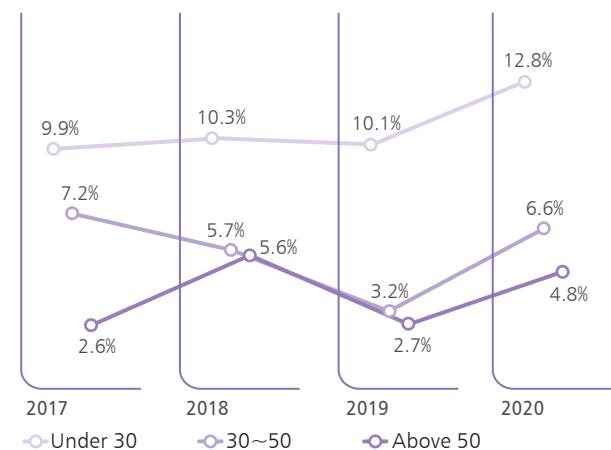
As for the entire company, Taiwan and Singapore combined for a total of 375 resigned employees, with a turnover rate of 6.3%.

In terms of gender, the average turnover rate was 8.4% among male employees and 4.3% among female employees. By age group, the average turnover rate was 12.8% among employees under age 30, 4.8% among those between 30 and 50 years old; and 6.6% for employees 50 years of age or older (including 27 retired).

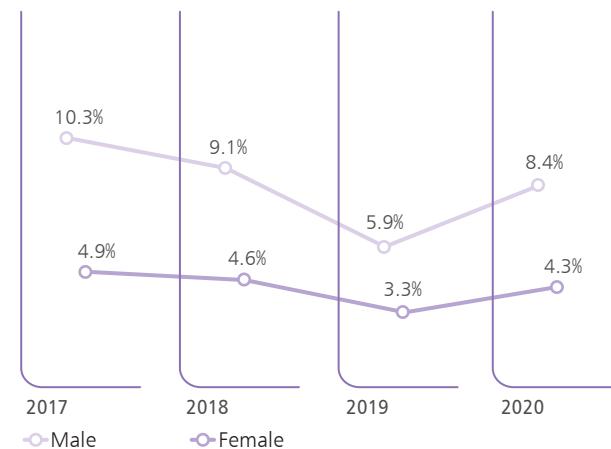
#### 2017-2020 Turnover Rate

Year	2017	2018	2019	2020
Fab	Taiwan	Taiwan	Taiwan	Singapore
Turnover Rate	7.5%	6.7%	4.6%	15.5%
VIS				
6.3%				

VIS Turnover Rate – Age Group



Turnover Rate – Gender



## Balance between Home and Work

When a VIS employee needs to take extended leave to take care of young child, they can apply according to means listed in employee manual or HR regulations; in addition, the company also provides consultation to help employees apply for extended leave in compliance with "Act of Gender Equality in Employment," and "Regulations for Implementing Unpaid Parental Leave for Raising Children". To show respect for "diverse family," VIS also offers employees in same-sex marital relationships the right to apply for unpaid parental leave when they adopt the children of their spouses.

In 2020, a total of 359 VIS employees were entitled to unpaid parental leave, among which 56 employees submitted applications and were all approved. In 2020, 34 employees returned from parental leave, and the reinstatement rate was 46%. Male employee reinstatement rate was 33.3%, and female employee reinstatement rate was 49.2%. The main reason for female employees not returning after unpaid parental leave was the need to take care of family (73.9%), whereas the main reason for male employees not returning was that they found another job (75%). Furthermore, the retention rate of those who had returned from unpaid parental leave in 2019 and stayed for more than a full year was 90.2%, 100% for male employees and 88.2% for female employees.

## Unpaid Parental Leave and Reinstatement

Item	Total	Male	Male
2020 Number of Employees Entitled to Parental Leave	359	199	160
2020 Number of Applications	56	14	42
2020 Number of Actual Reinstatements (A)	34	5	29
2020 Number of Supposed Reinstatements (B)	74	15	59
2020 Reinstatement Rate (A/B)	46%	33.3%	49.2%
2019 Number of Actual Reinstatements (C)	41	7	34
2019 Number of Reinstatements and Stayed for more than a Year (D)	37	7	30
2019 Retention Rate (D/C)	90.2%	100%	88.2%

## Compensation

### 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.

### Overall Compensation

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

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



In 2020, there were 10 managers at VIS, and 4,851 non-managerial full-time employees. Annual average salary was NT\$1,353.5 thousand; Annual median salary was NT\$994.9 thousand. (In accordance with Taiwan Stock Exchange Corporation Rules Governing Information Filing by Companies with TWSE Listed Securities and Offshore Fund Institutions with TWSE Listed Offshore Exchange-Traded Funds). The information above have been audited by Deloitte Taiwan.

Employee compensation in 2020 was around NT\$1.57 billion, which was distributed after decision by the Board of Directors and approval by the Shareholders Meeting, to encourage employees to continue contributing to the company.

The overall compensation will not differ due to gender, age, race, religion, political view, and marital status, and all employees are treated equally and fairly. VIS respects the principle of equal pay for both genders. In 2020, the ratio of compensations of basic level employees was nearly 1:1.

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

	Year	2017	2018	2019	2020
Managerial	Mid to High Level	0.95	0.94	0.91	0.92
	First-Level	0.95	0.98	0.95	0.98
Non-Managerial	Indirect	0.76	0.80	0.85	0.80
	Direct (Taiwanese)	1.03	1.05	1.03	1.03
	Direct (Foreign)	--	--	1.02	1.04

#### Benefits System

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

#### Comprehensive Insurance

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

#### Leave Policies Superior to Legal Requirements

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



## Compensations and Benefits of Non-Managerial Employees

Item	2016	2017	2018	2019	2020
Employee Compensation and Benefits	6,453,548	6,437,992	7,590,795	7,508,045	8,111,480
Average Employee Compensation and Benefits	1,291	1,238	1,366	1,386	1,561

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

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

## Retirement System

### Comprehensive Pension System

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

For employees who opt for the new system, the company allocates 6% of their salary into their personal Labor Insurance account every month; for employees who choose the old system, or those who choose the new system but still has seniority calculated in the old system, VIS has established a pension supervision committee according to related laws, and allocates 2% pension reserve every month. In 2020, 27 employees applied for retirement, and were all approved. Male retirees accounted for 41%, and female retirees 59%.

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

## 6.2 Human Resource Development



### Comprehensive HR Development and Incubation

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

## HR Development

### 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 managers 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.

For the necessary management skills and share language of the management ability training roadmap for managers of different levels, VIS also organized a wide range of management classes and trainings, such as: new manager workshop, subordinate incubation and instruction, performance interview technique, effective motivation and communication and counseling, cross-departmental cooperation and situational leadership. In 2020, VIS organized 25 cohorts, which were participated by 527 person-times, amassing a total of 3,428 hours of training, as VIS continued to enhance leadership of managers.

In 2020, VIS invited external lecturer for the "Building High-Performance Team" course, which was attended by a total of 46 mid to high-level managers. Through the course, the managers learned the key factors of managing high-performance team, how to dissect the possible problems faced by the team during different stages of development, and how to enhance employee involvement through reasonable encouragement and

motivation. The course helped the managers to gain more confidence in building and maintain own teams. This course has been included in the annual mid-level manager training plan, in aim to establish shared management language across departments while also continually helping the managers to lead their teams for further growth and development.

### Strengthen Employees' Interdisciplinary Capabilities

VIS established the Individual Development Plan (IDP) with mandatory and optional courses. Managers 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 internal vacancies available for transfers and respects employees' transfers for the accumulation of diverse professional skills and to cultivate internal interdisciplinary talents.

For example, VIS continued to promote the Six Sigma Quality Trainings (Green Belt/Black Belt), and by 2020, VIS had incubated 11 black-belt and 312 green-belt experts, establishing sound quality improvement and problem-solving and analysis capability; these experts applied their knowledge on work and proposed guidance improvement projects, achieving a total of NT\$140 million in verified project benefits.

## 2020 Training Outcomes

Project Categorization and Actual Benefits	<b>2020 Six Sigma Quality Training (Green Belt) Outcomes</b>  Launched 4 projects listed below: 1. Reducing scrap rate: (1) Voltage related (scrap rate from 11% to 0%) (2) Product quality related (scrap rate from 100% to 0%) 2. Increased productivity: Increased productivity of SACVD from 5.56% to 37.15% 3. Yield rate enhancement: solve the problems of MOSFET (product quality), raising yield rate from 70% to 95%	<b>Advanced Management Development Program</b>  Improve management leadership, ensure continuity of key positions, and establish leadership team.
Quantified Benefit (Amount)	1. Reducing scrap rate: (1) Voltage related: annual benefit of NT\$4,527,072 (2) Product quality related: annual benefit of NT\$3,953,816 2. Increased productivity: annual benefit of NT\$5,042,166 3. Yield rate enhancement: annual benefit of NT\$4,798,800  Total annual benefit: NT\$18,321,854	1. Select managers with development potentials through talent selection and evaluation tools to participate in the program. 2. The development program includes mentorship, job rotation, overseas assignment, and external high-level management incubation, for a 2 to 3-year period. 3. Organized leader recharge training for 45 participants, accumulating 360 total training hours to improve leadership of management. 4. 1/5 of the program participants were promoted to important positions in the company, becoming management team members.
Participation Percentage of VIS Employees	1.16%	0.3%

## Learning and Development

### Rich and Diverse Learning Resources

To cultivate the right professional talents needed by our company, VIS has established a comprehensive talent development system that focuses on novice, management, profession, external, and self- development training programs. Furthermore, the company offers an e-Learning website, which includes 827 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. In 2020, 50,280 person-times have participated in the e-Learning courses.

In 2020, the total time allocated for internal training was 86,256 hours, and the total number of attendees was 88,211. On average, each employee received approximately 14.55 hours of training, and the total training cost was nearly NT\$7 million.

### 2017-2020 VIS Training Index

Year	Number of Employees	Total Training Hours	Average Training Hours	Total Number of Participants (Person-Times)
2017	5,215	178,769	34.28	138,881
2018	5,579	152,171	27.28	128,964
2019	5,315	139,974	26.34	105,744
2020	5,929	86,256	14.55	88,211

### 2017-2020 VIS Training Index (By Employee Category)

Unit: hour

Year	DL	IDL	Executive	Average Training Hours
2017	20.90	47.33	37.73	34.28
2018	13.94	41.49	27.29	27.28
2019	11.34	40.11	32.10	26.34
2020	9.17	18.90	17.49	14.55

### 2017-2020 VIS Training and Development Index

Unit: NT\$

HR Development Index	2017	2018	2019	2020
Average Training Fee for Full-Time Employees	1342.09	1247.44	999.55	1177.13

## 2020 VIS Training Index (By Gender)

Gender	Number of Employees	Total Training Hours	Average Training Hours	Total Number of Participants (Person-Times)
Female	2,959	31,213	10.55	35,444
DL	2,115	20,188	9.55	23,199
IDL	844	11,025	13.06	12,245
Male	2,970	55,043	18.53	52,767
DL	437	3,209	7.34	3,659
IDL	2,533	51,834	20.46	49,108

## 2020 VIS Trainings Introduction

A total of 367 physical trainings were held in 2020, only selected ones are listed below:

Type	Course Name	Content and Outcome	Person-Times
Engineering	New-Hire Engineers General Courses	Coordinate new-hire engineers general courses based on each fab's needs. Offer intensive training for new hires to enhance their engineering capability	1,602
Engineering	Introductory AI	VIS offered a series of introductory classes: statistics, machine learning, and deep learning, etc., incubating AI seeds in different departments to lay a sound foundation for the company's future AI application.	64
General	Teacher's Day: Communication Skills Seminar	Enhance internal lecturers' professional knowledge. Encourage them through posters and cards to raise level of enthusiasm, and show gratitude to their hard work	84
ESH	EMT 1	Train all employees emergency medical care skills. To date, 70 (first-training) and 161 (continual-training) employees have been certified, allowing them to work together and help others during emergencies	149
Quality	Six Sigma	Through the quality improvement course, engineers understand quality tools and learn how to apply them. The course trained 69 seed trainees, among which 21 have earned Green Belt certification. This project achieves an annual benefit of NT\$18,321,900 and continues to improve the company's quality and talent competitiveness	69
Management	Managers' Management Course	Classes are design for managers of different levels based on competencies required, such as talent development, and personnel management, strengthening managers' management skills and competencies.	527



Internal Lecturer Training – Through on-stage practices, the trainees learned how to make lectures effective, fun, and creative.



Manager's Management Course – Utilizing diverse tools to help attending managers to effectively make decisions.



Teacher's Day Seminar: Making use of games to make education more fun and lively



Quality Course: Six Sigma

## Human Capital ROI

	2017	2018	2019	2020	Unit: NT\$ thousand
(A) Revenue	24,909,613	28,928,094	28,286,072	33,131,202	
(B) Operating Expenses	2,745,180	3,013,562	3,423,398	3,840,078	
(C) Employee Compensation and Benefits Expenditures	6,437,992	7,590,795	7,508,045	8,111,480	
Human Capital ROI (A- (B-C))/C	4.44%	4.41%	4.31%	4.61%	
Total Number of Employees	5,215	5,579	5,315	5,929	

## 6.3 Human Rights

VIS supports all related international human rights regulations and prioritizes human rights when formulating related policies. Regarding the formulation of labor-related policies, VIS formulates policies in compliance with or superior than legal and international human rights regulations, keeping VIS' Code of Conduct consistent with international norms. VIS also vigorously establishes positive relationship with employees, building a fun and challenging working environment.

### Human Rights Policy

VIS supports "United Nations Declaration of Human Rights" (UDHR) and complies with interpretations of international human rights guidelines, including "International Bill of Human Rights," "ILO International Declaration on Fundamental Principles and Rights at Work," "UNGPs," "OECD Guidelines for Multinational Enterprises," and "UNGC." VIS also takes actions consistent with the "RBA Code of Conduct" and comply with local laws and regulations of its global sites of operation, in order to protect human rights and build working environment with dignity, realizing the company's core values and realizing "VIS Human Rights Policy," so all employees can receive the respect they deserve. Also, VIS demands all suppliers to comply with the "RBA Code of Conduct" for the formulation and implementation of related human rights policy and ask all supply chain partners to follow the same standards.

### Human Rights Risk Assessment and Mitigation Measures

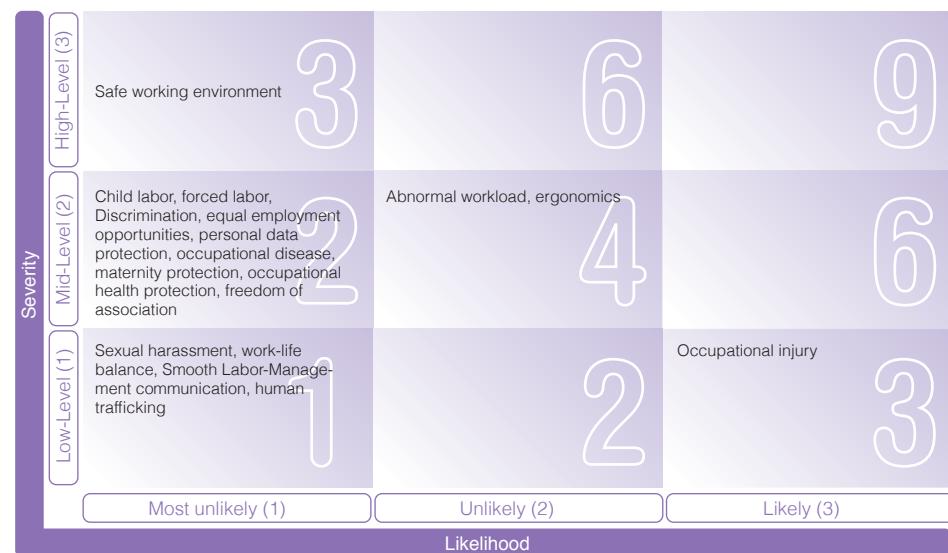
VIS promises to ensure workplace safety throughout the supply chain; all employees are treated with dignity and respect, and VIS operations promote environmental protection and adhere to ethics, constantly innovating and

improving the programs. Every year, VIS adheres to related international human rights conventions and policies to establish the list of topics of human rights risk; targeting the topics on the list, executives of corresponding competent units (HR Division and Risk and Environmental Safety Management Department) will conduct risk assessment. To reduce human rights risk, VIS actively launches improvement plans to build quality working environment, and create a more challenging, safe, and enjoyable workplace. To implement related human rights education. VIS provides employees human rights protection training so that they understand more about their own rights.

In 2020, all unit executives of HR Division convened meeting in accordance with related international human rights conventions and policies, and established a list of human rights risk topics, which included 17 risk topics. The human rights risk map is the results of the risk assessment conducted by related competent units according to the likelihood and severity; in the 2020 human rights risk assessment, no topic was listed as high-level risk (score of 9); four were listed as mid-level risks (score 3~6): safe working environment, abnormal workload, ergonomics and occupational injuries; 13 were listed as low-level risks (score 1~2): child labor, forced labor, Discrimination, equal employment opportunities, personal data protection, occupational disease, maternity protection, occupational health protection, sexual harassment, work-life balance, freedom of association, human trafficking, and Smooth Labor-Management communication.

## Human Rights Risk Map

High-level risk (9); Mid-level risk (3~6); Low-level risk (1~2)



## Human Rights Risk Topics Mitigation Measures

Human Rights Topics	Affected Groups	Assessment Tools	2020 Risk Investigation	Prevention/Mitigation Measures and Implementation Results	Targets
Safe Working Environment	All Employees and Vendors	Install gas and liquid leakage detectors, work environment test	Mid-Level	<ul style="list-style-type: none"> <li>All employees and vendors participate in safety and health tasks, controlling ESH risks from the sources to facilitate safety and health; enhance safety and health responsibility cognition and cultivate safety and health culture through communication and education and training.</li> <li>Install gas and liquid leakage detectors in fabs for real-time onsite monitoring; operational environment test is conducted every six months to ensure safe working environment.</li> <li>Completed 442 work environment chemical factor sampling and testing; all analysis results met requirement (&lt;permitted concentration standards *1/100); occupational disease cases resulted from chemical exposure: 0.</li> </ul>	<ul style="list-style-type: none"> <li>All work environment chemical factor sampling and testing results met requirement.</li> <li>Occupational disease cases resulted from chemical exposure: 0.</li> </ul>
Occupational Disease	All Employees	Special Operations Categorization	Low-Level	<ul style="list-style-type: none"> <li>“Zero accident, and no occupational disease” are goals of management. VIS complies with laws and regulations, and international conventions, in building a safe and healthy working environment.</li> <li>Through health examination and lifestyle survey analysis, employees are categorized for follow up and management, in aim to prevent potential health risks and enhance overall wellbeing; Combining Corporate Values, health examination analysis, and employee health needs, VIS launches health promotion activities and employee assistance plan, encouraging employee participation and creating joint goals of healthy workplace.</li> </ul>	<ul style="list-style-type: none"> <li>Health examination rate &gt;95%</li> </ul>
Occupational Health Protection	All Employees	Health Examination for Special Operation Personnel	Low-Level	<ul style="list-style-type: none"> <li>VIS offers employees health examination every year. In 2020, a total of 44,99 employees took the health examination, and the overall health examination rate was 97%. For those who discovered abnormalities, nurses would make arrangement for them to visit the fab doctors to offer personalized health consulting, helping those with mid/high risk with medical aids. In 2020, a total of 632 visits were made by employees to fab doctors.</li> </ul>	
Abnormal Workload	All Employees	Burnout Inventory	Mid-Level	<ul style="list-style-type: none"> <li>Every year, VIS compiles a follow-up list for the prevention and management of work-related cardiac and cerebrovascular diseases.</li> <li>Proactively make arrangement for fab doctors to offer personalized health consulting and professional recommendations, helping employees to build a healthy lifestyle. VIS also conducts regular musculoskeletal/overload questionnaire surveys to facilitate and ensure mental and physical health of employees and safety of working environment.</li> <li>Fab doctor counseling and recommendation have been completed for all monitored employees in 2020.</li> </ul>	<ul style="list-style-type: none"> <li>Completed handling and improvement management of all cases.</li> </ul>

Human Rights Topics	Affected Groups	Assessment Tools	2020 Risk Investigation	Prevention/Mitigation Measures and Implementation Results	Targets
Ergonomics	All Employees	Nordic Musculoskeletal Questionnaire, MSD/RULA/KIM Checklist	Mid-Level	<ul style="list-style-type: none"> <li>VIS regularly conducts operation analysis and hazard assessment targeting all employees and onsite vendors.</li> <li>Regarding suspected cases of hazards, fab nurses will make arrangement for them to visit fab doctors, and conduct onsite inspection with Risk and Environmental Safety Management Department, proposing feasible improvement recommendations after analysis of procedures, tasks, and actions.</li> <li>In 2020, VIS completed operation analysis and hazard assessment for all employees and onsite vendors, and handled individual cases and managed improvement.</li> </ul>	<ul style="list-style-type: none"> <li>Completed handling and improvement management of all cases.</li> </ul>
Occupational Injury	All Employees and Vendors	Hazard Identification and Risk Assessment	Mid-Level	<ul style="list-style-type: none"> <li>Regularly conducts hazard identification and risk assessment targeting all operations and items; association meeting must be held for all involved units prior to any construction to implement dangerous operation permission and onsite operation management.</li> <li>Include occupational injury cases as follow-up items and propose improvement plans, which are promoted to employees to lower the possibility of future occurrence.</li> <li>All constructions in 2020 held an association meeting to ensure safety; occupational injury cases in 2020 were all included as follow-up items, with improvement plans proposed and promoted to all employees and vendors; safety and health training completion rate of new recruits reached 100%.</li> </ul>	<ul style="list-style-type: none"> <li>Achieved 100% follow-up and improvement rate of occupational injury cases.</li> <li>Health training completion rate of new recruits reached 100%.</li> </ul>
Maternity Protection	Women in pregnancy or one year after giving birth	Maternity Protection Health Management System	Low-Level	<ul style="list-style-type: none"> <li>“Maternity Health Care” Management Project assessed maternity health of employees who were pregnant or had just had a baby, and adjusted their workloads and positions. VIS also offers exclusive parking spaces for mothers, as well as nursing rooms, so that pregnant or nursing employees could find balance between work and life, and achieve the goal of maternity protection.</li> <li>VIS establishes care list according to the Maternity Health Care Management System for maternity protection and care, offering employees necessary resources and protection.</li> <li>All maternity protection works in 2020 have been completed.</li> </ul>	<ul style="list-style-type: none"> <li>Completed all maternity protection works.</li> </ul>
Personal Data Protection	All Employees	Personal Data Protection and Management Self-Check Sheet	Low-Level	<ul style="list-style-type: none"> <li>Establish personal data protection taskforce to handle counseling, appeal, exercising of the right to use personal data, and emergency reporting.</li> <li>VIS irregularly conducts promotion of personal data protection and regularly conducts inspection; personal data protection taskforce regularly conducts inspections and reviews, as well as convening meetings to enhance protection of personal data; internal and external audit units conduct legal compliance audits annually.</li> <li>In 2020, VIS received 0 appeal regarding personal data protection.</li> </ul>	<ul style="list-style-type: none"> <li>Received 0 appeal regarding personal data protection.</li> </ul>

Human Rights Topics	Affected Groups	Assessment Tools	2020 Risk Investigation	Prevention/Mitigation Measures and Implementation Results	Targets
Sexual Harassment	All Employees	Anti-Sexual Harassment Mailbox	Low-Level	<ul style="list-style-type: none"> <li>Formulate sexual harassment management regulations, insisting on zero-tolerance for discrimination and regulating methods of filing appeals and related handling; include sexual harassment in annual required training, and promote through bulletin board and employee communication meeting.</li> <li>Employees may file appeals through Anti-Sexual Harassment Mailbox, where the General Counsel is the person in charge; an investigation taskforce will handle the appeals, and carry out related penalties and improvements based on finding of investigation.</li> <li>In 2020, three sexual harassment appeals were filed, and General Counsel appointed investigation taskforces to handle the cases; all three cases were physical harassment, where 2 cases were closed as the complainants accepted apologies, and 1 case was closed as the respondent (vendor) resigned. All closed cases were promoted through posters, courses, meetings, as materials of anti-sexual harassment.</li> </ul>	<ul style="list-style-type: none"> <li>Completed all investigation and penalty of all cases.</li> </ul>
Discrimination, Equal Employment Opportunities	Job Candidates	Employment Process related Documents	Low-Level	<ul style="list-style-type: none"> <li>Promote and implement internal control procedure, respect local labor laws. When reviewing job applications, VIS will not discriminate against anyone based on race, class, language, thought, religion, political view, nationality, birthplace, gender, sexuality, age, marital status, look, facial features, and disabilities.</li> <li>Employees can file appeals via channels of Ombudsman Mailbox and Employee Opinion Mailbox, where the persons responsible are CFO and vice president of ADM respectively; HR Division will then handle the appeals.</li> <li>Starting from recruitment, VIS complies with all laws and regulations for its employment procedure and eliminates all discriminations; there was no discrimination related appeal in 2020.</li> </ul>	<ul style="list-style-type: none"> <li>Received 0 appeal of illegal discrimination via Ombudsman Mailbox and Employee Opinion Mailbox</li> </ul>
Child Labor	Employees under 18	Identity Documents	Low-Level	<ul style="list-style-type: none"> <li>VIS obeys labor laws and does not hire child labor. Interviews are conducted to make sure that employees are at least 18 years of age.</li> <li>All documents and personal information will be reviewed when new recruits report to VIS.</li> <li>VIS did not employ any child workers in 2020.</li> </ul>	<ul style="list-style-type: none"> <li>Employed 0 child labor</li> </ul>
Human Trafficking	Foreign Employees	Identity Documents, Employment Contract, Notice of Employment	Low-Level	<ul style="list-style-type: none"> <li>VIS complies with local labor laws and regulations and conducts employment procedures accordingly, verifying identity documents of interviewees; VIS also files applications following required procedures for all foreign employees.</li> <li>When employees report to the company, they have to sign employment contract, employment notice, and submit identity documents, to ensure all procedures are in compliance with laws; when hiring foreign DL employees through legal brokers, VIS strictly verifies related documents to ensure compliance.</li> <li>In 2020, there was 0 case of human trafficking.</li> </ul>	<ul style="list-style-type: none"> <li>No human trafficking case</li> </ul>

Human Rights Topics	Affected Groups	Assessment Tools	2020 Risk Investigation	Prevention/Mitigation Measures and Implementation Results	Targets
Forced Labor	All Employees	Employee Opinion Box	Low-Level	<ul style="list-style-type: none"> <li>VIS respects low labor laws and regulations, as well as employees' free will to work. VIS never forces or coerces any employee for labor. All employees are voluntarily working at VIS, and can terminate the employment anytime.</li> <li>Employees can file appeals via channels of Ombudsman Mailbox and Employee Opinion Mailbox, where the persons responsible are CFO and vice president of ADM respectively; HR Division will then handle the appeals.</li> <li>In 2020, VIS received 0 appeal regarding forced labor.</li> </ul>	<ul style="list-style-type: none"> <li>No appeal regarding forced labor</li> </ul>
Work-Life Balance for Physical	All Employees	Participation and Satisfaction of Employee Activities	Low-Level	<ul style="list-style-type: none"> <li>Offer employees diverse art and culture, health, parent-child, and group activities, to facilitate interpersonal interactions and enrich the idea of "work-life balance".</li> <li>In 2020, VIS held a series of company events: Sports Festival, concerts, Family Day, Hiking, Road Running, and so on, inviting over 15,000 employees and family members. Employee tours saw participation by 5,000 employees and family members; VIS also introduced EAP to offer employees professional counseling and medical services in the areas of mental health, law, finance, health, and management, building a corporate environment of work-life balance.</li> </ul>	<ul style="list-style-type: none"> <li>Continued to organize diversified employee activities</li> </ul>
Freedom of Association	All Employees	Union Communication, Number of Clubs in Employee Welfare Committee	Low-Level	<ul style="list-style-type: none"> <li>Formulate Corporate Social Responsibility Manual, clearly stating that employees have the freedom of association according to local laws and regulations and VIS respect employees' organization of union according to legal procedures.</li> <li>Employee Welfare Committee encourages employees to participate in healthy recreational and welfare activities, formulating club management rules and offering funding.</li> <li>In 2020, the union sustained normal operation; moreover, employees formed a total of 26 clubs.</li> </ul>	<ul style="list-style-type: none"> <li>Normal Operation of Corporate Union and Clubs</li> </ul>
Smooth Labor-Management Communication	All Employees	Minutes of Labor-Management Meeting	Low-Level	<ul style="list-style-type: none"> <li>Provide open communication channels, and care hotline, and respect employee opinions, and care for employees to create harmony in labor relation.</li> <li>In accordance with labor-management meeting regulations, labor representatives are elected at each fab; employees can propose disputes to discuss with managers at each quarterly labor-management meeting; VIS also holds Chairman's Talk every six months for Chairman to communicate with employees.</li> <li>In 2020, all three fabs held quarterly labor-management meetings (12 sessions), and handled all proposed issues; six sessions of Chairman's Talk were held.</li> </ul>	<ul style="list-style-type: none"> <li>Closed all cases from employee communication channels</li> <li>Organized labor-management meeting in accordance with law</li> </ul>

## Employee Communication

VIS values employees' opinions and ideas, strives to establish effective communication channels. VIS two-way employer-employee communication, in order to build harmony employer-employee relationship and establish diverse channels for employees to reflect opinions. Executives are responsible for every channel, including independent directors, chairman, president, vice president of ADM, Chief Finance Officer, General Counsel, and directors of the fabs, showing how much VIS values the opinions of its employees. From all the appeal channels, internal communication channels received 331 cases in 2020, including: 160 from "Speak Out," 145 from Employee Opinion Mailbox, 23 from Ombudsman Mailbox, and 3 from Anti-sexual Harassment Mailbox. All reported cases have been assigned to responsible units, and dealt with in confidentiality. Depending on the situation, an investigation task force would be formed. All channels of communication are disclosed on internal website, electronic bulletin board, and new-comer training materials, informing all employees.

Furthermore, VIS holds at least two Chairman's Talk every six months, including Manager Communication Meeting for managers above JG 35, and Town Hall Meeting for all employees. Six Chairman's Talk were held in 2020. During the meetings, Chairman not only shared on company operations and future outlooks, but also replied to issues raised by employees prior to the meetings, in order to respond to their suggestions while conveying the thoughts of management.

## Frequency and Content of Diverse Communication Channels

Item	Frequency	Content	2020 Performance
Labor-Management Meeting	Quarterly	Held at each fab.	VIS held a total of 12 sessions at 3 fabs.
Employee Opinion Channels	Irregular	"Speak Out," Employee Opinion Mailbox, Ombudsman Mailbox, Anti-sexual Harassment Mailbox, Audit Committee mailbox, chairman mailbox, and president mailbox.	Received 331 cases, and reply rate of 100%.
Chairman's Talk	Six Months	Managers above JG 35, all employees	Held 6 Chairman Meetings, and around 1,750 people attended.

## Corporate Business Philosophy Survey

VIS has always cared for and valued employee opinions, and carries out improvements accordingly, in order to build a more harmonious working environment and enhance unity. To learn employees' recognition level of corporate business philosophy, VIS has cooperated with expert consultants to conduct the "10 Business Philosophy Survey" since 2018, which will be conducted biennially. The 2020 survey included employees in Taiwan, Western U.S., and Singapore, where the response rate was 98.2%, achieving a recognition level of 4.42/5.0; compared to 2018 result, the recognition level increased by 0.03 points, and significant increase could be observed in all questions, showing that VIS employees highly recognized with and were highly engaged in (highly committed to) the company's business philosophy.

## Corporate Business Philosophy Survey Questionnaire and Results

The questionnaire consisted of two aspects: Business Philosophy and Employee Engagement, and a total of 51 questions in the format of 5-point scale. The Business Philosophy aspect included the 10 Articles of VIS Business Philosophy and the average recognition level of all employees was 4.42; 77.3% of employees recognized with VIS' business philosophy. The recognition level was higher than 2018 (4.39), whereas the percentage of employees was lower (77.5% in 2018). Male employees had a score of 4.40, which was slight lower than female employees' 4.45; in terms of position, senior management had the highest score of 4.76, followed by mid-level management (4.52), and first-level management (4.47), with the lowest being non-management employees, averaging 4.41. As for Employee Engagement, the overall average was 4.42; female employees' engagement level (4.43) was slightly higher than male employees' average of 4.41; in terms of position, senior management had the highest score of 4.88, followed by mid-level management (4.60), and first-level management (4.50), with the lowest being non-management employees, averaging 4.39.

Aspect	Article	2018	Overall	Gender		Position			2020
				Male	Female	Non-Management	First-Level Management	Mid-Level Management	
Business Philosophy Article 1	Upholding Ethical Business Practices	4.39 (77.5%)	4.42 (77.3%)	4.40 (75.9%)	4.45 (80.2%)	4.41 (77.4%)	4.47 (81.7%)	4.52 (83.2%)	4.76 (95.3%)
Business Philosophy Article 2	Focusing on Core Business								
Business Philosophy Article 3	Internationalized Operation with View on Global Market								
Business Philosophy Article 4	Focusing on Long-term Business Strategies, Striving to Be a Perpetual Enterprise								
Business Philosophy Article 5	Treating Customers as Partners								
Business Philosophy Article 6	Building Quality into All Aspects of Our Business Compliance								
Business Philosophy Article 7	Constant Innovation and Entrepreneurial Vitality								
Business Philosophy Article 8	Creating a Dynamic and Enjoyable Working Environment								
Business Philosophy Article 9	Establishing an Open Management Style								
Business Philosophy Article 10	Being a Good Corporate Citizen by Contributing and Caring for both Shareholders and Employees								
Level of Employee Engagement	Commitment	4.42 (86.3%)	4.42 (85.1%)	4.41 (84.4%)	4.43 (86.1%)	4.39 (84.1%)	4.50 (91.4%)	4.60 (95.3%)	4.88 (95.3%)

Description: 1. The survey used a 5-point scale questionnaire (Strongly Agree: 5; Agree: 4; Neutral: 3; Disagree: 2; Strongly Disagree: 1).

2. The percentages in brackets are the percentages of employees answering Agree and Strongly Agree.

## 6.4 Occupational Safety and Health

### Sustainability Goals



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

### VIS Environmental, Safety, and Health Policies

When it comes to the company's environmental, safety, and health policies, VIS places a strong emphasis on full participation by all employees, proactively establish sound interaction with stakeholders including employees, customers, and community citizens, and performing due diligence prior to M&A; VIS upholds the core values of "honesty and practicality, commitment, innovation, and customer partnership," and strives for the goals of "zero accident and sustainable environmental development. VIS is also committed to conduct various ESH improvements. 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.

Information on VIS' environmental, safety, and health policies, and applicable scopes of safety and health/environmental management systems have been published on the company's website, for all stakeholders to access at any time. In addition, VIS' 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.

### Environmental, Safety, and Health Management System

Complying with ISO 14001 and ISO 45001 standards and requirements of ESH regulations, VIS establishes ESH management system. All Fabs in Taiwan have obtained the ISO 14001:2005 and ISO 45001:2018 third-party certification, and Fab VS1 in Singapore has introduced ESH management system; stakeholders such as suppliers and citizens can access the latest status on the certification process via the following link: [https://www.vis.com.tw/en/press\\_document](https://www.vis.com.tw/en/press_document)

Each department, based on various operations, products and services, process hazards, insurance company audit, expert recommendation, case studies from other departments or peer fabs, and regulatory requirements, appoints senior staff member to log and assess ESH risk and environmental aspects, and propose ESH plans for improvement targeting high-level risks and significant environmental items. The main implementations launched are listed below:

- Legal Compliance Identification: ESH department logs into websites like Laws & Regulations Database of R.O.C. to check the latest ESH regulations and other requirements, in order to ensure that VIS complies with the aforementioned laws and regulations as well as requirements of other stakeholder groups.
- ESH Risk Assessment and Formulation of Management Plans: Each unit appoints senior staff member to log and assess ESH risk and environmental aspects, and propose ESH plans for improvement targeting high-level risks and significant environmental items.
- ESH Performance Measurement and Environmental Monitoring Management: Risk and Environmental Safety Management Department

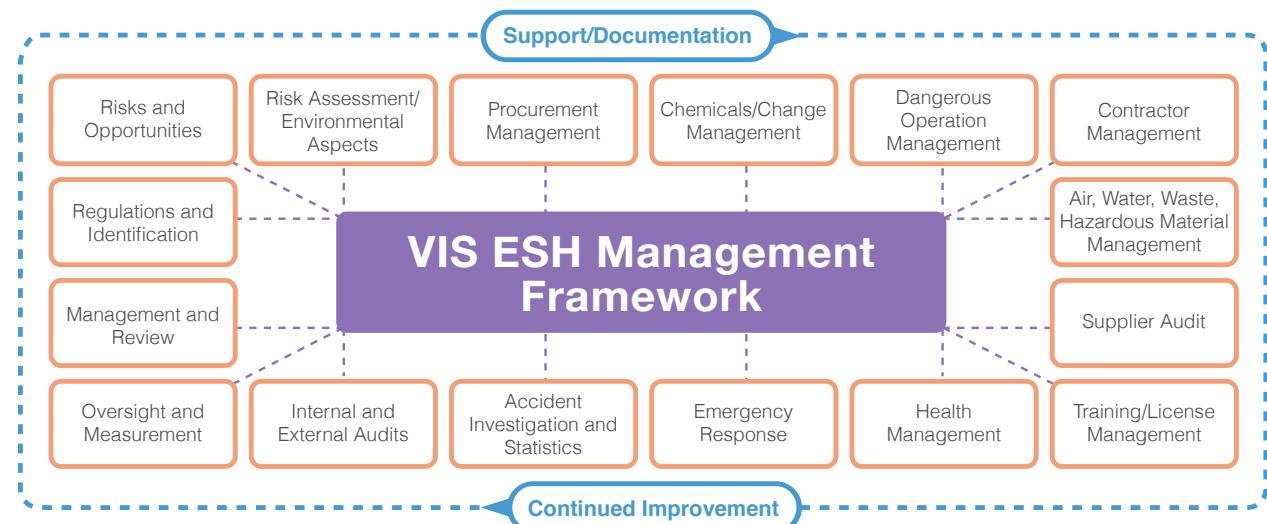


outsources the implementation of environmental monitoring every six months in compliance with the law, and make public announcement of monitoring results and demands units with abnormalities to make improvement.

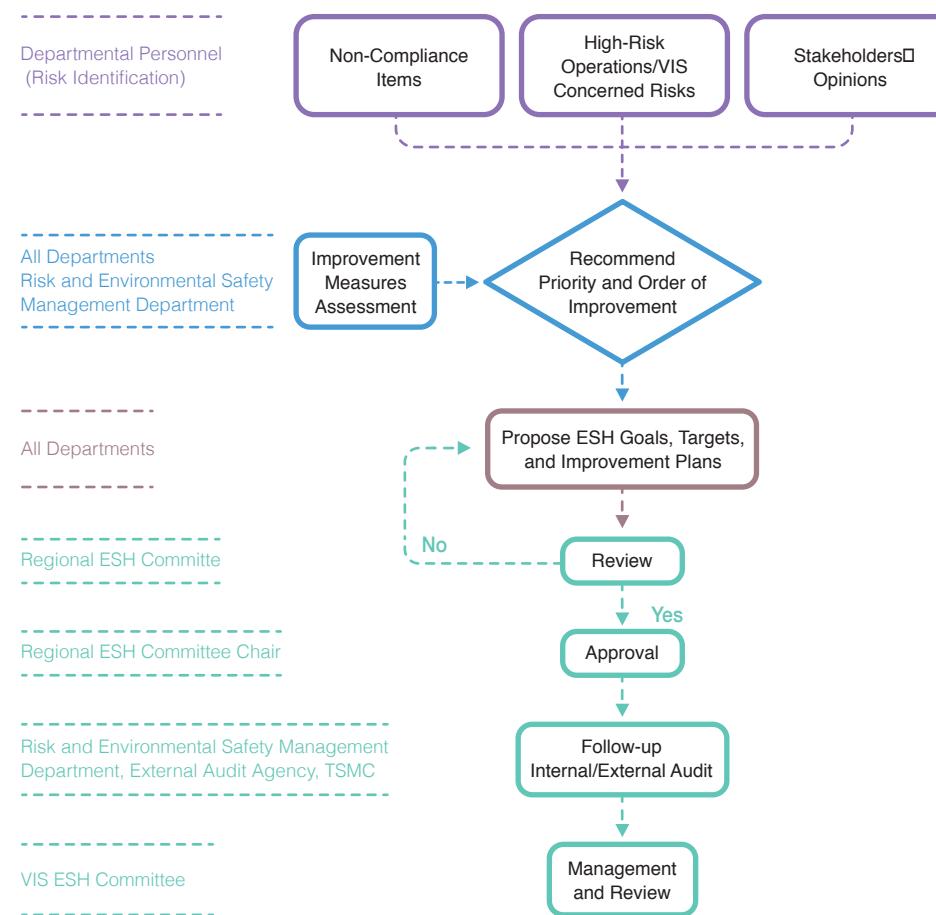
- ESH Performance KPI Contest: Facility engineering and module engineering departments conduct ESH Performance KPI contest every six months (quarterly for manufacturing), including items of accidents and deficiencies, continued ESH improvement, and operational control...etc., where the winning units are presented banners and prize money.
- Implementation of Internal and External Audits: Risk and Environmental Safety Management Department conducts semi-annual internal audits, and commissions a third party for management system audit every year to ensure the effectiveness of the management system.

When abnormal events take place, investigation system and CAR will be immediately launched, and unit responsible will be asked to make improvements. The environmental, safety, and health management system is implemented in accordance with PDCA method shown below:

### VIS ESH Management Framework



## ESH Organization Implementation and Operation Procedures

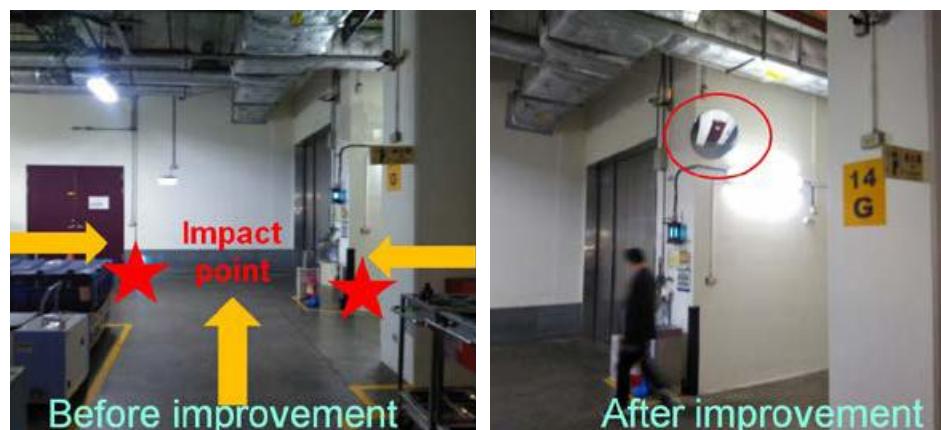


An important environmental policy of VIS is to implement green production to reduce environmental impact. In 2020, VIS completed a total of 87 environmental improvement plans, mainly concerning waste reduction, energy conservation, and legal compliance, which included replacement of energy-saving/variable-frequency dry pump, extension of tube cleaner HF & DI water, and reduced use of process chemicals and gases, such as ammonia water, TMAH, IPA, N<sub>2</sub>, O<sub>2</sub>, H<sub>3</sub>PO<sub>4</sub>, and light barrier, from source, in order to lower the impact on the environment; also, VIS continues to purchase green products, including paper towel and photocopy paper, and use raw materials that do not contain banned substances, to lower environmental burden and impact.

Examples of important ESH plans executed in 2020 are shown below:



F2 MAU Maintenance Platform Railings (Risk Level: 4-5)



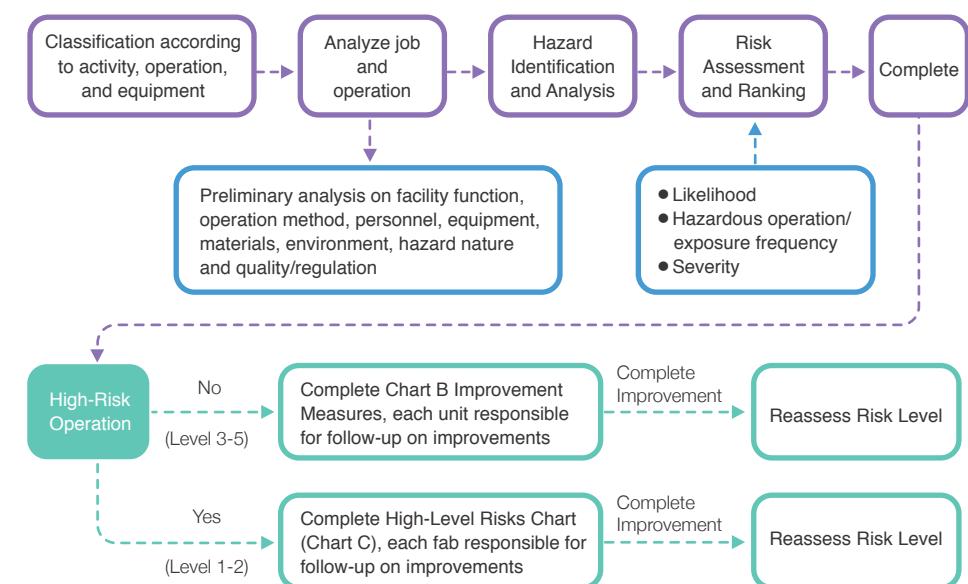
F2 Foundry Building 1F – Reflection Mirror in Aisle (Risk Level: 4-5)

### • Hazard Identification, Risk Assessment and Accident Investigation

According to various operations within workplace and nearby operations of provided facilities and operation areas, including routine or nonroutine tasks, hazard classification (including physical, ergonomic, chemical, biological, socio-psychological hazards), planned or newly developed, new or adjusted activities, products, and services, targeting employees, contractors, dealers, visitors, contracted personnel, and related personnel of rental interfaces of plants, or other external personnel that have to enter the workplace, of each responsible unit identifies safety and health hazards of the equipment, facilities, and production environment, while also considering risks of operations resulted from other human factors, including personnel behaviors/abilities; based on the results of identification, each responsible unit conducts improvement, risk and opportunity assessment, and operation control.

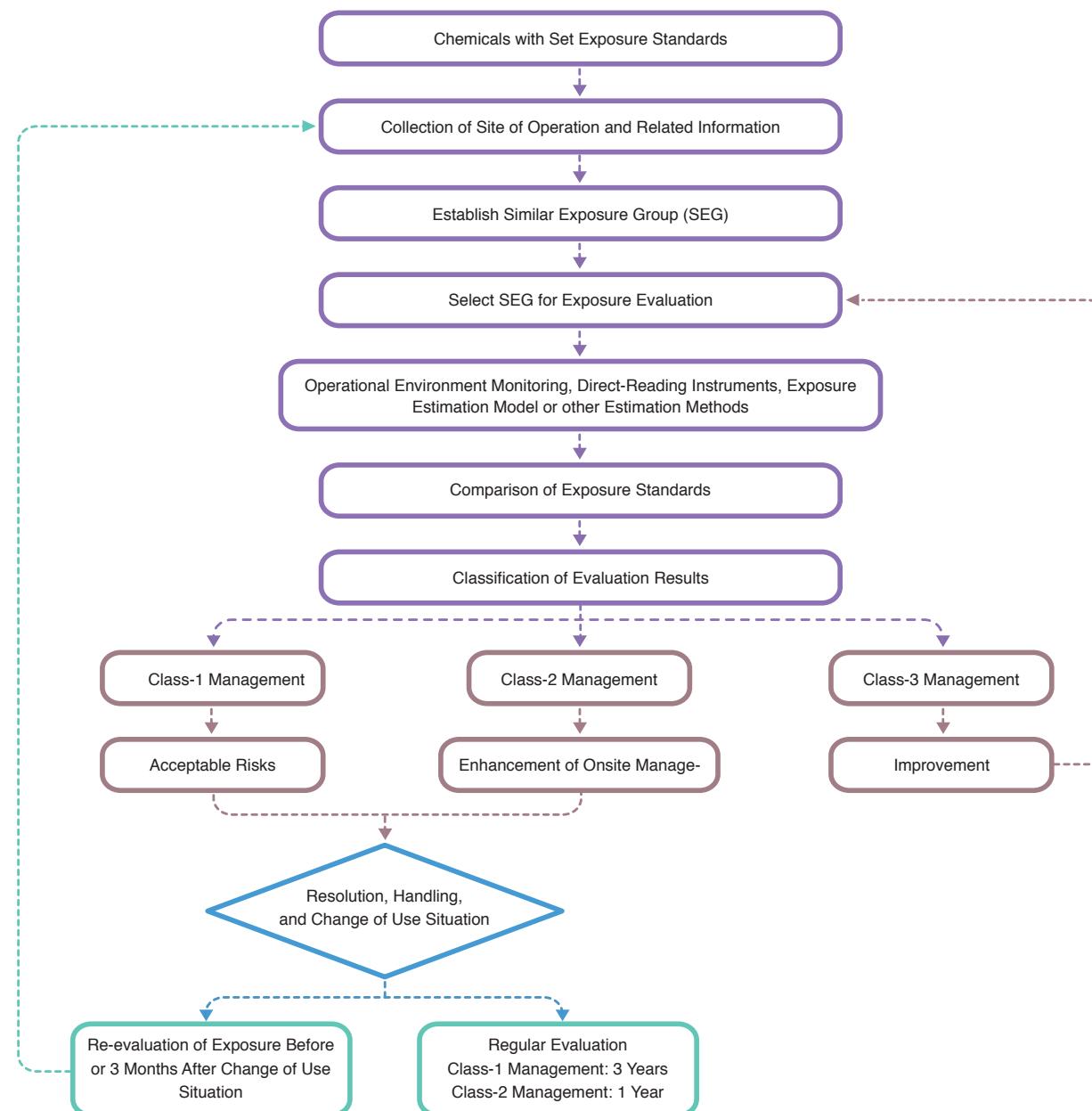
All outsourced constructions or contracted operations, contractors must also complete job safety analysis (JSA) before association meeting, to identify possible hazards and preventive measures in advance. Risk assessment and JSA results must be promoted during the association meeting before the construction and daily toolbox meetings, so that all personnel involved understand clearly the hazards and important safety reminders relating to the construction.

### Hazard Identification and Risk Assessment Procedures



If material risks or significant aspects are found through hazard identification, risk analysis, and environmental aspects, management plans must be formulated. ESH plans shall be reviewed and approved by supervisors, department ESH representatives, and risk management organization, of the proposing unit, and finally implemented upon approval by the chair of regional ESH Committee. Each fab will report the implementation result of ESH plans during the monthly ESH Committee meeting, and at the quarterly VIS ESH Committee meeting.

Regarding the hazardous chemicals used or stored in fabs, risk level is assessed based on level of impact on health, distribution, and usage quantity for classified management. Assessment results and classified management procedures of chemicals with set exposure standards are shown below:



Each fab's Emergency Response Center (ERC) will organize related emergency response training and drill in accordance with "Emergency Response Training Implementation Rules" (1D1-007) every year; and has formulated "Emergency Response Handling Plan" (1A1-0083) as internal regulations. When an event takes place in the fab, responses and handling of the situation shall comply with various emergency response procedures. Also, reporting and event investigation by the fab and external competent authority will be launched in accordance with "Event Reporting/Investigation Rules" (1T5-0001). Improvements of all events/deficiencies will be followed up, and reported to committee members and labor representatives at fab and VIS ESH Committee meetings.

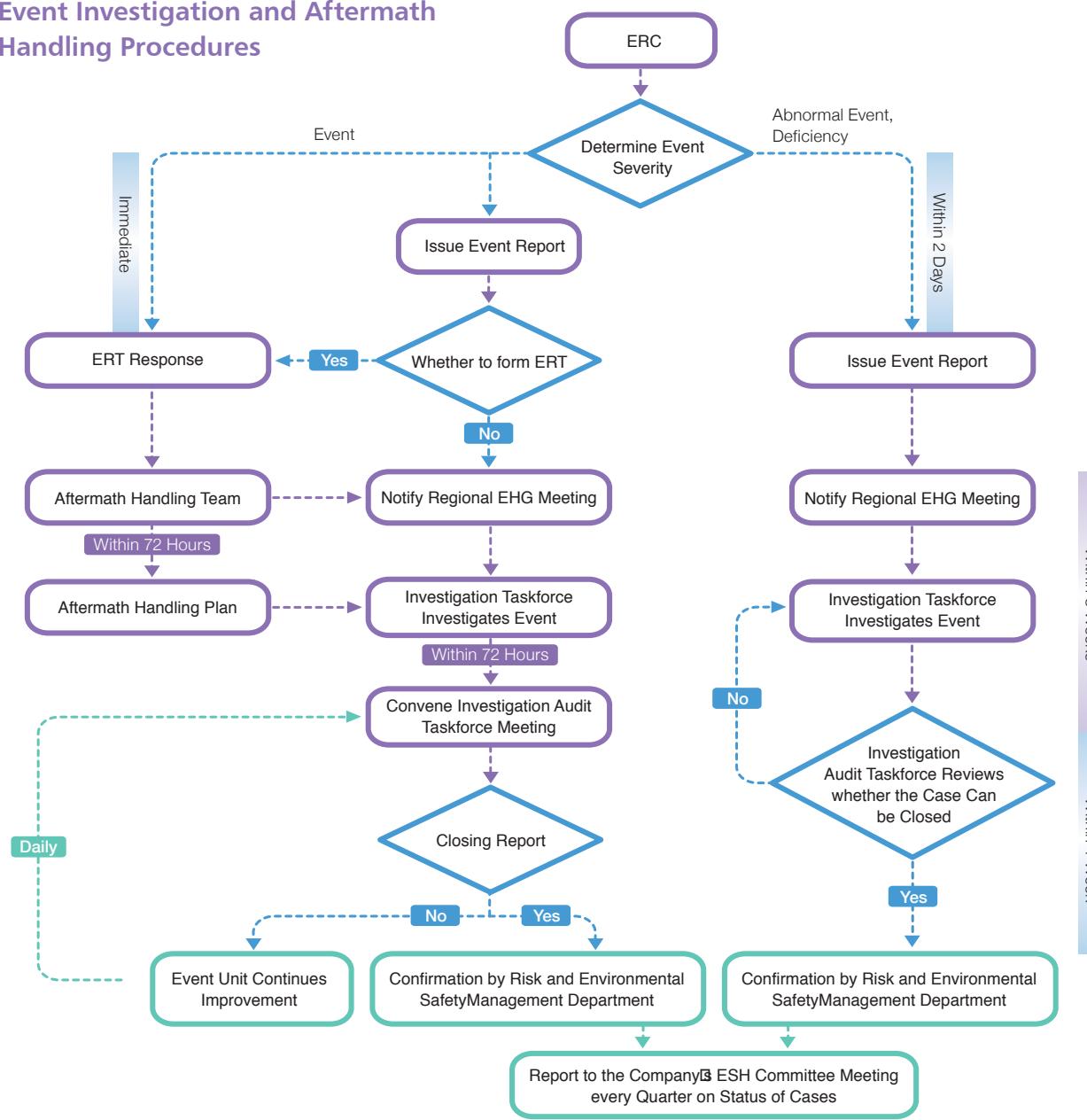
### ERT Drills, Sessions, and Number of Participants of Fab 1/2/3

	Training Items	Content	Hrs.	Planned Sessions	Executed Sessions	No. of Participants
Drills	1. TE Evacuation Drills	Actual evacuations based on simulated disaster scenarios.	1H	4	4	447
	2. Office Evacuation Drills	Office staff evacuation based on simulated disaster scenarios.	1H	3	3	2,075
	3. Post-Earthquake Assessment Drills	Fab building exterior/interior damage assessment drill	1H	3	3	69
	4. ERT Drills	Drills for entire fab	0.5H	11	11	162
	5. Unannounced Response Drills	Unannounced ERT assembly	0.5H	5	5	169
Summary				61	55	3,830

### ERT Drills, Sessions, and Number of Participants of VIS VS1 in Singapore

	Item	Content Executed	Hrs.	Planned Sessions	Executed Sessions	No. of Participants
Evacuation Drills	Shift A-D Evacuation Drill		1H	4	4	397
	Office Evacuation Drill		1H	1	1	270
ERT Drills	Shift B-D ERT Drill		1H	3	3	47
Summary			8	8	8	714

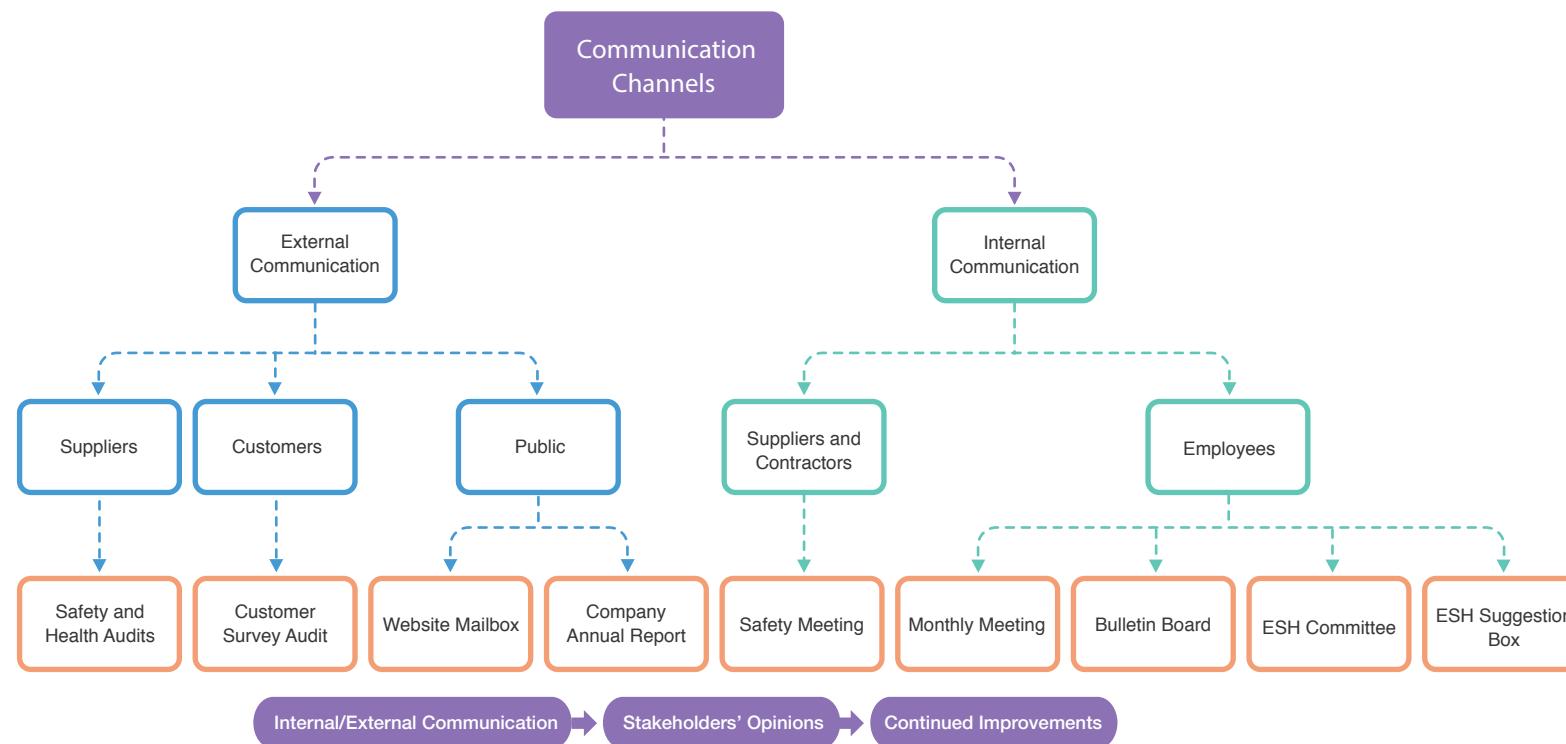
## Event Investigation and Aftermath Handling Procedures



### • ESH Worker Participation, Consulting and Communication

As for communication channels of ESH related matters, designated personnel at the fabs provide around-the-clock emergency response consulting, and for related ESH issues, day shift engineers can be consulted. Communication channels include: TE online personnel monthly meeting, physical and electronic bulletin board, toilet literature, departmental ESH meeting, regional ESH meeting, ESH Opinion Mailbox, improvement proposal system, new recruit seminar, report to supervisors or ESH representatives, and electronic employer-employee communication platform. Also, when onsite vendors discover issues, they can immediately report to responsible engineers, or to the company through monthly hook up meeting; through supplier audit, directly communicate with vendor personnel regarding ESH issues. VIS boasts diverse communication channels, which are shown below:

VIS ESH Communication Channels



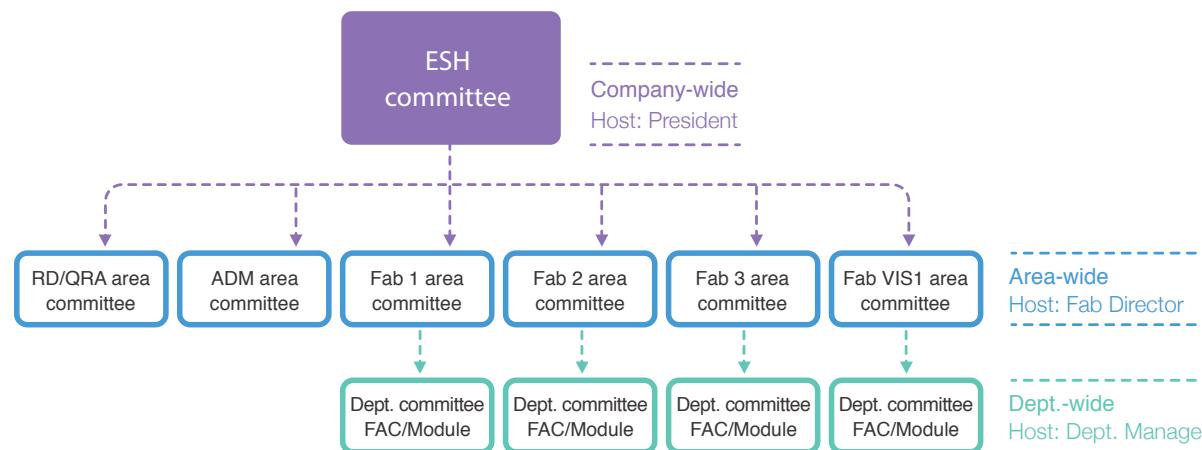
- Safety, Health, and Environmental Protection Committee

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

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

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

### ESH Committee Structure



### ● Personnel included in ESH Management System

VIS has a total of 5,949 employees (Headquarters: 581; Fab 1: 1,601; Fab 2: 1,888; Fab 3: 1,072; Fab VS1: 807).

The number of contractors or non-employees whose jobs/working environment are controlled by the organization is 643 (Fab 1: 151; Fab 2: 177; Fab 3: 123; Fab VS1: 192), approximately 9.75% of all workers.

The number of employees/contractors is the reported number to the online reporting system of occupational injury in December 2020.

## 6.4.2 Workplace Health Management

### Infectious Disease Response

To protect the health and safety of its employees, VIS Epidemic Prevention Team has made public announcement on pandemic prevention policy and regulations, including when to wear a mask, respiratory tract hygiene and cough manner, taking own body temperature, and update of pandemic prevention survey, etc.; also, based on the survey results, Wellness center offers care and follow up on personnel. Through close cooperation of the Epidemic Prevention Team and all units, no abnormalities have been found.

### Health Management

VIS values employee health and proactively launches employee health promotion to build a safe and healthy workplace. VIS offers employees, including new hires, special operation staff, and all employees, health examination every year, which is more frequent than required by laws. Complying with laws and regulations, VIS has employed professional medical staff and onsite doctors to jointly promote the comprehensive health management program including special care, health care, health promotion, and psychological consulting, raising the employees' health awareness.



When to Wear a Mask Poster



Taking own body temperature Poster

In 2020, Health Promotion Class proactively promoted sports and health related activities to facilitate employee health, and encourage the entire company to participate, including weight-loss sports seminar, essence oil massage seminar, and weight-loss challenge, which were all well-received by employees. Also, VIS provides a wide range of indoor recreational facilities, and organizes for employees diverse leisure and club activities, so that employees can relax when they are not working and strike a balance between work and life. Wellness center's application for Work-Life Balance Award was accepted in 2020.

## Special Care

VIS offers special operations health examination every year, so that all employees can feel safe working. In 2020, 234 were engaged in special hazardous operations, and the examination rate was 100%. A list of the

work-related cardiac and cerebrovascular diseases prevention management was established using the results of the examinations, where nurses arranged for visit to fab doctors to offer personalized consulting and suggestions, so employees could proactively establish healthy lifestyle. Also, VIS regularly conducts muscle and bone surveys to proactively offer employees related care, ensuring workplace safety.

"Maternity Health Care" Management Project assessed maternity health of employees who were pregnant or had just had a baby, and adjusted their



workloads and positions. VIS also offers exclusive parking spaces for mothers, as well as nursing rooms, so that pregnant or nursing employees could find balance between work and life.



Safeguard the World, Safeguard Health



Maternity Health Care

## Health Care Program

VIS offers employees health examination every year, which is more frequent than required by laws. In 2020, the overall health examination rate was 97%, and 4,499 people attended. For those who discovered abnormalities, nurses would make arrangement for them to visit the fab doctors to offer personalized health consulting, helping those with mid/ high risk with medical aids. VIS also conducts graded health management for hours management depending on the medical conditions of employees. In 2020 a total of 632 people visited fab doctors.



## Health Examination

Disease prevention is also an important key to safety and health. VIS has been offering employees free flu shots every year. In 2020, a total of 1,525 people were vaccinated, and VIS subsidized each person NT\$500, totaling at NT\$763,000.

Moreover, VIS irregularly organizes related health promotion activities. In 2020, VIS organized the Engineer's Day "Liver Disease Screening for Love" activity, making special arrangement for gastroenterologists to enter the fabs with health examination teams to perform abdominal ultrasound and blood sampling. A total of 139 employees participated as VIS protected employees from the threat of diseases.



Free Flu Shots



"Liver Disease Screening for Love" Activity

## Health Promotion

To promote the habit of exercising regularly, VIS specially invited professional sports instructors to organize the "Sports Seminar – How to Lose Weight," sharing with employees sports nutrition and how to exercise at home and in office. Nearly 200 employees registered for the event and gave positive feedback. Also, VIS cooperated with aromatherapists to organize the "Essence Oil Seminar-World-Class Relaxation," attracting 120 employees to participate,

as they learned to relieve the fatigue and stress from work and allowed their body and soul to relax.

VIS organized the Weight-Loss Challenge based on the 46.8% BMI abnormal rate. The challenge was participated by a total of 436 employees. The lost a total of 1,113kg, averaging 2.6kg per person. Through healthy weight-loss activities, combined with healthy diet and sports promotion, VIS employees could opt for low-oil, low-calories diet and exercise timely at work, raising health awareness and prevent chronic diseases; it also boosted their morale, creating a healthy and energetic working environment.



Weight-Loss Challenge Poster



Sports Seminar – How to Lose Weight



Essence Oil Seminar – World-Class Relaxation

### 6.4.3 Disabling Injury Statistics

In 2020, there were 5 cases of employee injuries and 0 case of contractor injury at VIS, all of which were minor injuries, such as contusion or sprain, 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 2020. 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.

#### Disabling Injury Statistics

	2016		2017		2018		2019		2020	
	Male	Female								
Number of Disabling Injuries	2	3	3	5	3	3	3	5	0	5
VIS Disabling Injury Frequency (Note 1)	0.20	0.30	0.27	0.45	0.26	0.26	0.26	0.43	0	0.43
VIS Severity of Disabling Injuries (Note 2)	1	5	2	2	2	3	2	3	0	16
Total Injury Index (Note 3)	0.01	0.04	0.02	0.03	0.02	0.03	0.02	0.03	0	0.08

	2016		2017		2018		2019		2020	
	Male	Female								
Number of Contractor Disabling Injuries	0	0	0	0	0	0	0	0	0	0
Contractor Disabling Injury Frequency (Note 1)	0	0	0	0	0	0	0	0	0	0
Contractor Severity of Disabling Injuries (Note 2)	0	0	0	0	0	0	0	0	0	0
Total Contractor Injury Index (Note 3)	0	0	0	0	0	0	0	0	0	0

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

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

Note 2: Disabling injury severity rate = (Total lost days of disabling injury/Total work hours (including hours of overtime)) X 1,000,000

Note 3: Frequency-Severity Indicator (FSI) =  $\sqrt{(\text{Disabling injury frequency} * \text{Disabling injury severity rate}/1,000)}$

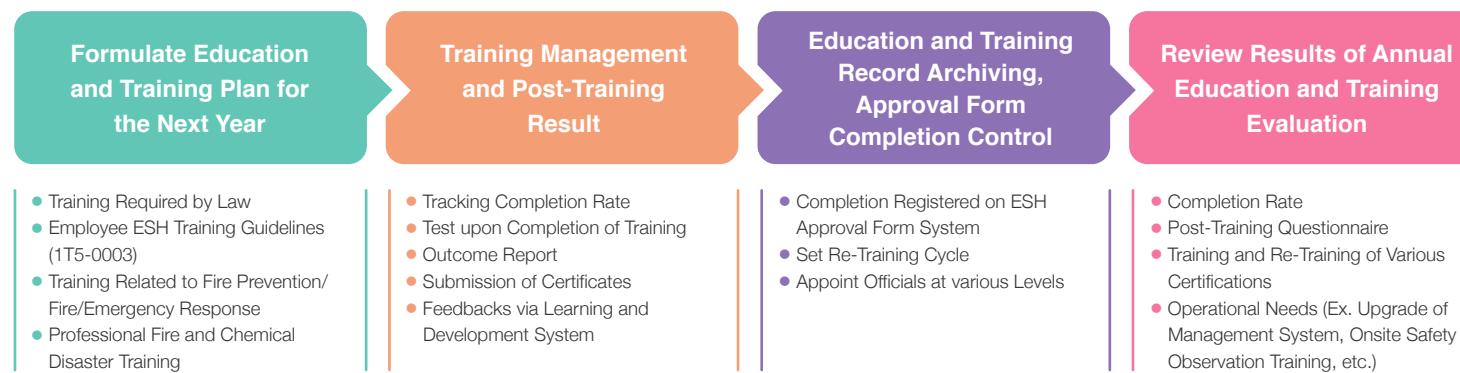
Note 4: Disabling Injury Statistics does not include VS1 in Singapore.

#### 6.4.4 Promotion of ESH Education

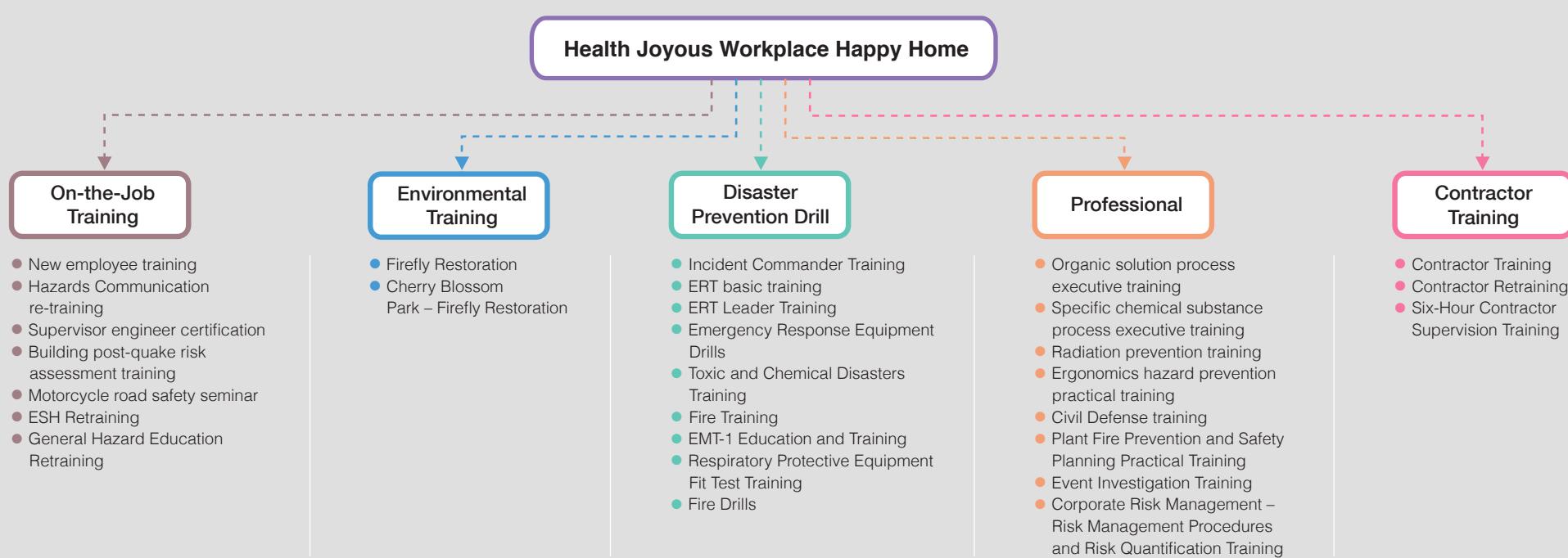
With the vision of an employee-oriented “Happy Enterprise” and support of senior executives, VIS actively promotes educational training and certification, enhancing employees’ safety awareness through learning, establishing safety culture, and finally achieving the vision of “health, joyous workplace,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

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

#### 1. VIS Training Planning and Execution Process



## 2. Types of Education and Training



Note 1: New employee training targets official non-fixed term employees, including those serving alternative civilian service, contract workers transitioning to full-time employees, reinstated employees, masseurs. Number of attendees in Taiwan: 260/Singapore: 286.

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

### 3. Photographs of Education and Training

1. On-job and Disaster Prevention Training: various ESH trainings were held based on nature of different operations.



ERT Leader Training



EMT-1 + Education and Training

2. Classification of ESH Education and Training: Classified ESH courses enhance professional skills of ESH personnel of different levels.



Organic solution process executive training

3. Environmental Education: VIS' environmental education activities included tree-planting at Cherry Blossom Park, Ke-Tzu-Hu adoption for water-accessible environment, and nearby HsinKe Junior High School education

and promotion, which received support from local residents, employees, and senior management, leading people to jointly care for quality of environment and raise environmental awareness.

#### 6.4.5 Contractor Management

Contractor management is one area VIS highly regards, all VIS contractors must sign "Contractor Construction and Safety Management Affidavit" and all contracted personnel must also sign "VIS Contracted Personnel Safety, Health, and Environmental Management Form" to fully understand necessary safety measures of the environment of contracted constructions, be responsible for all the safety and health related matters during the construction period, and commit to conducting self-inspections.

#### Hazard Information and Education and Training

Operational hazards for all contracted works must be informed in advance, and identify possible hazards and preventive measures before, during, and after the operation.

- Association Meetings: Risk assessment and JSA results must be promoted during the association meeting before the construction. All contractor supervisors (including proxies) shall attend the meeting and sign meeting minutes. Meeting minutes must be read by the responsible persons of the contractor and subcontractor, where stamps of the contractor, subcontractor, and person responsible are needed, indicating that responsible person of contracting contractor and all supervisors understand clearly the hazards and important safety reminders relating to the construction.

- Daily Toolbox Meeting: At the daily toolbox meeting, supervisor must inform operating personnel all ESH related issues (including JSA), so that all personnel involved understand clearly the hazards and important safety reminders relating to the construction.

VIS held weekly education and training for contractors, informing various hazards, important notices, and regulations that must be complied with, so that every contracted operators understand that VIS values their life and safety.

### **Contracted Personnel Qualification**

Contracted operational personnel's qualification is strictly controlled:

- In addition to having labor insurance as required by law, as well as completing six hours of workplace safety training and obtaining necessary licenses, VIS also specially requires all contracted operational personnel to have the following qualifications:
  - ◆ For those engaged in Level-1 high-risk operations, all personnel must have more than 2 years of related experience.
  - ◆ For general constructions, contracted personnel must have at least one year of experience before obtaining long-term worker certificate.
  - ◆ High-risk operational personnel must be over the age of 20 and recognized by contractors.
- VIS also requires all contractor supervisor and ESH personnel to have the following qualifications:
  - ◆ All supervisors must be authorized by the responsible person of the contractor, and present letter of authorization.

- ◆ Contractor supervisor (for constructions requiring over 5 people) and ESH personnel (for constructions over 30 people) must have Class 3 Labor Safety and Health Manager qualification.

### **Interconnected "e-Management Systems" Controlling Personnel Entering Fab through Electronic Key Card**

Through the e-management systems, such as contractor management system, contractor hazard information, and construction safety permit application system, etc., contractors must first establish data of the company, personnel information, and hazard information (such as association meeting minutes) first, and then have their data reviewed by designated personnel before they can enter the fab; in addition to the aforementioned qualifications, contracted operational personnel can only be qualified after they pass the "Contractor ESH Education and Training;" all the aforementioned systems are interconnected, and qualified supervisors, ESH personnel and operational personnel will show up on the list of "Construction Safety Permit Application System" for applicants to select/assign.

### **Supervision of Contracted Operation**

- VIS Employees Responsible for Contracted Operations must be Qualified "Supervisor" (special regulation of VIS)

For sound source management, VIS also requires all employees responsible for contracted operations to complete "Supervisor Training" and attend retraining every two years, in order for them to perform their job of supervision.

### •Contracted Operations must Apply for approval in Advance

To ensure safety for all operations, all high-risk operations and dangerous operations must be first applied. After the application of approval, a checklist can be printed for the contractor supervisor to check each item and inspect working environment, which will then be re-inspected by the responsible VIS employees.

### •VIS Special Regulations Regarding High-risk Operations

Before key high-risk operations, all three parties, contractor supervisor, head of responsible VIS unit, and safety personnel, must make sure there is no issue before the operation can begin. Depending on the severity of the construction, the outsourced agency may utilize dash cam to supervise the progress of the construction.

### •Daily Monitoring of Operations

Risk and Environmental Safety Management Department will make sure that all protective measures are in place according for all the applied operations in the fabs at the morning meeting. VIS safety personal will inspect various toolbox meetings for random supervision (prior to construction). VIS ERC will monitor the progress and inspection (during and after construction) of all high-risk and dangerous operations. Even during morning meeting of each unit, all the fabs will still have safety personnel conducting inspection for loading and unloading of some chemicals and cargoes, ensuring all related operations are in compliance with regulations.

### •Supervision by All

All fab directors, engineering unit heads, and labor safety representatives shall conduct inspections irregularly; if they discover any issues, they must make immediate correction and include the issues for follow-up improvement.

### •Technological Enforcement

VIS utilizes the "Integration of CCTV Image Recognition System and AI" to check if employees are not wearing helmets or lifting elevated floor panels without fencing as required (accurate: 98%, see picture), effectively enhanced alertness of contractors.



Applying CCTV image recognition to identify employees not wearing helmets or lifting elevated floor panel without fencing

### “Designated” Unit Responsible for Abnormal Situations

Any person can immediately report to Fab ERC when contractors are engaged in unsafe practices. The responsible unit, upon receiving the report, will confirm the situation with related units, making immediate correction and carrying out systematic follow-up and improvement.

## Contractor Evaluation

VIS conducts contractor evaluation every year, and the results will be reported at each fab's ESH Committee Meeting and the company's ESH Committee Meeting, and submitted to procurement units as future procurement references.

## Contractor Health Management

VIS also cares for contractor health management, and has established health center with qualified first-aid personnel, EMT personnel, and equipment, offering immediate help when there is need of emergency care. For those who provided personal health information and written agreement with approval of contractors, VIS health center will conduct follow-up management and health instruction on those with abnormalities found in health examination. During the pandemic, contractors are key targets of pandemic prevention and management, including: body temperature, and travel and contact history, which must meet the requirements of VIS Pandemic Prevention Committee before entering fabs; upon entering the fabs, related pandemic prevention measures must also comply with VIS regulations.

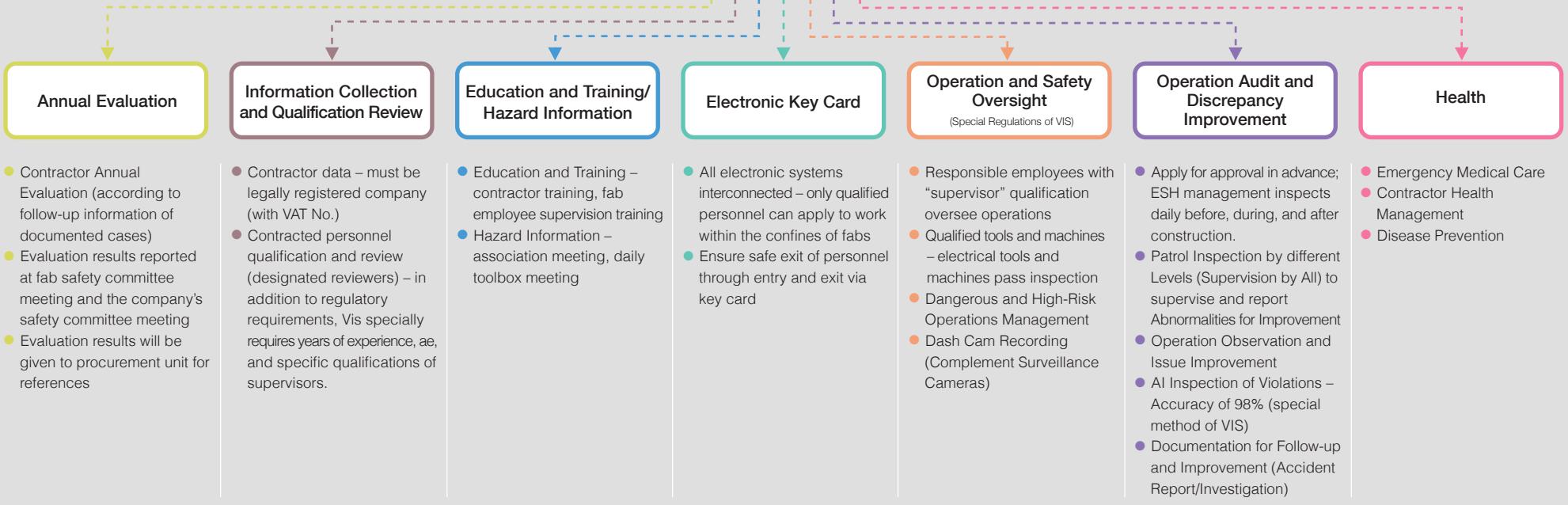
## "Hand in Hand" Program

VIS continues to implement the "Hand in Hand" program in 2020 to enhance performances of contractor ESH management. VIS will expand the ESH audit and guidance system from partners to all contractors after the pandemic, and normalize "Contractor Audit System," to narrow the gap between the level of ESH management at VIS and its contractors, and prevent construction accidents to achieve win-win situation.

## Newly Acquired Fab VS1 (Singapore) Contractor Management

VIS acquired Fab VS1 in Singapore in 2020, and has since proactively introduced the contractor management mechanism in the Taiwan region. To date, VIS has successfully established related mechanisms, including requiring contractors and contracted operational personnel to sign "Contractor Construction and Safety Management Affidavit" and "Contractor Personnel ESH Management Form", so they clearly understand VIS' workplace ESH regulations, and check all possible hazards and preventive measures for hazard information at association meetings before construction. Contracted operational personnel and supervisors must all meet the qualifications as prescribed by local laws in Singapore. VIS' existing e-management systems, such as contractor management system, contractor hazard information, and construction safety permit application system, etc., contractors must first establish data of the company, personnel information, and association meeting minutes first, and then have their data reviewed by designated personnel before they can enter the fab; all contracted operational personnel must pass the company's "Contractor ESH Education and Training" to be fully qualified; all the aforementioned systems are interconnected, and qualified supervisors, ESH personnel and operational personnel will show up on the list of "Construction Safety Permit Application System" for applicants to select/ assign.

## Contractor Operations Management



7

Common Good



Social Engagement and Investment NT\$

8,144,240



VIS' social engagement practices conform to five main themes of "care for the disadvantaged," "care for senior citizens living alone," "support for diverse education," "sustainability initiatives," and "environmental protection." By continually launching charity actions, VIS benefits communities and gives back to the society. Under the leadership and guidance of VIS Corporate Sustainability Committee, VIS formulates development strategy and short-, mid-, and long-term targets to effectively integrate internal and external resources and manpower and proactively carry out social engagement in aim to exert positive influences that become the driving force toward a better world.

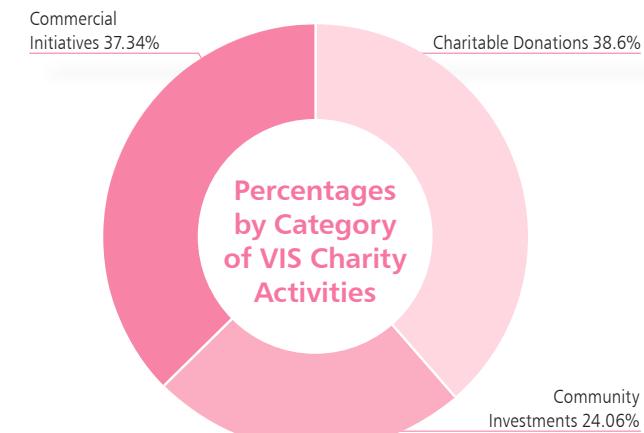
## Five Themes of Social Engagement

Theme	Our Actions	Our Vision	Target	Social Influences
Care for the Disadvantaged	<ul style="list-style-type: none"> <li>Launch annual charity donation for different issues, calling for employees to make contribution to help disadvantaged people.</li> <li>Respond to social welfare groups in support of disadvantaged children, providing daily supplies</li> </ul>	Become the long-term support for the disadvantaged	Social welfare groups	Support the disadvantaged groups
Care for Senior Citizens Living Alone	Regularly have lunch with senior citizens living alone in the communities, providing daily supplies	Companionship for senior citizens living alone, enhancing social ties	Society/community elders	Safeguard elders' health and wellbeing
Support for Diverse Education	Cooperate with social welfare groups and colleges and universities to support students from remote areas or disadvantaged families, providing scholarship and academic assistance	Help students from disadvantaged families to access more educational resources	Social welfare groups and colleges and universities	Eliminate educational gap
Sustainability Initiatives	<ul style="list-style-type: none"> <li>Sponsor the radio program "Focus on Taiwan" to promote related topics of UN SDGs</li> <li>Through scholarship and volunteer and reading companion volunteering, support the sustainability of the cultural heritage of Hsinchu's Smangus Tribe.</li> <li>Donate PAPR and supplies to medical testing personnel, and provide masks for children and pandemic prevention kit to social welfare groups and neighboring communities.</li> </ul>	Promote sustainability topics and care for the future outlook of society and industry	General public	Follow the international trend of supporting sustainability of the Earth, facilitate peaceful social development
Environmental Education	<ul style="list-style-type: none"> <li>Proactively engaged in community building and ecological restoration, contributing to environmental sustainability</li> <li>Visit communities and campuses to talk about environmental topics, cultivating the green awareness of environmental sustainability and love for Earth.</li> </ul>	Connect with neighboring communities to promote green community and environmental education	Society/neighboring communities and related government agencies	Lower ecological impacts, cultivate environmental education

## Social Investment Management

To effectively quantify the benefits brought by charity investment, VIS references the community investment evaluation mechanism of London Benchmark Group (LBG), and use the time, cost, and donations-in-kind, as indicators of the evaluation of charity action benefits and influences. This not only helps VIS examine the outcomes, but also serves as important references for future development of charity strategy, allowing the company to more reasonably allocate resources and avoid repetition and waste.

In addition to tangible data, VIS firmly believes that every charity action also includes intangible outcomes, such as the establishment and cultivation of environmental awareness, positive values of children, as well as VIS becoming the model enterprise of charity, which creates a greater chance to involve more companies and maximize the power of "good will." In recent years, cash is the main



resource of the company's engagement in charity work, accounting for approximately 80%, followed by volunteering at around 9%. Based on types of activities, commercial initiatives relating to corporate sustainability accounts for 37%, long-term community investment accounts for 24%, and one-off charity activities account for 39%.

### Types of Contribution

	Cash Contributions		In-Kind Giving		Volunteering		Management Overheads		Unit: NT\$
	Fund	Percentage	Fund	Percentage	Fund	Percentage	Fund	Percentage	
2020	8,144,240	79.82%	567,340	5.56%	941,250	9.23%	550,262	5.39%	
2019	4,300,000	75.35%	835,700	14.64%	370,700	6.5%	200,178	3.51%	

### Social Engagement Priorities and KPIs

Priorities	Content	Business Benefit KPI	Social/Environmental Benefit KPI
Care for the Disadvantaged	<ul style="list-style-type: none"> <li>Year-end Charity Donation – Support Children with Rare Disorders</li> <li>Family Day</li> <li>Aid for Children in Halfway House</li> </ul>	<ul style="list-style-type: none"> <li>Company cohesion (2,100 donations)</li> <li>Corporate image (5 letters of gratitude)</li> <li>Media favorability (16 news stories)</li> </ul>	<ul style="list-style-type: none"> <li>Medical care and daily supplies (helping 657 children with rare disorders/disabilities/facial disfigurements or burns)</li> <li>Cultural and artistic cultivation (7 music lessons, reading companions, and caring activities)</li> <li>Social harmony (respond to at least 6 social welfare groups' actions annually)</li> </ul>
Care for Senior Citizens Living Alone	<ul style="list-style-type: none"> <li>Year-end Charity Donation – Aid for Senior Citizens Living Alone</li> <li>Care for Community Elders</li> </ul>	<ul style="list-style-type: none"> <li>Company cohesion (1,456 donations)</li> <li>Corporate image (3 letters of gratitude)</li> </ul>	<ul style="list-style-type: none"> <li>Care for disadvantaged senior citizens (New Year's meal for 1,756 elderly citizens)</li> <li>Improvement of senior citizens' living environment (helping 9 senior citizens to clean their houses)</li> <li>Community harmony (accompany around 50 community senior citizens for meal monthly)</li> </ul>
Support for Diverse Education	<ul style="list-style-type: none"> <li>Blue Sky House Academic Support Volunteering</li> <li>National Tsing Hua University "Sunrise Program"</li> </ul>	<ul style="list-style-type: none"> <li>Company cohesion (157 volunteering hours)</li> <li>Executive as mentors (18 hours of guidance)</li> </ul>	<ul style="list-style-type: none"> <li>Guidance for adolescents (14 life education seminar and 2 extracurricular activities)</li> <li>Elimination of gap in educational resources (NT\$200,000 in scholarship)</li> <li>Raise learning motivation and achievement (6 mentorships)</li> </ul>
Sustainability Initiatives	<ul style="list-style-type: none"> <li>Cultural Sponsorship of Radio Program</li> <li>Indigenous Cultural Heritage</li> <li>Donation of Pandemic Prevention Goods and Supplies</li> </ul>	<ul style="list-style-type: none"> <li>Media exposure (over 52 broadcast hours)</li> <li>Positive feedback from society and community (2 letters of gratitude)</li> </ul>	<ul style="list-style-type: none"> <li>Promote SDG topics and facilitate discussion (Discussing 15 UN SDGs)</li> <li>Support indigenous tribal culture (annual academic assistance and provision of performance opportunity)</li> <li>Enhance safety of medical testing units and communities during pandemic (donated NT\$400,000 worth of pandemic prevention goods and supplies)</li> </ul>
Environmental Education	<ul style="list-style-type: none"> <li>Greenland Adoption and Ecological Restoration</li> <li>Environmental Education</li> </ul>	<ul style="list-style-type: none"> <li>Company cohesion (280 volunteers)</li> <li>Media favorability (10 news stories)</li> </ul>	<ul style="list-style-type: none"> <li>Greenification of community environment (adopting and maintaining a total area of 5.56 hectares)</li> <li>Development of community biodiversity (planted 200 blue Japanese oaks, 10 cherry trees, and 180 aquatic plants Da-Ann Hygrophila and Crenatae Water-clover, to create ideal environment for firefly restoration)</li> <li>Enhance communities' level of environmental education (influencing over 800 person-times)</li> </ul>



The new "Care for Children with Rare Disorders" project in 2020 made donations to Syin-Lu Social Welfare Foundation in aim to get more medical and care resources for children.

## 7.1 Social Welfare

### 7.1.1 Care for the Disadvantaged

#### Year-End Charity Donation

In 2020, VIS organized year-end charity donation for the sixth straight year. Continuing the tradition, VIS also launched the "New Year with Elders" project, supporting social welfare groups, Old Five Old Foundation, Huashan Social Welfare Foundation, and Eden Social Welfare Foundation, to help senior citizens living alone to enjoy a great New Year's Eve feast and receive the love and warmth from all sectors. In addition to caring for elderly citizens, VIS also launched the "Care for Children with Rare Disorders" project in 2020, calling for employees to show their love and jointly support Taiwan Foundation of Rare Disorders, Syin-Lu Social Welfare Foundation, and Sunshine Social Welfare Foundation, helping disadvantaged children to receive necessary treatments and medical care, while also supporting their families to overcome hardships and thrive with the children.

All VIS employees responded with enthusiasm to the 2020 Year-End Charity Donation, and after two weeks of fundraising, the total number of charity donations increased by 800 compared to the year

before, raising over NT\$3.5 million; among which, "New Year with Elders" raised a total of NT\$1.3 million, and "Care for Children with Rare Disorders" raised around NT\$2.2 million.

“  
Thanks to VIS and its employees for lending their helpful hands during this difficult time around the world, giving patients of rare disorders the warmest support, and continuing their lives.

Founder Chen Li-Yin,  
Taiwan Foundation of Rare  
Disorders

“  
Thanks to VIS for their donation. We will use the donation to help children with physical disabilities in treatment and rehabilitation. Day by day, they can become better versions of themselves, and day by day, their parents can gain a peace of mind.

Director Yang Yu-Ling and Service Team,  
Hsinchu Branch, Syin-Lu  
Social Welfare Foundation



VIS launched "New Year with Elders" fundraising project, donating to Eden Social Welfare Foundation's "Love – Chinese New Year Feast" program. (Courtesy: Eden Social Welfare Foundation)



A-Fu (alias) said to volunteers: "This year, I am very thankful to have these New Year dishes and tuna dumplings rather than cold bread."

## 2020 VIS Year-End Charity Donation Projects

Project	Social Welfare Group	Sponsorship Project Content	Amount (NT\$)
New Year with Elders	Old Five Old Foundation	Embracing Senior Citizens Living Alone with Love	508,550
	Huashan Social Welfare Foundation	Annual Year-End Banquet for People in Need	407,550
	Eden Social Welfare Foundation	Love – Chinese New Year Feast	387,560
Care for Children with Rare Disorders	Taiwan Foundation of Rare Disorders	Emergency Relief for Families of Patients with Rare Disorders	727,033
	Syin-Lu Social Welfare Foundation	Rehabilitation for Children with Disabilities and Rare Disorders	827,293
	Sunshine Social Welfare Foundation	Scholarship for Children with Facial Disfigurements and Burns	651,333

VIS Chairman Leuh Fang (L3) made charity donation to the Skikun Culture and Creative Dance Group performing at the 2020 Family Day, expressing VIS' support for indigenous art and culture.

## Family Day

VIS organizes Family Day every year, inviting employees and their families to participate in the activity. The theme of the 2020 Family Day was "Summer Fun – World Tour of Love," which invited over 6,000 employees and their family members to the Leofoo Village Theme Park, where their bond and unity were further strengthened through interactive games.

In addition to Skikun Culture and Creative Dance Group, VIS also invited nearly 400 people from halfway houses it has long sponsored and cared for, including Hsinchu Love Children's Home, and the Garden of Hope Foundations' shelters north of Miaoli, Blue Sky House, LOHAS Preschool, and SOS Children's Village of Taiwan, to join the Family Day, where they were accompanied by volunteers and social workers they were familiar with for a wonderful experience. The innocent smiles on the faces of the children made the day even more peaceful and harmonious. Chairman Leuh Fang also made donations to six social welfare groups a total of NT\$1.2 million, hoping to enhance the quality of life of disadvantaged children, and provide those women and children who had been mistreated with violence more comprehensive protection, while also expressing VIS' support and encouragement for indigenous people's art and cultural heritages.





Chairman Leuh Fang interacts with children of Blue Sky House

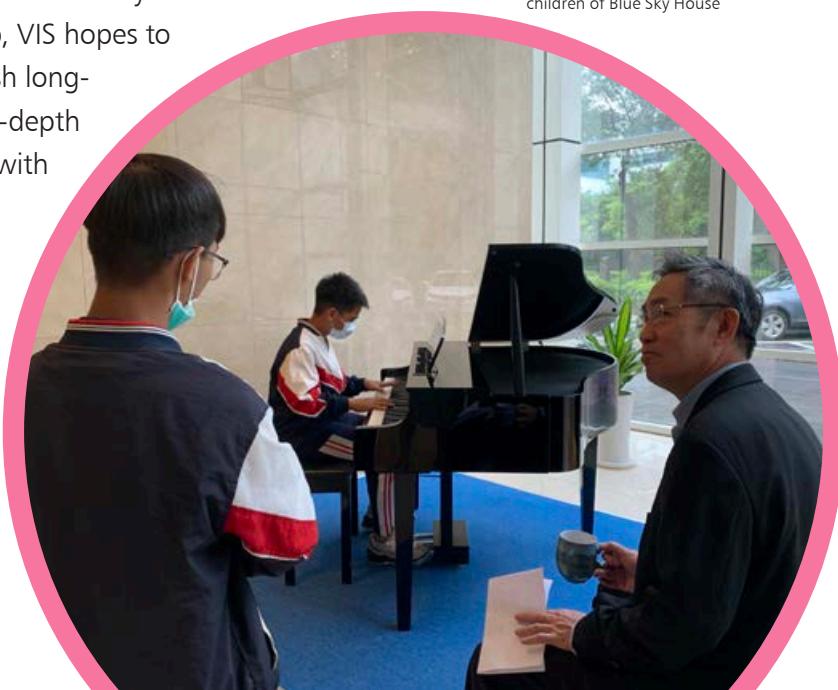
comprehensively using company resources to help these vulnerable children and young people. In 2020, VIS Chairman initiated a long-term aid program for Blue Sky House, integrating PR, Volunteer Program, fabs, Information Technology and Intelligence Management, and HR, which included: inviting children of Blue Sky House to VIS and talk with Chairman with future aspirations, VIS volunteers regularly taking shifts to tutor the children, purchasing remote learning equipment and gifting masks during the pandemic, and inviting the young people to VIS' basketball tournament for a friendly with VIS employees.

## Children's Halfway Houses

In 2019, VIS Volunteer Program also expanded service scope to halfway houses, mainly serving Hsinchu Blue Sky House, Taoyuan LOHAS Preschool and SOS Children's Village in Taoyuan. The main objective of VIS volunteers' service for the children is to help them, who may have experienced abuse, domestic violence, or loss of parents, to release their stresses and emotions, and regain confidence and smile. Thus, VIS volunteers visited these halfway houses monthly to read and play games with children, and teach them computer, handicrafts, DIY, and violin, as well as taking them to field trips, such as taking children of SOS Children's Village to YesHealth iFarm for environmental education and children of Blue Sky House to visit VIS and Shang Shun World, and organizing a Christmas party for children of LOHAS Preschool, bringing all the children joy and fun while achieving educational purposes.

In addition to monetary sponsorship, VIS hopes to also establish long-term and in-depth interaction with all halfway houses,

Chairman Leuh Fang interacts with children of Blue Sky House





In 2019, VIS volunteers taught children of LOHAS Preschool how to play violin and ukulele, introducing them to the world of art. In 2020, in addition to continuing the music classes, VIS also added succulent plants and various DIY activities to enrich the life of the children. Director Li Ging-ying, the head of the VIS volunteering program, led fellow volunteers to give every child a pandemic prevention kit produced by VIS, and organized a fun Christmas party at the end of the year, bidding farewell to 2020 in the drum beats of the children.



VIS volunteers keeping children of LOHAS Preschool company

VIS volunteers keeping children of LOHAS Preschool company

Head of VIS Volunteer Program, Lee Ching-Ying (L2), led VIS volunteers to deliver meals to nearby communities and keep the senior citizens company.



Moreover, VIS Volunteer Program participated in SOS Children's Village's annual achievement show and charity fair, calling for employees to donate supplies; VIS also donated all proceedings of charity auction to SOS Children's Village to cover its annual operational expenses. In 2020, the SOS Children's Village Charity Auction donated NT\$30,921; on the day of the event, the children also went on stage to showcase their achievements and talents, and VIS volunteers cheered for them to show support and witnessed their growth together.

### 7.1.2 Care for Senior Citizens Living Alone

VIS has long cared for community senior citizens living alone. Since 2015, VIS has invited senior citizens of social welfare groups and Kehu Village and Baoshan Village near Fab 1 and Fab 2 to the annual year-end dinner, where VIS employees prepare exciting performances. In 2020, due to the escalating outbreak of COVID-19, VIS cooperated with the government's pandemic prevention policies and did not organize annual year-end dinner to avoid cluster infection. However, VIS continued to hold Year-End Charity Donation, and donated around NT\$1.3 million for the "New Year with Elders" project (refer to 7.1 Year-End Charity Donation for details), offering over 1,000 senior citizens living alone an abundance Chinese New Year's Eve feast.

In addition to charity dinner and donation, the Volunteer Program regularly organized monthly activity of dining with senior citizens. VIS' catering supplier was invited to jointly donate lunch boxes to deliver to senior citizens living alone in the two villages, Baoshan and Kehu, around Fab 1 and Fab 2, once a month, and VIS volunteers would visit the senior citizens and dine and talk with them once a month, caring for their health and wellbeing. , and irregularly held DIY classes and raised goods and supplies to offer the senior citizens resources and assistance.



Volunteers passionately participated in the 2020 SOS Children's Village Charity Fair.



### 7.1.3 Support for Diverse Education

To help disadvantaged children gain access to comprehensive educational resources, VIS has provided children of Blue Sky House after-school guidance since 2019. Through a wide range of thematic educational seminars, VIS teaches young adults life knowledge and proper values, and through conversation and interaction in class, VIS guides youths to embark on a positive and proactive life journey. In 2020, the Volunteer Program organized 14 educational seminars, covering topics like "electricity usage safety," "introduction to energy conservation," "everyday English conversation," and "self-protection in the cyber world;" in addition to sharing knowledge in class, VIS volunteers also passed on life experience through Q&A, showing youths directions and helping them to grow and learn better.

Talent incubation is another focus of VIS. In 2020, VIS sponsored National Tsing Hua University's "Sunrise Program" for the fourth consecutive year. In addition to providing scholarship of NT\$100,000 to two students from a disadvantaged family, VIS specially selected female students in commerce and sciences this year, to incubate and encourage females to explore careers in the high-tech industry starting from higher education. VIS also invited female senior executives to serve as their mentors, offering career assistance and encouragement to further motivate them to learn and improve academic performances, in aim to eliminate the rural-urban gap in educational resources.

VIS sponsored National Tsing Hua University's "Sunrise Program" for the fifth consecutive year in 2020, in aim to eliminate rural-urban gap in educational resources.



VIS volunteers held 14 thematic educational seminars for youths of Blue Sky House in 2020.





### 7.1.4 Sustainability Initiatives

Beginning in 2015, VIS has provided annual sponsorship of NT\$2 million to IC Broadcasting Co., Ltd. to produce a series of broadcast programs of “Focus on Taiwan,” which explores with audience topics including Taiwan’s education, talent, society and people’s livelihood, and energy and environment, based on current international trends. Starting in 2020, the program has incorporated related content of “UN SDGs” covering issues like global hunger, COVID-19 prevention, gender and education equality, sustainable development of city, ocean protection, and climate change. A total of 52 episodes were produced in 2020, which were available not just on IC FM97.5, but also via Podcast platforms, allowing more people to freely download and access to maximize the influences of the program, and drive the discussion and awareness of the industry on global sustainability topics.

#### UN SDGs Discussed on “Focus on Taiwan”

SDGs	Topic
2 Zero Hunger	Facing Biblical Threat of Hunger, Taiwan Can Help!
3 Good Health and Wellbeing	National Health Research Institute: The Great Wall of COVID-19 Prevention
	COVID-19 Prevention: New Breakthrough of Domestic Vaccine
	Healthy and Happy to 120! On Smart Long-term Care
	Mobile ECG! New Technology and Biomedical Applications
4 Quality Education	New 108 Curricula, New Pandemic, and Our Education
	Education: Endless Cycle of Love – Children’s Book House
5 Gender Equality	Prevention of Gender Violence in the Digital Age
8 Decent Work and Economic Growth	Bugs with Great Contributions! Taiwan’s Circular Economy of Insects
	Terroir Economics, Meaningful Business of Tourism
10 Reduced Inequality	Barrier-Free Information, More Important than Barrier-Free Facilities!
	Every year, Taiwan sees 1,800 deaths of children, how to prevent this?
	Long-term Care in remote Areas Brings Care to the Heart of Taiwan
	Co-Living Experiment of the Young and Old in Taiwan

VIS sponsors IC Broadcasting Co., Ltd.’s “Focus on Taiwan” for the sixth consecutive year. VIS Chairman Leuh Fang (L) and program host Ms. Chun-hua Shen (R).

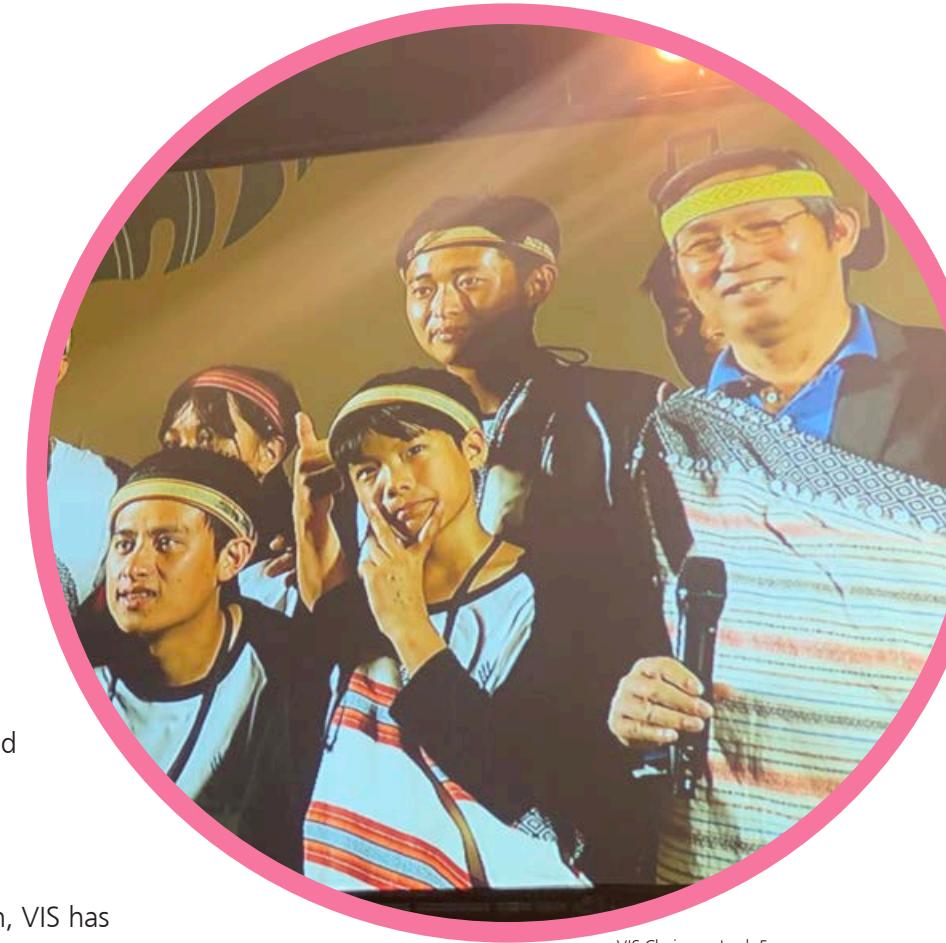
SDGs	Topic
11 Sustainable Cities and Communities	Cities' Key Role in Climate Change
12 Ensure Sustainable Consumption and Production Patterns	Chun-Hua Shen's Notes on Carbon Reduction Note: Are e-Scooters Eco-Friendly? New Concept of Eco-Tourism – Becoming a Light and Responsible Traveler
13 Climate Action	Is Taiwan Hot This Year? At the Forefront of Global Warming! Long-Term Audit! The Truth of Energy Conservation of Taiwan's Industry
14 Life Below Water	World Ocean Day: Eco-Revolution that Started from the Coast
15 Life on Land	Build a Green Great Wall – Plant Trees for Environmental Protection Understanding and Coexisting with Wild Animals

## Support for Indigenous Cultural Heritage

VIS supports indigenous education and cultural heritage. In addition to long-term volunteering for education in remote areas, company-wide events also invite indigenous cultural groups for performances; utilizing the power of media, VIS supports indigenous art and cultural heritages.

VIS' support for the indigenous culture first began with its donation for the establishment of a kindergarten in Smangus Tribal Village in Jianshi Township, Hsinchu County, in 2017. Since then, VIS has donated books to the tribal village for children and formed Smangus education volunteering program, visiting the tribal village every month to read, paint, and play games with children. In 2020, due to the COVID-19 pandemic, visits to Smangus were suspended, but VIS continued to invite Smangus Tribal Village Youth Choir to be the special opening act for the company's Moonlight Concert. On the stage, the tribal village representative presented the Atayal chieftain shawl to VIS Chairman, expressing their gratitude for VIS' long-term support for the indigenous culture, and symbolizing the friendship between VIS and the tribal village.

For the second straight year, VIS invited the Skikun Culture and Creative Dance Group from Yilan for an exciting opening performance, and donated NT\$200,000 to sponsor their indigenous art promotion and cultural performance. VIS Chairman Leuh Fang also recorded a video of blessing for the 2020 year-end Harvest Festival, and encouraged the young people of the tribal village to always be proud of their roots no matter where they go.



VIS Chairman Leuh Fang accepts the shawl and woven band from Smangus representative.



VIS Volunteer Program visited senior citizens living alone in Jinshan Village, Kehu Village, and Baoshan Village, near VIS fabs, and donated pandemic-prevention kits, ensuring that the elderly citizens had sufficient pandemic-prevention supplies.

## Community Building and In-Kind Giving

With the outbreak of COVID-19 in 2020, VIS not only established internal pandemic-prevention network, but also provided pandemic-prevention goods and supplies to the society and nearby communities, jointly fight the pandemic with all citizens. First, VIS responded to the initiative of TSMC Charity Foundation in early 2020, donating 31 PAPRs used in the labs at VIS fabs to medical testing groups, and had engineers instructing the technicians on how to properly wear PAPR to strengthen the first-line of defense and lower their risk of infection

Second, to strengthen the communities' pandemic prevention, VIS purchased 2,000 children's masks and donated to the halfway houses where VIS volunteers served, so that the children did not have to line up for masks, reducing the workload of hallway house social workers and supervisors.

Furthermore, VIS also gifted 115 pandemic-prevention kits to Jinshan Village, Kehu Village, and Baoshan Village, near the fabs, and continued to care for SOS Children's Village and LOHAS Preschool, ensuring that disadvantaged senior citizens and children

could all receive sufficient pandemic-prevention supplies and strengthening the communities' pandemic-prevention capability.

VIS Volunteer Program donated pandemic-prevention kits and children's masks to LOHAS Preschool.



## 7.2 Environmental Protection

### Greenland Adoption and Ecological Restoration

VIS is proactively engaged in community building, and strives to maintain and greenify surrounding areas of VIS fabs to be friendly to the environment and communities. Currently, VIS has adopted Qianjia Air Quality Purification Area in Hsinchu, as well as Cherry Blossom Park and nearby 800-meter section of the Ke-Tzu-Hu Creek in Jinshan Village, reaching a total area of approximately 5.56 hectares. Through regular mowing of the lawn, tree planting, caring, and watering, and insect control, VIS gradually builds green and friendly communities.

Adopted four old trees in Cherry Blossom Park and applied for certificates; one old tree has passed certification, while the other three have submitted applications.

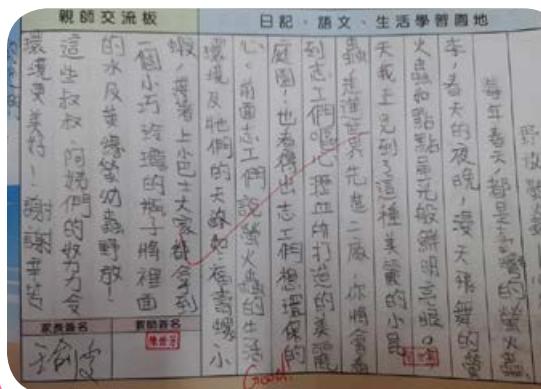
VIS has set community ecological restoration as one of the items of its long-term social engagement. VIS has cooperated with River Management Office and nearby neighborhoods for the improvement of Ke-Tzu-Hu Creek since 2015, establishing a sound foundation for long-term environmental and ecological restoration. In 2018, VIS adopted the nearby Cherry Blossom Park, and conducted ecological investigation in collaboration with the team led by Dr. Wu Chia-hsiung's team, Taiwan's Godfather of Ecology, and discovered that Cherry Blossom Park was an ideal site for the restoration of fireflies, an ecological indicator species. Thus, VIS adopted Ke-Tzu-Hu Creek and the nearby flood detention pond, and planted aquatic plants Da-Ann Hygrophila and Crenatae Water-clover to create the most optimal environment for the restoration of fireflies.

VIS Fab 2 Director Roy Yu (L4) leads colleagues, their families and Qianjia Village Chief and residents to plant trees.





Left: VIS Fab 2 Director Roy Yu leads students of Hsinchu Municipal Lung Shan Elementary School to release firefly larva by Cherry Blossom Park.  
Right: Volunteers and children release fireflies into the wild, and wish that they grow up healthily.



VIS have been working with professionals to release 2,500 larvae of yellow-margin fireflies into the detention pond in 2020, hoping that these larvae would safely grow up under the collective protection of VIS environmental education volunteers and community residents, so glowing fireflies could light up the starry nights in Spring 2021.

“  
Thanks to VIS Fab 2 partners for offering the “Fireflies Dance” class. All participating teachers and students of Lung Shan Elementary School were enthusiastically engaged in the exciting activity. On our way back, the children continued to talk about the activity, whether it was the vision of the ecological environment drawn in the presentation, or the transformation, life, feeding habits, and natural enemies, throughout the life of firefly, as well as their natural habitat and the significance of restoration introduced in the challenge, the most precious thing was that the children were inspired by the real experience of releasing the fireflies into the wild to look forward to a future where “fireflies glitter and dance in air.” The children know that to achieve this action, they need to start from daily life, and through their actions, they can stroke at a time paint the beautiful scenery of dancing fireflies.

-----Hsu Hui-Ying, Director of Student Affairs,  
Lung Shan Elementary School



## Environmental Education

VIS has long strived for environmental education with a purpose of conveying the principle of environmental sustainability. Starting in 2013, VIS Environmental Safety Department employees launched plan to visit nearby elementary schools and junior and senior high schools for environmental education. In 2020, VIS environmental education volunteers continued to visit elementary schools in the nearby areas of Hsinchu Science Park and teach children about "water footprint." By introducing them to related information on global water resources, the volunteers helped the children to understand the importance of water resources; also, the volunteers asked questions and gave prizes to strengthen their impression, hoping that the students could treasure water resources and realize the concept of water conservation in everyday life. Moreover, VIS volunteers also designed a DIY class, teaching the students to make containers for succulent plants using aluminum wires; through teaching them the techniques of bending and twisting aluminum wires, the activity allowed the students to be imaginative and creative, and realize the wonderful feeling of growing green plants.



Environmental education volunteers visited elementary schools in nearby areas of Hsinchu Science Park and taught the students about "water footprint," students also learned the wonderful feeling of growing green plants through the DIY activity.

## 8

## Appendix

- About This Report
- 2020 VIS Sustainability Report GRI Chart
- Assurance Statement



## Appendix 1

# 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 2020 (2020/01/01 to 2020/12/31).

## 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 2020 report and that of the preceding year exhibit no differences in scope of disclosure. All financial figures in this report are presented in New Taiwan Dollars (NTD). Units used for calculating environmental safety and community involvement figures are customary units commonly used internationally.

## Reporting Principles

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

## Report Management

Related information of this report was written by corresponding departments assigned by VIS Corporate Sustainability Committee Taskforce, and reviewed by

supervisors for accuracy and completeness; the information was then collected and compiled into the report by the PR Division. Finally, the Board of Directors, chair of VIS Corporate Sustainability Committee, and senior executives of all departments reviewed the report and confirmed goals and directions of sustainable development strategy and major topics management guidelines.

## Report Verification

The 2020 VIS Sustainability Report was compiled in accordance with GRI Standards Core Option. SGS-Taiwan was commissioned for assurance in accordance with GRI Standards-Core Option and AA1000 Assurance Standard: v3 Type 2 high-level assurance. Refer to Appendix 3 for the assurance statement.

## Release Schedule of Report

VIS published its first Corporate Sustainability Report in 2015. In the future, VIS will publish Sustainability Report on a yearly basis.

Current release: Published in June, 2021

Previous release: Published in June, 2020

Subsequent release: Published in June, 2022

## Contact Information

For continued communication with stakeholders, we sincerely welcome you to contact us and offer your most valuable opinions.

Responsible Unit: VIS Corporate Sustainability Committee

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## Appendix 2

## 2020 VIS Sustainability Report GRI Chart

## 1. General Standard Disclosure

GRI Standard	GRI Content Index	Corresponding Section	Page No.	Note
<b>Organization Profile</b>				
102-1	Name of the organization	1.1 Company Profile	6	
102-2	Activities, brands, products, and services	1.1 Company Profile	6	
102-3	Location of headquarters	1.1 Company Profile	6	
102-4	Location of operations	1.1 Company Profile	6	
102-5	Ownership and legal form	1.1 Company Profile	6	
102-6	Markets served	1.1 Company Profile	6	
102-7	Scale of the organization	1.1 Company Profile	6	
102-8	Information on employees and other workers	6.1 Talent Recruitment and Retention	123	
102-9	Supply chain	5. Responsible Supply Chain	109	
102-10	Significant changes to the organization and its supply chain	1.1 Company Profile 5. Responsible Supply Chain About This Report	6, 109, 189	
102-11	Precautionary Principle or approach	3.2 Risk Management	53	
102-12	External initiatives	2.4 Actions of UN SDGs	45	
102-13	Membership of associations	2.3 Materiality Analysis and Stakeholder Communication	19	
<b>Strategy</b>				
102-14	Statement from senior decision-maker	Letter from Chairman	2	

GRI Standard	GRI Content Index	Corresponding Section	Page No.	Note
<b>Ethics and Integrity</b>				
102-16	Values, principles, standards, and norms of behavior	3.3 Ethics and Transparency	61	
<b>Governance</b>				
102-18	Governance structure	2.2 Corporate Sustainability Management 3.1 Corporate Governance	16, 48	
<b>Stakeholder Engagement</b>				
102-40	List of stakeholder groups	2.3 Materiality Analysis and Stakeholder Communication	19	
102-41	Collective bargaining agreement	VIS' labor union organization consists of 56 members. Moreover, each fab has appointed labor representatives (5 in each fab, and 15 in total). Labor-management meeting is held every quarter; prior to the labor-management meeting, all employees can submit proposals via the internal system, which will be discussed at the meeting by labor and management representatives.		
102-42	Identifying and selecting stakeholders	2.3 Materiality Analysis and Stakeholder Communication	19	
102-43	Approach to stakeholder engagement	2.3 Materiality Analysis and Stakeholder Communication	19	
102-44	Key topics and concerns raised	2.3 Materiality Analysis and Stakeholder Communication	19	
<b>Reporting Practice</b>				
102-45	Entities included in the consolidated financial statements	1.2 Financial Performance	9	
102-46	Defining report content and topic boundaries	About This Report	189	
102-47	List of material topics	2.3 Materiality Analysis and Stakeholder Communication	19	
102-48	Restatements of information			
102-49	Changes in reporting	2.3 Materiality Analysis and Stakeholder Communication	19	
102-50	Reporting period	About This Report	189	
102-51	Date of most recent report	About This Report	189	
102-52	Reporting cycle	About This Report	189	

GRI Standard	GRI Content Index	Corresponding Section	Page No.	Note
102-53	Contact point for questions regarding the report	About This Report	189	
102-54	Claims of reporting in accordance with the GRI Standards	About This Report	189	
102-55	GRI content Index	2020 VIS Sustainability Report GRI Chart	190	
102-56	External assurance	Assurance Statement	197	

## 2. Major Topics Disclosure

GRI Standard	GRI Content Index	Corresponding Section	Page No.	Note
<b>1. Economic Performance</b>				
103-1	Explanation of the material topic and its Boundary	1.2 Financial Performance	9	
103-2	The management approach and its components	1.2 Financial Performance	9	
103-3	Evaluation of the management approach	1.2 Financial Performance	9	
201-1	Direct economic value generated and distributed	1.2 Financial Performance	9	
201-2	Financial implications and other risks and opportunities due to climate change	4.1 Climate Change and Energy Management	80	
<b>2. Quality Management</b>				
103-1	Explanation of the material topic and its Boundary	3.5 Quality and Customer Service	72	
103-2	The management approach and its components	3.5 Quality and Customer Service	72	
103-3	Evaluation of the management approach	3.5 Quality and Customer Service	72	
<b>3. Innovation and R&amp;D</b>				
103-1	Explanation of the material topic and its Boundary	3.4 Innovation Management	66	
103-2	The management approach and its components	3.4 Innovation Management	66	
103-3	Evaluation of the management approach	3.4 Innovation Management	66	

GRI Standard	GRI Content Index	Corresponding Section	Page No.	Note
<b>4. Legal Compliance</b>				
103-1	Explanation of the material topic and its Boundary	3.3 Ethics and Transparency	61	
103-2	The management approach and its components	3.3 Ethics and Transparency	61	
103-3	Evaluation of the management approach	3.3 Ethics and Transparency	61	
307-1	Non-compliance with environmental laws and regulations	3.3 Ethics and Transparency 4. Green Manufacturing	61, 79	
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	3.3 Ethics and Transparency 5. Responsible Supply Chain	61, 109	
<b>5. Customer Privacy</b>				
103-1	Explanation of the material topic and its Boundary	3.5 Quality and Customer Service	72	
103-2	The management approach and its components	3.5 Quality and Customer Service	72	
103-3	Evaluation of the management approach	3.5 Quality and Customer Service	72	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.5 Quality and Customer Service	72	
<b>6. Risk Control and Management</b>				
103-1	Explanation of the material topic and its Boundary	3.2 Risk Management	53	
103-2	The management approach and its components	3.2 Risk Management	53	
103-3	Evaluation of the management approach	3.2 Risk Management	53	
<b>7. Employee-Employer Relations</b>				
103-1	Explanation of the material topic and its Boundary	6.1 Talent Recruitment and Retention	123	
103-2	The management approach and its components	6.1 Talent Recruitment and Retention	123	
103-3	Evaluation of the management approach	6.1 Talent Recruitment and Retention	123	
401-1	New employee hires and employee turnover	6.1 Talent Recruitment and Retention	123	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	6.1 Talent Recruitment and Retention	123	

GRI Standard	GRI Content Index	Corresponding Section	Page No.	Note
401-3	Parental leave	6.1 Talent Recruitment and Retention	123	
<b>8. Occupational Safety and Health</b>				
103-1	Explanation of the material topic and its Boundary	6.4 Occupational Safety and Health	151	
103-2	The management approach and its components	6.4 Occupational Safety and Health	151	
103-3	Evaluation of the management approach	6.4 Occupational Safety and Health	151	
403-1	Occupational health and safety management system	6.4 Occupational Safety and Health	151	
403-2	Hazard identification, risk assessment, and incident investigation	6.4 Occupational Safety and Health	151	
403-3	Occupational health services	6.4 Occupational Safety and Health	151	
403-4	Worker participation, consultation, and communication on occupational health and safety	6.4 Occupational Safety and Health	151	
403-5	Worker training on occupational health and safety	6.4 Occupational Safety and Health	151	
403-6	Promotion of worker health	6.4 Occupational Safety and Health	151	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	6.4 Occupational Safety and Health	151	
403-8	Workers covered by an occupational health and safety management system	6.4 Occupational Safety and Health	151	
<b>9. Employee Development</b>				
103-1	Explanation of the material topic and its Boundary	6.2 Human Resource Development	138	
103-2	The management approach and its components	6.2 Human Resource Development	138	
103-3	Evaluation of the management approach	6.2 Human Resource Development	138	
404-1	Average hours of training per year per employee	6.2 Human Resource Development	138	
<b>10. Corporate Governance</b>				
103-1	Explanation of the material topic and its Boundary	3.1 Corporate Governance	48	
103-2	The management approach and its components	3.1 Corporate Governance	48	
103-3	The management approach and its components	3.1 Corporate Governance	48	

GRI Standard	GRI Content Index	Corresponding Section	Page No.	Note
<b>11. Social Engagement</b>				
103-1	Explanation of the material topic and its Boundary	7. Common Good	172	
103-2	The management approach and its components	7. Common Good	172	
103-3	Evaluation of the management approach	7. Common Good	172	
<b>12. Supplier Sustainability Management</b>				
103-1	Explanation of the material topic and its Boundary	5. Responsible Supply Chain	109	
103-2	The management approach and its components	5. Responsible Supply Chain	109	
103-3	Evaluation of the management approach	5. Responsible Supply Chain	109	
204-1	Proportion of spending on local suppliers	5. Responsible Supply Chain	109	
308-1	New Suppliers that were screened using environmental criteria	5. Responsible Supply Chain	109	
414-1	New suppliers that were screened using social criteria	5. Responsible Supply Chain	109	
<b>13. Climate Change</b>				
103-1	Explanation of the material topic and its Boundary	4.1 Climate Change and Energy Management	80	
103-2	The management approach and its components	4.1 Climate Change and Energy Management	80	
103-3	Evaluation of the management approach	4.1 Climate Change and Energy Management	80	
302-1	Energy, consumption within the organization	4.1 Climate Change and Energy Management	80	
302-2	Energy, consumption outside of the organization	4.1 Climate Change and Energy Management	80	
302-3	Energy intensity	4.1 Climate Change and Energy Management	80	
302-4	Reduction of energy consumption	4.1 Climate Change and Energy Management	80	
302-5	Reductions in energy requirements of products and services	4.1 Climate Change and Energy Management	80	
305-1	Direct (Scope 1) GHG emissions	4.1 Climate Change and Energy Management	80	

GRI Standard	GRI Content Index	Corresponding Section	Page No.	Note
305-2	Energy indirect (Scope 2) GHG emissions	4.1 Climate Change and Energy Management	80	
305-3	Other indirect (Scope 3) GHG emissions	4.1 Climate Change and Energy Management	80	
305-4	GHG emissions intensity	4.1 Climate Change and Energy Management	80	
305-5	Reduction of GHG emissions	4.1 Climate Change and Energy Management	80	

### 3. Other Disclosure

GRI Standard	GRI Content Index	Corresponding Section	Page No.	Note
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	3.3 Ethics and Transparency	61	
303-3	Water withdrawal	4.2 Water Resource Management	94	
306-2	Waste by type and disposal method	4.3 Waste Management	100	
306-4	Transport of hazardous waste	4.3 Waste Management	100	
408-1	Operations and suppliers at significant risk for incidents of child labor	6.3 Human Rights	143	

## Appendix 3

## Assurance Statement

**SGS**

## ASSURANCE STATEMENT

**SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE VANGUARD INTERNATIONAL SEMICONDUCTOR CORPORATION's SUSTAINABILITY REPORT FOR 2020**

**NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION**

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by Vanguard International Semiconductor Corporation (hereinafter referred to as VIS) to conduct an independent assurance of the Sustainability Report for 2020 (hereinafter referred to as the Report). The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included the sampled text, and data in accompanying tables, contained in the report presented during on-site verification (2021/03/09–2021/04/21). SGS reserves the right to update the assurance statement from time to time depending on the level of report content discrepancy of the published version from the agreed standards requirements.

**INTENDED USERS OF THIS ASSURANCE STATEMENT**

This Assurance Statement is provided with the intention of informing all VIS's Stakeholders.

**RESPONSIBILITIES**

The information in the VIS's CSR Report of 2020 and its presentation are the responsibility of the directors or governing body (as applicable) and the management of VIS. SGS has not been involved in the preparation of any of the material included in the Report

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of verification with the intention to inform all VIS's stakeholders.

**ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE**

The SGS ESG & Sustainability Report Assurance protocols used to conduct assurance are based upon internationally recognized assurance guidance, including the Principles contained within the Global Reporting Initiative Sustainability Reporting Standards (GRI Standards) 101: Foundation 2016 for report quality, and the guidance on levels of assurance contained within the AA1000 series of standards and guidance for Assurance Providers.

The assurance of this report has been conducted according to the following Assurance Standards:

Assurance Standard Options	Level of Assurance
A SGS ESG & SRA Assurance Protocols (based on GRI Principles and guidance in AA1000)	n/a
B AA1000ASv3 Type 2 (AA1000AP Evaluation plus evaluation of Specified Performance Information)	High

Assurance has been conducted at a high level of scrutiny.

**SCOPE OF ASSURANCE AND REPORTING CRITERIA**

The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

Reporting Criteria Options
1 GRI (Core)
2 AA1000 Accountability Principles (2018)

- evaluation of content veracity of the sustainability performance information based on the materiality determination at a high level of scrutiny for VIS and high level of scrutiny for applicable aspect boundaries outside of the organization covered by this report;
- AA1000 Assurance Standard v3 (2020) Type 2 evaluation of the report content and supporting management systems against the AA1000 Accountability Principles (2018); and
- evaluation of the report against the requirements of Global Reporting Initiative Sustainability Reporting Standards (100, 200, 300 and 400 series) claimed in the GRI content index as material and in accordance with.

**ASSURANCE METHODOLOGY**

The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, CSR committee members and the senior management in Taiwan and Singapore; documentation and record review and validation with external bodies and/or stakeholders where relevant.

**LIMITATIONS AND MITIGATION**

Financial data drawn directly from independently audited financial accounts and Task Force on Climate-related Financial Disclosures (TCFD) has not been checked back to source as part of this assurance process.

**STATEMENT OF INDEPENDENCE AND COMPETENCE**

The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification; quality, environmental, social and ethical auditing and training; environmental, social and sustainability report assurance. SGS affirm our independence from VIS, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, RBA, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

**VERIFICATION/ ASSURANCE OPINION**

On the basis of the methodology described and the verification work performed, we are satisfied that the specified performance information included in the scope of assurance is accurate, reliable, has been fairly stated and has been prepared, in all material respects, in accordance with the reporting criteria.

We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting.

**AA1000 ACCOUNTABILITY PRINCIPLES (2018) CONCLUSIONS, FINDINGS AND RECOMMENDATIONS****Inclusivity**

VIS has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, suppliers, CSR experts, and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns. For future reporting, VIS may proactively consider having more direct two-ways involvement of stakeholders during future engagement.

**Materiality**

VIS has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders.

**Responsiveness**

The report includes coverage given to stakeholder engagement and channels for stakeholder feedback.

**Impact**

VIS has demonstrated a process on identify and fairly represented impacts that encompass a range of environmental, social and governance topics from wide range of sources, such as activities, policies, programs, decisions and products and services, as well as any related performance. Measurement and evaluation of its impacts related to material topic were in place at target setting with combination of qualitative and quantitative measurements.

**GLOBAL REPORTING INITIATIVE REPORTING STANDARDS CONCLUSIONS, FINDINGS AND RECOMMENDATIONS**

The report, VIS's CSR Report of 2020, is adequately in line with the GRI Standards in accordance with Core Option. The material topics and their boundaries within and outside of the organization are properly defined in accordance with GRI's Reporting Principles for Defining Report Content. Disclosures of identified material topics and boundaries, and stakeholder engagement, GRI 102-40 to GRI 102-47, are correctly located in content index and report. For future reporting, it is recommended to have more descriptions of VIS's involvement with the impacts for each material topic (103-1), and how efforts were given to mitigate the impacts. When reporting on goals and targets for each material topic, the expected results are suggested to be set, if applicable, with quantitative objectives

Signed:

For and on behalf of SGS Taiwan Ltd.



**AA1000**  
Licensed Report  
000-8/V3-QWNQQ

David Huang  
Senior Director  
Taipei, Taiwan  
12 May, 2021  
[WWW.SGS.COM](http://WWW.SGS.COM)