



## Corporate Social Responsibility

---

2017



**Ardentec Corporation**  
**Giga Solution Tech. Co., Ltd.**



# About the Report



## CSR Contact

Ardentec Corporation Corporate Social Responsibility (CSR) Committee Secretariat

**Address** No. 3, Gongye 3rd Rd., Hukou Township, Hsinchu County 30351, Taiwan, R.O.C

**Telephone** +886-3-5976688 Ext. 1211 ; or +886-933-266-008

**Fax** +886-3-5971396 **E-mail** [csr@ardentec.com](mailto:csr@ardentec.com)

**Website** [www.ardentec.com](http://www.ardentec.com)

### Drafting Principles and Guidelines

---

This report was prepared in accordance with Global Reporting Initiative's GRI Standards, Corporate Social Responsibility Best Practice Principles for TWSE/GTSM Listed Companies, and the AA1000 APS (2008) standards. It discloses the steps taken by Ardentec to ensure business sustainability in a number of aspects, such as stakeholder response, corporate governance, economics, environmental, employees, and social engagement. This report includes all the material topics which were reviewed and approved to release by President.

Financial figures in this report are expressed in NTD and are CPA-certified. Performances in terms of environment, safety and health are illustrated based on internationally accepted benchmarks and data filed with the competent authorities.

### Scope of Report

---

This report discloses the economic, environmental, and social aspects of Ardentec's performance, including its headquarters, its Singaporean and Korean subsidiaries, and also Giga-Solution subsidiary.

### Report Period and Publishing

---

This report is the sixth corporate social responsibility report published by Ardentec Corporation which discloses the performance of corporate social responsibility (CSR) from January 1, 2017 to December 31, 2017. Electronic version of this report can be downloaded from the company's website <http://www.ardentec.com>. Ardentec publishes the Corporate Social Responsibility Report every year. The previous year's report was published in June, 2016, and we expect to publish the next report in June, 2019.

### Verification

---

The verification of this report is entrusted to a third party verification unit, BSI Taiwan Ltd., in line with GRI Standards core disclosure level and type 1 moderate assurance level of AA1000 AS assurance standard. The BSI independent statement is attached to the annex of this report.

## **A** ABOUT THE REPORT I

### **A** ABOUT ARDENTEC

1	1.1 Company Introduction	2
	1.2 Corporate Values	3
	1.3 The Organization	4
	1.4 Professional Services	5
	1.5 Market Size and Performance	6
	1.6 Surplus Allocation	8
	1.7 Development Strategies and Innovations	9
	1.8 Honors and Accolades	10

## LETTER FROM CHAIRMAN AND PRESIDENT IV

### SUSTAINABLE BUSINESS FRAMEWORK

2	2.1 CSR Policy	14
	2.2 The CSR Organization	14
	2.3 Analysis of Stakeholders and Topics of Concern	15
	2.4 Topic Materiality Matrix	20
	2.5 The Impact Boundries of Material Topics to Value Chian	21
	2.6 Communication with Stakeholders	26

## CORPORATE GOVERNANCE

3	3.1 Governance Principles	29
	3.2 Board of Directors	30
	3.3 Executive Compensation Policy	33
	3.4 Ethical Guidelines	34
	3.5 Internal Controls	34
	3.6 Risk Management	35
	3.7 Major Investment	39

## ENVIRONMENTAL PROTECTION

4	4.1 Environmental Policy	41
	4.2 Environmental Protection Expenses and Investment	41
	4.3 Greenhouse Management System	42
	4.4 Disclosure of Environmental Information	44
	4.5 Greenhouse Gas Management	45
	4.6 Water Resource Management	50
	4.7 Waste Management	51





## EMPLOYEES AS PARTNERS

5

5.1 Employee Partnership Policy	57
5.2 Right People for Right Job	57
5.3 Compensation and Benefits	59
5.4 Career Growth	62
5.5 Workplace Health and Safety	64
5.6 Labor-Management Harmony	69
5.7 Workforce Structure	72



## CUSTOMER SERVICE AND SUPPLIER MANAGEMENT

6

6.1 Customer Service	74
6.2 Customer Secrecy Protection	74
6.3 Quality Optimization of Customer Service	75
6.4 Customer Satisfaction Surveys	75
6.5 Supplier/Contractor Management	76
6.6 Supplier Audits	79
6.7 Supplier/Contractor Workplace Safety	79



## COMMUNITY INVOLVEMENT

7

7.1 Educational Support	81
7.2 Caring for the Disadvantaged	84
7.3 Sustainability of the Environment and Ecosystem	86



## ANNEXES

Annex 1 Independent Assurance Opinion Statement	90
Annex 2 GRI Standards Reference Table	92
Annex 3 ISO26000 Reference Table	97
Annex 4 UN Sustainable Development Goals Reference Table	100
Annex 5 The UN Global Compact Reference Table	101
Annex 6 Corporate Social Responsibility Best Practice Principles for TWSE/GTSM Listed Companies Reference Table	103

# Ardentec



## LETTER FROM CHAIRMAN AND PRESIDENT

## I Dear friends caring about the sustainability development of Ardentec

We are very pleased to share, once again, our 2017 corporate social responsibility performance with friends of Ardentec.

We recognize the Responsible Business Alliance (RBA)'s mission to promote comprehensive corporate social responsibility with our responsible supply chain philosophy. We follow the latest version of the RBA Code of Conduct in establishing Ardentec's Corporate Social Responsibility Code of Conduct and ensure that our operational activities fully comply with the Code. We also encourage and support suppliers in implementing the Corporate Social Responsibility Code of Conduct of Ardentec's Suppliers. From world-class customers to

Ardentec, the Code connects suppliers to form a value chain that fulfills corporate social responsibility and environmental sustainability.

In 2017, Ardentec was selected once again by world-class customer partners for the Best Supply Chain Award 2017, acknowledging Ardentec's outstanding performance in terms of technical service, quality, cost, and corporate social responsibility, and meeting the highest expectations of customers. Ardentec's mission is to be A Testing Partner You Can Trust, to become an important partner in its customers' responsible supply chain, and repay its customers in a real way by earning their trust.

Although the semiconductor testing industry is low-energy consumption and low-emissions, Ardentec nevertheless ardently pursues opportunities to contribute positively to the environment. In the Paris Agreement, which continues the Kyoto Protocol, reducing greenhouse gas emissions is the primary task for slowing down global warming and climate change. Ardentec annually conducts greenhouse gas inventories, checks the average energy consumption and waste of machine start-up, and continuously seeks improvement. In 2017, we initiated the fan filter unit in the plant area, converted to low-energy LED lighting in the office area, and adopted

other energy-saving measures. As a result, we achieved an energy savings of 53%, and the total carbon emissions were reduced by 1,307 metric tons, equivalent to one year of carbon dioxide absorption of 2.46 Daan Parks. This electricity saving performance was verified by the Bureau of Energy in November 2017. In 2018, we will continue our efforts in energy conservation programs. We will do our best as an enterprise to reduce the risk impact of global warming. Ardentec's staff is very passionate, and colleagues at the Taiwan headquarters and overseas locations are greatly concerned with the environment.

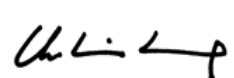
In 2017, we invited once again more than 500 teachers and students in the neighboring Zhongzheng Junior High School to participate in beach cleanup, which promotes environmental education in the community. Our staff care for society and neighborhoods. They participate in charity weight loss events where they donate rice, they donate to schools in remote areas, visit elderly people who are solitary, disabled, or suffering from dementia, and set up the "Ardentec Award" to encourage students to strive for success. Employees are important partners in Ardentec's sustainable operation. Through their

expertise, they provide customers with the best services, care for the environment and neighborhoods, promote the implementation of corporate responsibility, and work with suppliers to establish a corporate social responsibility system according to the Code of Conduct. Bringing staff, customers and suppliers together to form an industry that benefits all of society—this is the direction Ardentec continuously works toward.

Chairman



President







# ABOUT ARDENTEC

- 1.1 Company Introduction
- 1.2 Corporate Values
- 1.3 The Organization
- 1.4 Professional Services
- 1.5 Market Size and Performance
- 1.6 Surplus Allocation
- 1.7 Development Strategies and Innovations
- 1.8 Honors and Accolades

## 1.1 Company Introduction

Ardentec Corporation is a specialized semiconductor testing company. The company's service includes testing engineering development and product testing of various semiconductors.

Ardentec's headquarters is in Hsinchu Industrial Park, Hukou Township, Hsinchu County, Taiwan. Taiwan headquarters has a total of 4 Sites, including Kaiyuan, TingShin, Gaosheng and Paoching.

The north-east Asia Korea subsidiary, East Asia Headquarters and Giga-Solution subsidiary in Taiwan, Ardentec Nanjing and Singapore subsidiary

are connected as the circular Asia service band, forming a complete business development and testing operation service network of Europe, Asia and America.

The front-end and back-end (such as testing and packaging) in the semiconductor industry require huge equipment investment. The technology and production management of the front end and back-end are very different. Therefore, in the semiconductor industry, the professionalization of the back-end such as testing and packaging becomes a parallel and complementary division of labor with the front-end. With

the industry-leading engineering capability, quality system and IT technical service and through the industrial vertical integration, Ardentec has established a long-term cooperative relationship with big domestic and foreign semiconductor manufactures and become one of top three specialized wafer testing service provider in Taiwan. With a specialty in niche services, Ardentec hopes to secure its foothold in the world's semiconductor industry.



## 1.2 Corporate Values

Ardentec aspires to be a model company that creates a positive cycle conducive to the development of society, the economy and the industry by emphasizing business ethics, exercising diligent in governance, adhering to laws and regulations as well as international rules and standards, making transparent disclosures, and using the

“right” business processes to provide customers with the best professional services and provide employees with the best care and benefits. To us, the most enjoyable aspect of corporate management is to engage employees, customers, suppliers and business partners with "passion" and create the right values through "rationality."

These beliefs are the cornerstones of “Ardentec.”

In addition, Ardentec has incorporated topics of environmental protection, employee care, and society feedback into its corporate governance, and thereby ensure sustainable growth for the Company, the employees, the environment, and society alike.

### Corporate Values

With the spirit of continuous improvement, Ardentec meets the requirement of high quality clients and the expectation of long-term stakeholders.

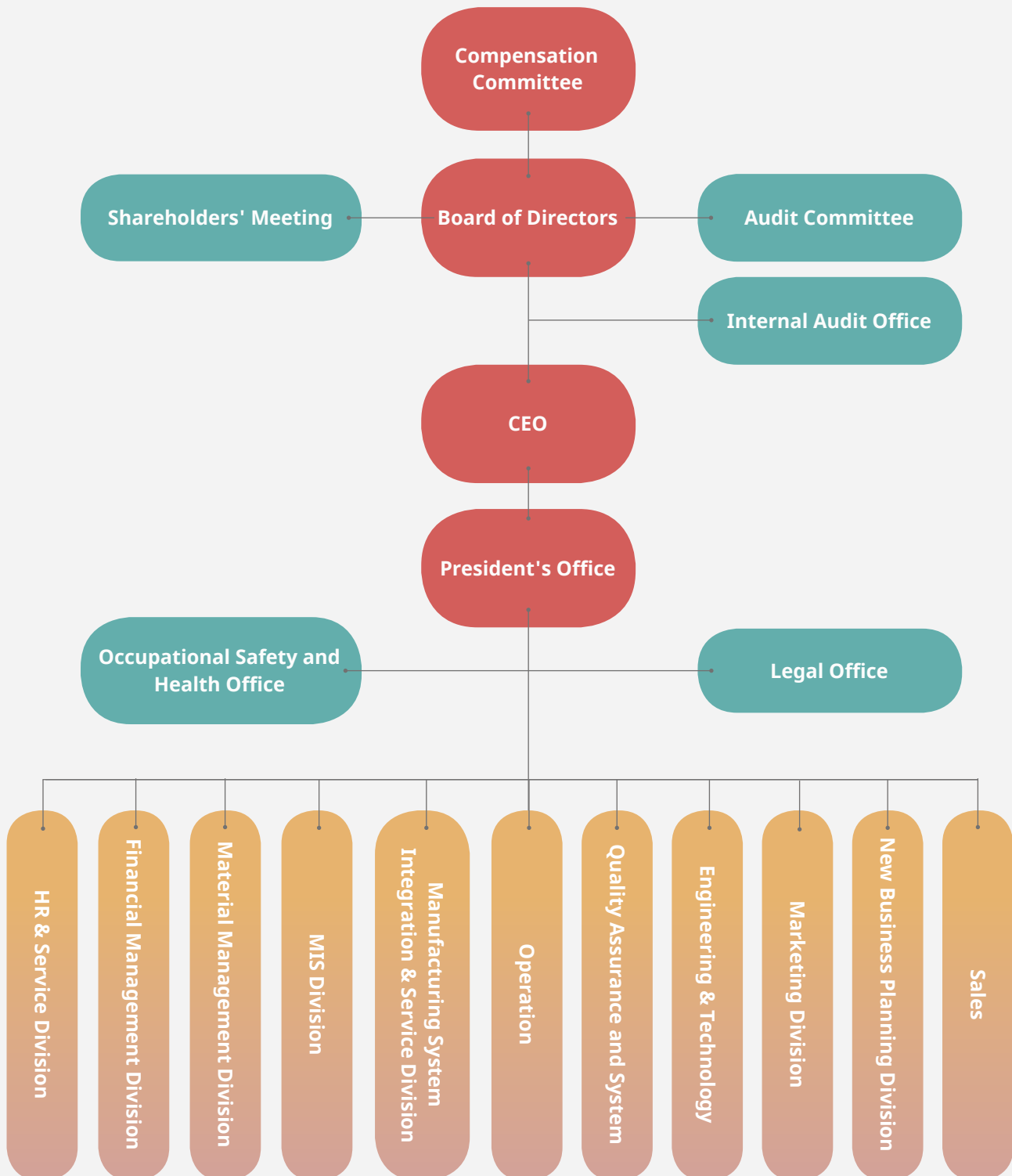
With enthusiastic and innovative attitude, Ardentec provides valuable key service in the global semiconductor industry.

With balanced humanity and professional demands, we drive the co-growth of employees and company.

With a commitment to business integrity, we endeavor to care for the sustainable development of society and the environment.

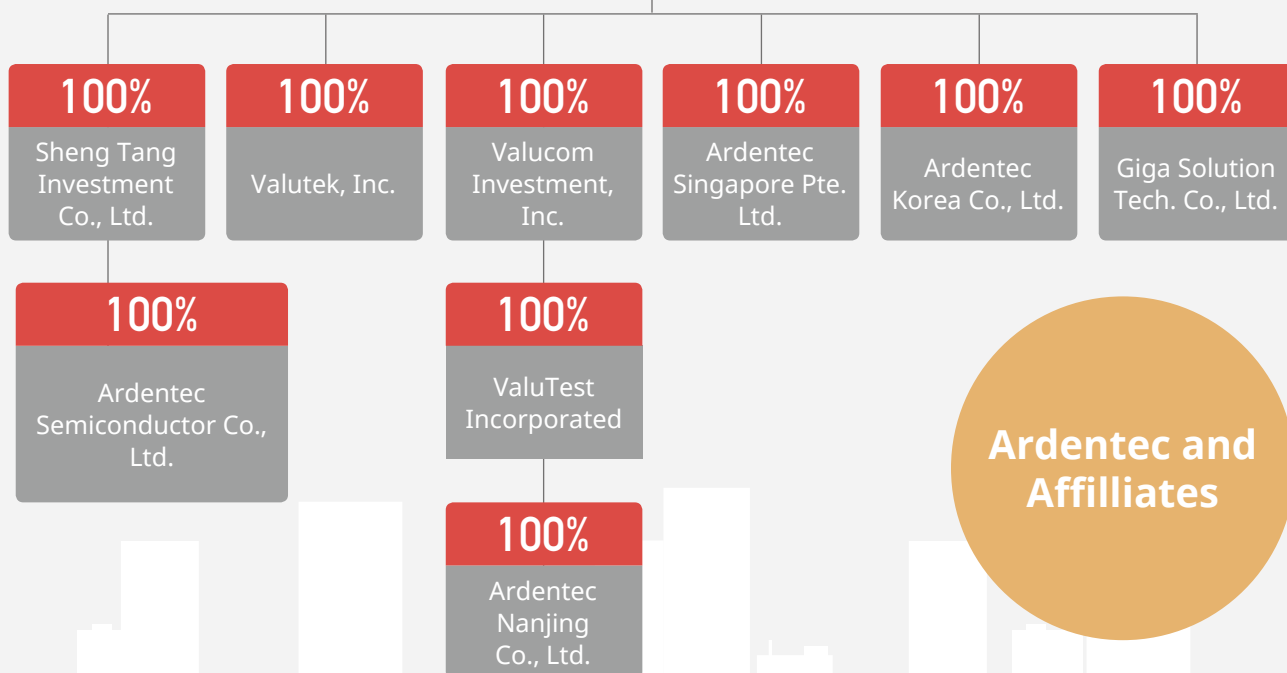


## 1.3 The Organization





## Ardentec Corporation



## Ardentec and Affiliates

## 1.4 Professional Services

With engineering expertise, service enthusiasm, and lean on-site management, we are committed to providing customers with complete semiconductor testing solutions. Our scope of service includes pre-production engineering service, mass production engineering service, probe card service, wafer probing service, final testing services, wafer-level chip scale



packaging (WLCSP) service, and other related engineering support services.

In Ardentec, we have independently developed highly automated information platforms. Our outstanding engineering team builds custom information service for customers with different needs and provides customers with engineering

services from the design phase to mass production to enable customers to quickly start mass production and maximize added value for customers. By combining highly automatic test production with the rigorous quality system and production error automatic alarm system, we assure the production quality of customer products.



## 1.5 Market Size and Performance

2017 was a boon year for semiconductors worldwide, with a total sales of 419 billion USD, marking the first time the output value of semiconductor industry exceeded 400 billion USD and representing a growth of 22.2% compared to 2016. According to the estimates of market research institutions, semiconductor sales in 2018 are still on the upside, with a growth of 7.8%, translating to 451 billion USD in sales. From the perspective of market demand and trends, 5G communication, high-speed computing, artificial intelligence, Internet of Things, self-driving cars, etc. will further boost semiconductor demand, and international industrial organizations are fairly optimistic about the prospects of 2018. However, due to the US rate rise, continual political topics in

North Korea, and the economic slowdown in China, uncertainties in the international economy have lingered. We will be prudent with our investments and maintain robust management practice to continue refining our customer services and enhance our competitiveness. With continuously improving quality, Ardentec has an edge over its competitors and continues to maximize profit for its customers, shareholders, and employees.

An increasing number of integrated device manufacturers (IDMs) in Europe and the United States are outsourcing work to semiconductor manufacturers in Taiwan and seeking local packaging and testing partners. Ardentec has years of experience in testing and customized services, a strength that has garnered the attention of

multiple international clients and made it possible for the company to secure its foothold in the semiconductor testing market, which is also why Ardentec has registered increasing overseas revenue on a yearly basis. In 2017, business in logic and mixed-signal IC testing as well as testing in security control, automotive uses and communications IC all grew significantly.

In 2017, a Nanjing subsidiary of Ardentec was established to provide regional development in customer services, to participate in the business opportunities offered by China's growing semiconductor market, to fill out its overall regional layout, and to fit with the customer's global strategy and thus improve customer relationships and benefit all parties involved.

## 2017 Product Sales Proportion

Product	Revenues	Weight %
Wafer Test	6,506,135	82.8%
Final Test	1,281,454	16.3%
Others (equipment rental)	72,426	0.9%
Total	7,860,015	100.0%

※ Unit : NT\$1,000

## 2016 and 2017 Testing Service Sales Region

Year	2016	2017
Taiwan	1,420,208	1,461,895
USA	2,659,984	3,316,014
Singapore	617,074	767,241
Mainland China	204,046	237,659
Others※	1,359,110	2,077,206
Total	6,260,422	7,860,015

※ primarily consists of European customers

※ Unit : NT\$1,000

## 2016 and 2017 Financial Performance(Consolidated)

Year	2016	2017
Operating revenues	6,260,422	7,860,015
Operating costs and expenses	5,193,836	6,241,697
Operating net profit	1,066,586	1,618,318
Non-operating revenues and expenses	1,830	(80,894)
Pre-tax profit	1,068,416	1,537,424
Income tax expense	160,303	269,853
Current period net profit	908,113	1,267,571

※ Above includes the revenues of Taiwan Headquarter, Giga Solution, Korea subsidiary, Singapore subsidiary and China Nanjing subsidiary.

※ Unit : NT\$1,000

## 1.6 Surplus Allocation

According to the Company's Articles of Incorporation, when there is a profit after the annual closing of books, besides paying taxes and covering up losses in previous years, the Company will appropriate 10% of the balance as the legal reserve and the special reserve by the law or based on actual needs. Then, according to

the need for operational activities, the Board of Directors will draw up a proposal to distribute the balance (including reverted special reserve) together with the unappropriated earnings in the previous year and submit the proposal to the annual general meeting of shareholders (AGM) for resolution before distributing

the profit.

The 2017 net profit after tax is NT\$1,276,987,601. The Board of Directors approved on March 8, 2018 the distribution of cash dividends at NT\$1.65 per share.



## 1.7 Development Strategies and Innovations

The experience accumulated from providing wafer testing services for leading manufacturers at home and abroad has enabled Ardentec to establish core competitiveness in key technologies, such as advanced testing technology, test process analysis systems, and test production automation.

In response to market trends in the industry, Ardentec has successfully developed technologies in recent years, including testing techniques for automotive ICs, security ICs and ICs specifically for the Internet of Things (IoT). These technologies have entered a harvest stage, and turnover will increase year by year. In 2018, we accelerated the research and development of high-voltage analog component testing technologies and expect it to contribute to revenue and profit starting in 2019.

We have also embarked on the R&D and successfully integrated technologies relating to IC testing, such as information system, logistics management, and automated production, to provide customers with integrated products and services. Aiming to improve production quality and enhance production efficiency, we continuously

research and develop information systems to achieve the dual goal of product quality improvement and testing cost reduction. We also continuously optimize and develop the test process analysis system and test machine real-time monitoring system to meet the comprehensive demands and quality requirements of different customers.

Top cope with the industry trend, we continuously expand our testing capacity for 12-inch wafers to become the largest testing team for 12-inch wafers in the industry. Apart from providing long-term mass production testing service for numbers of professional IC manufacturers at home and abroad, we launch cooperation with upstream IC design houses to advance the development of product testing programs for customers at the product design phase to facilitate customers to quickly start mass production.

One-stop, high-end, and automated testing services have become a market trend. In addition to participating in the professional division of labor and launching strategic alliances with the industry chain at home and abroad for global market deployment, we have also

established the Patent Review Committee to develop patents for cutting-edge testing, advanced IT technologies, and automation technologies. The committee also continuously optimizes and innovates research energy and services to achieve the goal of “leading brand of testing and qualification service and technology development” with complete and custom services.

## 1.8 Honors and Accolades

### Membership

Site	Members
Taiwan Headquarters	Global Semiconductor Alliance (GSA)
	Taiwan Semiconductor Industry Association
	Chinese Institute of Engineers, Hsinchu County Chapter
	Monte Jade Taiwan
	Hsinchu Industrial Society
	Hsinchu Industrial Park Association
	Hsinchu Industrial Park Security Alliance
	Hsinchu County Nurses Association
	Automobile Electronic SIG Exchange Seminar
	Chinese Institute of Industrial Engineers (CIIE)
Singapore Site	Singapore Business Federation (SBF)
	Singapore Semiconductor Industry Association (SSIA)
Korea Site	Korea Customs Logistics Association
	Eoyeon Hansan Industrial Complex Manager Association
	GG Association of Foreign Invested companies
	Korea Fire Safety Association
	Korea Energy Engineers Association
	Korea Electric Engineers Association



## Verification/Certification

Starting year of validity	Taiwan Headquarters	Singapore Site	Korea Site	Giga solution
2000	ISO 9002			ISO 9002
2001				ISO9001
2002	QS 9000			
2003	ISO 9001			
2004	ISO 14001			
	ISO/TS 16949			
2007	OHSAS 18001	ISO 9001		
2008	ISO 27001			
2009	TOSHMS	ISO 14001		
		OHSAS 18001		
2010	ISO 14064	ISO 27001		
	IECQ QC080000			
	Authorized Economic Operator, AEO			
2011		ISO/TS 16949	ISO 9001	ISO14001
2012	2012 Internal Compliance Program (ICP)	ISO 14064	ISO/TS 16949	
2013	2013 CNS 15506 (Note 1)	WStrategic Trade Scheme (STS) Tier 3 Permit	ISO 14001	
	Common Criteria (Security Site) Tingshin Site		OHSAS 18001	
	AA1000 AS			
2014	ANSI/ESD S20.20	Approved Contract Manufacturer and Trader w(ACMT)	ISO 27001	
	Common Criteria (Security Site) Kaiyuan Site	TradeFirst & STP certificate	CP (Compliance Program) AA grade	
	ISO/IEC 17025	Common Criteria (Site Certification)	Automatic Customs Approval	
2015	Common Criteria (Site Certification) EAL 6 (Note 2)	ISO 22301		
	Healthy Workplace Certification Health Promotion Mark			
2016	ISO 22301			
2017				ANSI/ESD S20.20

※ Note 1 Not renew from 2015

※ Note 2 Includes Gaosheng Site data center and Paoching Site data center





Chairman CY Lu received 2017 Science Management Awards by Chinese Society for Management of Technology.



Ardentec was rated as "Excellent 3rd" among the Companies and Factories Site Protection Group in the 2017 Civil Defense Corps Training held by Hsinchu County Government

Ardentec received the 2017 Prospective Business Continuity Award from the British Standards Institution (BSI)

Ardentec received the 2017 Sustainability Outstanding Award from the British Standards Institution (BSI)

Ardentec Singapore received the 2017 Excellence in Energy Management Award from Energy Efficiency National Partnership (EENP)







Photographer | James Tsai

# SUSTAINABLE BUSINESS FRAMEWORK

2.1 CSR Policy

2.2 The CSR Organization

2.3 Analysis of Stakeholders and Topics of Concern

2.4 Topic Materiality Matrix

2.5 The Impact Boundries of Material Topics to  
Value Chian

2.6 Communication with Stakeholders



## 2.1 CSR Policy

Upholding the concept of enhancing the competitiveness of enterprises while taking into account the social sustainable development, Ardentec expects to drive the culture and establish a society that values ethics and maintains social welfare and environmental sustainability. The Board of Directors reviews the CSR policy and evaluates the implementation performance of the economic, environmental and

social topics annually.

The Board of Directors has established Ardentec's CSR policy which are as follows:

- ◆ Business ethics and corporate governance
- ◆ Compliance with laws and international standards
- ◆ Fully disclose corporate governance and CSR Information.
- ◆ Development of a sustainable environment

In the process of implementing

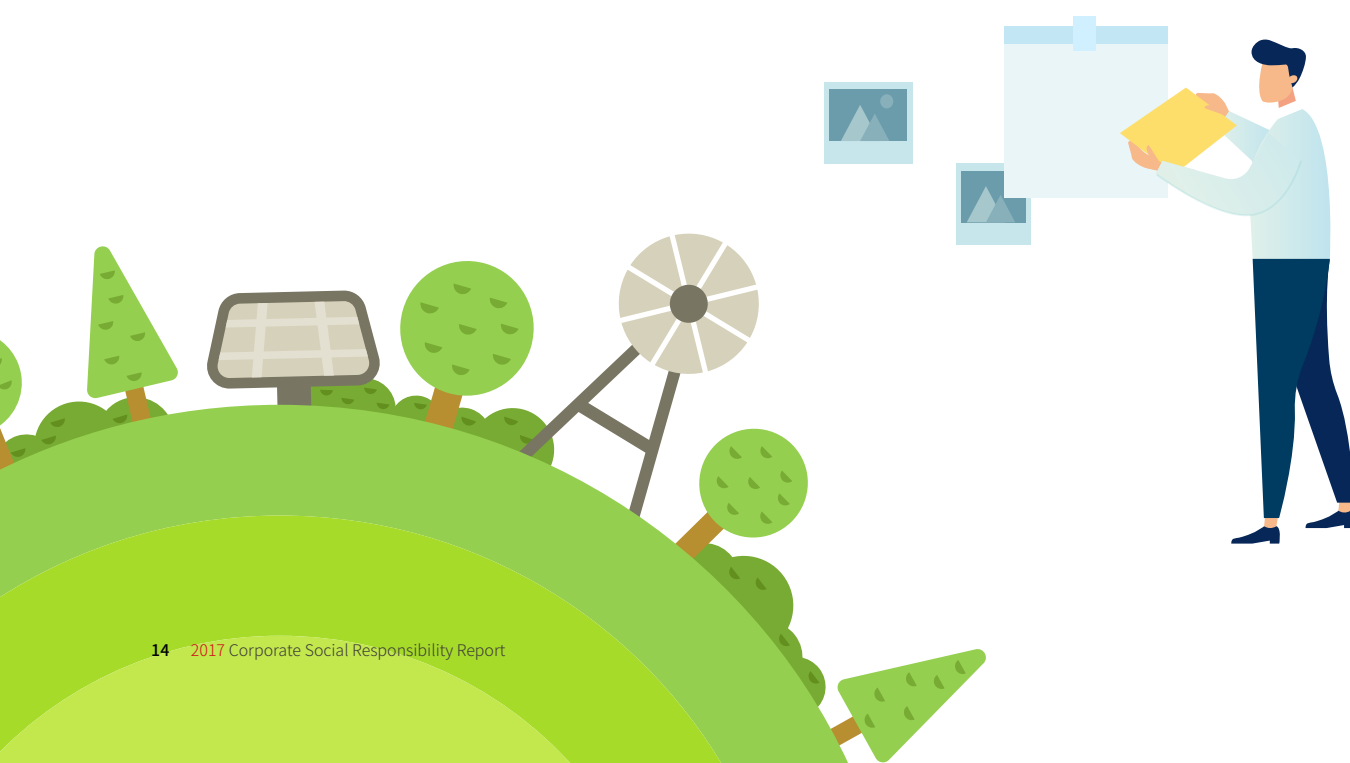
CSR, Ardentec stands behind the mission, vision, and charter of the RBA Responsible Business Alliance. In addition, Ardentec undertakes that the operating activities fully comply with the Responsible Business Alliance Code of Conduct (RBA CoC).

## 2.2 The CSR Organization

Ardentec assembled its "CSR Committee." Chaired by the President and staffed with senior managers of various departments, the CSR committee has been given the mission to

oversee Ardentec's corporate social responsibilities. Four teams have been created under the committee to supervise CSR through "Corporate Governance," "Environment, Health and Safety

(EHS)," "Human Rights Protection" and "Social Engagement" aspects, and to achieve Ardentec's goal towards building a sustainable business. President reports CSR performance to Board of Directors annually.





## 2.3 Analysis of Stakeholders and Topics of Concern

There are a wide range of stakeholder types and topics corresponding to business operations. Every year, Ardentec adopts the following processes to conduct stakeholder and topic collection, topic attention and

impact analysis, and identification of topic significance. Ardentec has established diverse, transparent, and responsive communication channels with its stakeholders in hopes of understanding their topics of concern and

expectations for Ardentec. The responses of stakeholders are important references for the Company's CSR direction, planning, and sustainable development.



### Collection of topics of Concern

Every year, Ardentec collects topics of concern from related domestic and foreign industries, confirming the collected information with each functional department before summarizing it into a complete list of topics of concern.

### Identification of Stakeholders

The head of each function identifies the stakeholders in the business activities and the communication methods and channels with these stakeholders based on the identified topics. Based on the identification results, we conclude eight

major types of stakeholders: employees, customers, suppliers and contractors, government and regulatory agencies, investors, cooperation institutions, creditors and communities.

## Stakeholders Category and Top 10 Topics of Concern

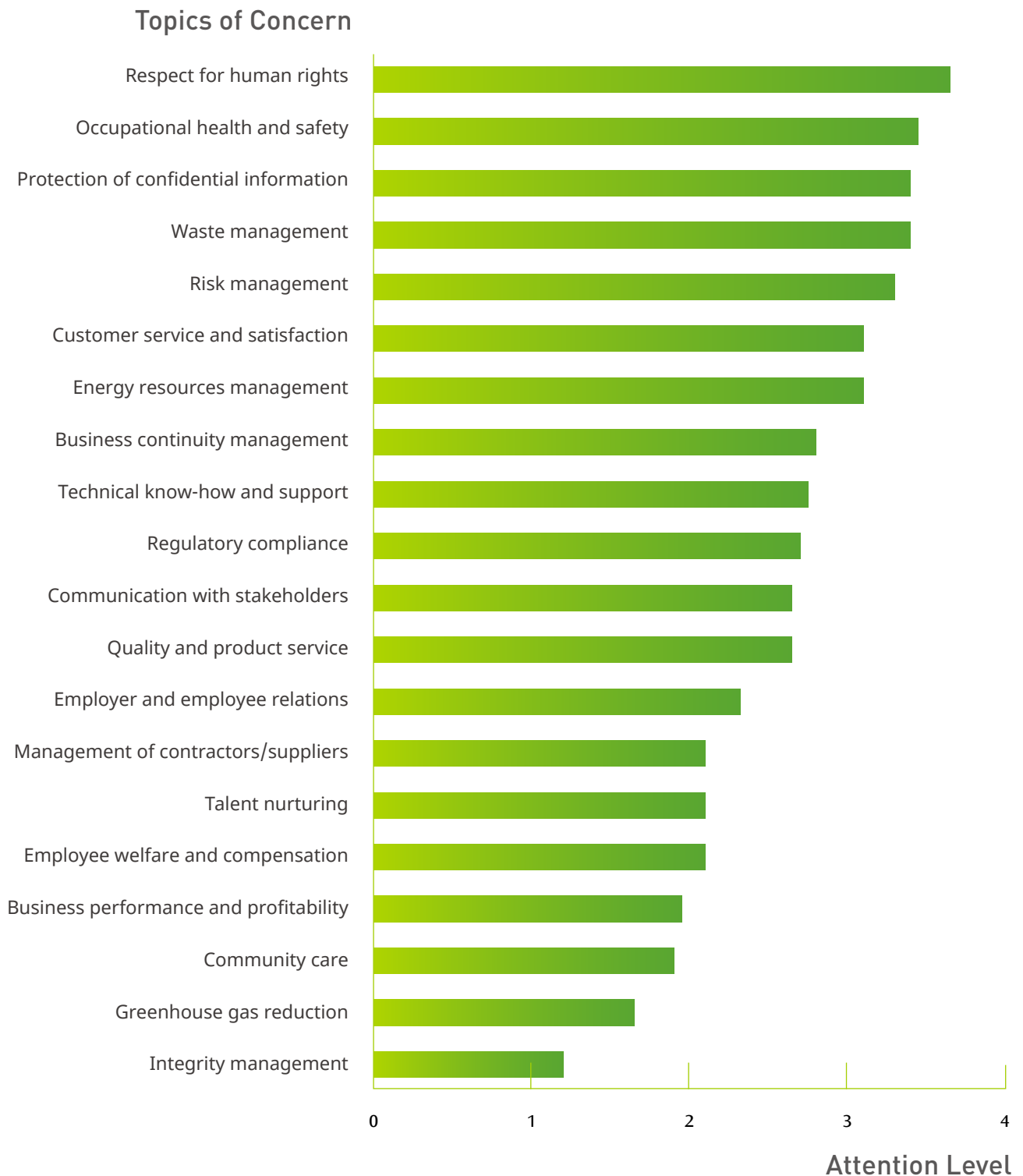
Stakeholder Topics	Employees	Customers	Suppliers and contractors	Government and regulatory agencies	Investors (※)	Cooperation institutions	Creditors	Community (※)
Respect for human rights	✓	✓	✓	✓				
Protection of confidential information	✓	✓	✓				✓	
Customer service and satisfaction	✓		✓			✓		
Waste management	✓	✓	✓	✓		✓	✓	
Regulatory compliance	✓	✓		✓		✓		
Risk management				✓			✓	
Occupational health and safety	✓	✓	✓	✓		✓		
Employee welfare and compensation	✓			✓			✓	
Employer and employee relations	✓			✓		✓		
Technical know-how and support	✓	✓	✓					
Quality and product service	✓	✓	✓			✓	✓	
Business continuity management		✓				✓	✓	
Management of contractors/suppliers			✓	✓				
Business performance and profitability	✓			✓				
Communication with stakeholders								
Greenhouse gas reduction								
Energy resources management								
Business integrity		✓	✓			✓	✓	
Talent nurturing						✓		

The cooperation institutions include accounting firms, audit unit, cooperative schools, etc.

※ Investors and community did not reply to concern topic survey

## Analysis of Attention Level of the Topics

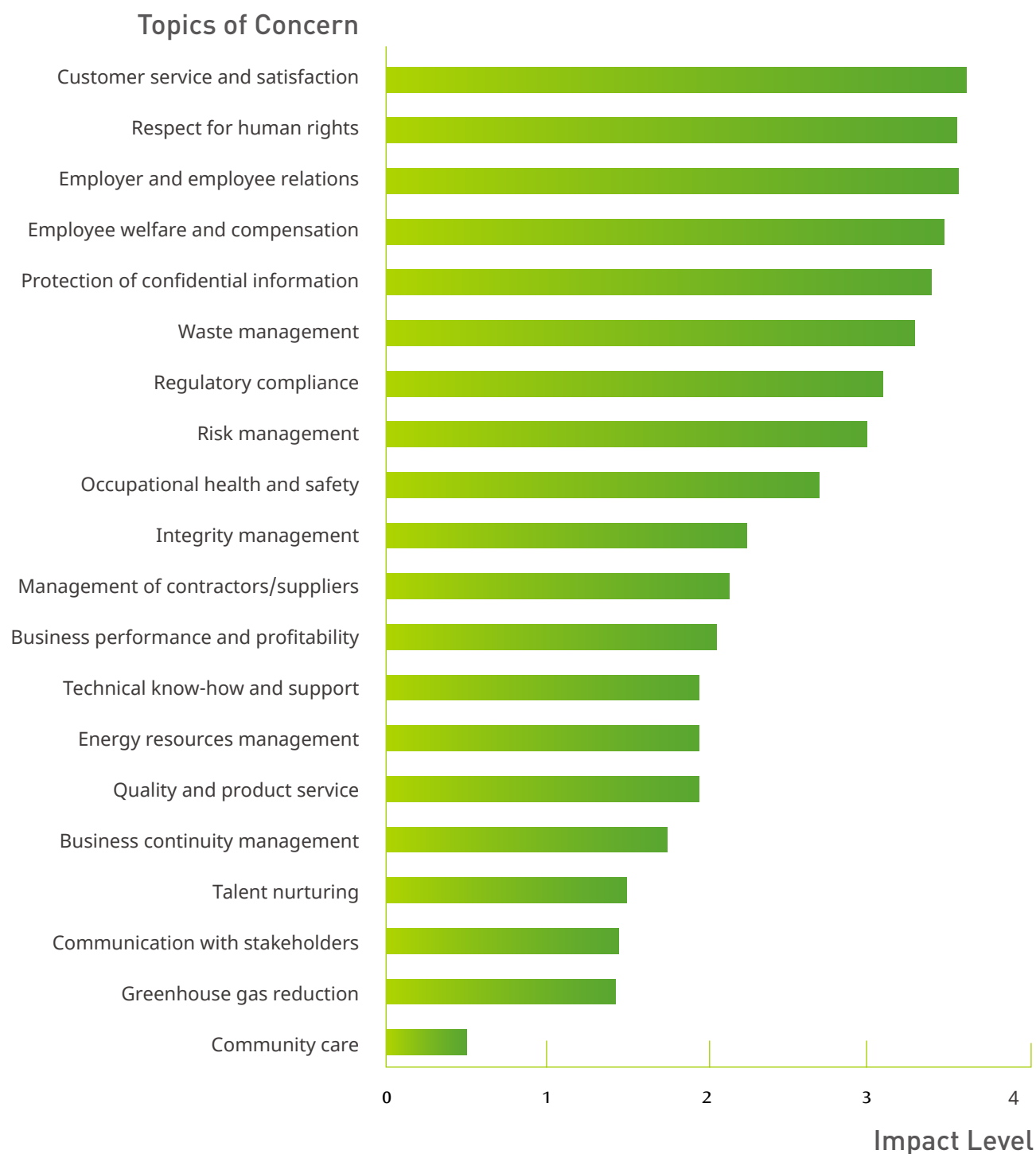
After identifying stakeholders and surveying communication methods and channels, the attention level relating to stakeholders within and outside of the organization is investigated by questionnaire survey. This is to provide the management with an overview of the stakeholders and the materiality of Topics raised by them. The materiality of topics raised by stakeholders is as follows :



※ Attention Level : 0-Not relevant/Unknown, 1-Not Attention, 2-Attention, 3-Heavy, 4-Extreme

## Analysis of Impact Level of Topics

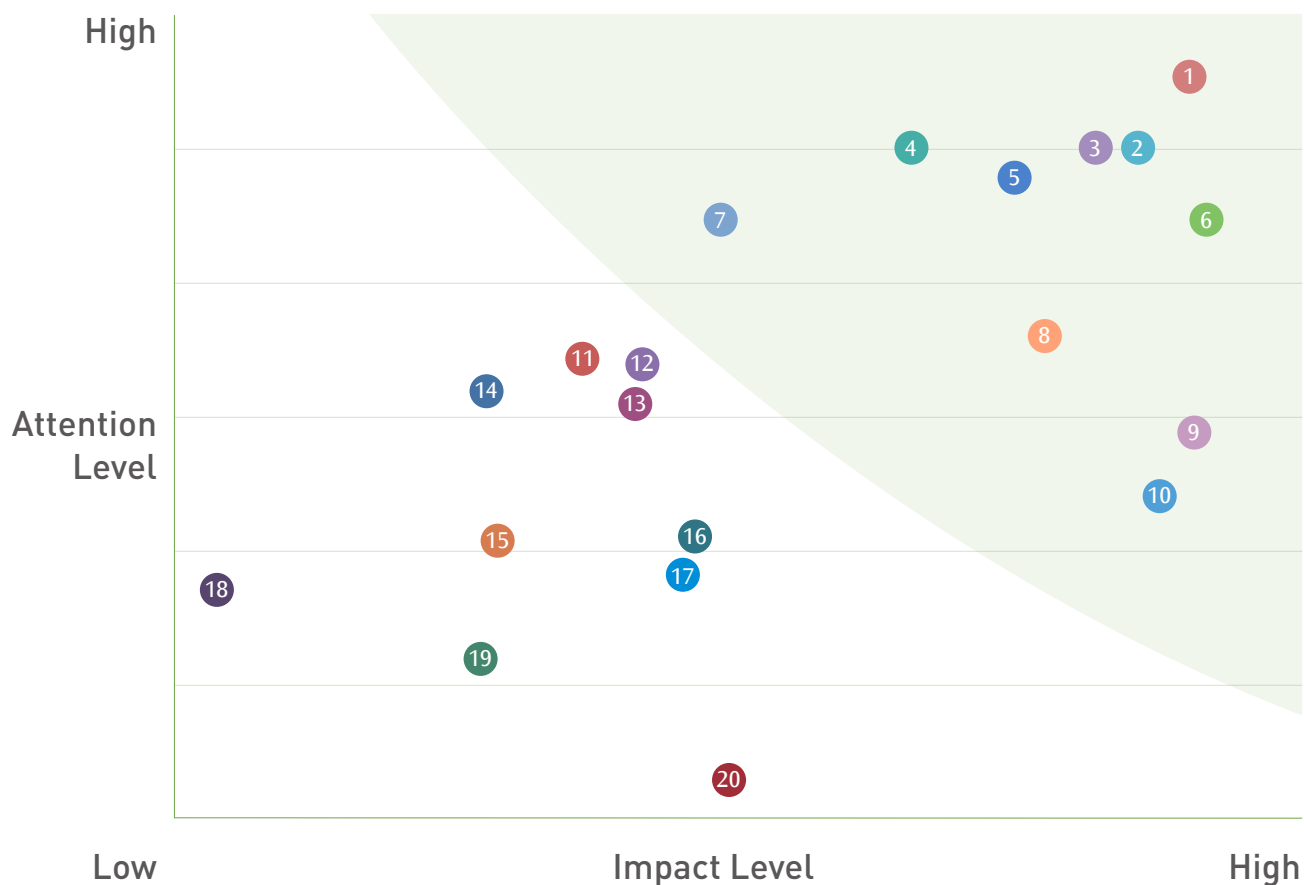
After their collection and organization, the issues of concern will be analyzed by each function supervisor with respect to the impact of each issue on the Company's business activities. After the assessment of impact of issues from each function being collected and organized, the Corporate Social Responsibility Committee will examine the impact of each issue on the Company as a whole. After the two-way microscopic-to-macroscopic inspection and the analysis of the relevance to the overall operation, the impact of these issues on operation will be collected and organized.



※ Impact Level : 0-Not relevant/Unknown, 1-Not Impact, 2-Impact, 3-Heavy, 4-Extreme

## 2.4 Topic Materiality Matrix

After combining the results of Topic materiality assessment, questionnaire survey, and the internal assessment of the reasonability of Topics, the materiality of topics raised by stakeholders are concluded and prioritized as distributed below.



### Material topics

- |  |                                      |
|--|--------------------------------------|
| 1 Respect for human rights               | 6 Customer service and satisfaction  |
| 2 Waste management                       | 7 Energy resources management        |
| 3 Protection of confidential information | 8 Regulatory compliance              |
| 4 Occupational health and safety         | 9 Employer and employee relations    |
| 5 Risk management                        | 10 Employee welfare and compensation |

### Other topics

- |                                    |   |
|------------------------------------|---|
| 11 Business continuity management  | 16 Management of contractors/suppliers    |
| 12 Technical know-how and support  | 17 Business performance and profitability |
| 13 Quality and product service     | 18 Community care                         |
| 14 Communication with stakeholders | 19 Greenhouse gas reduction               |
| 15 Talent nurturing                | 20 Integrity management                   |



## 2.5 The Impact Boundries of Material Topics to Value Chian

Analyzing the aspects and boundaries of material topics according to the analysis and evaluation of the attention level and impact level with reference to the relevance to the Company's actual operation.

Material Topics	GRI Standards (2016)		Corresponding chapter of Management approach	Value Chain of the Identification of Boundaries		
				Headquarters	Singapore Subsidiary	Korea Subsidiary
Risk management	General Disclosures	102-30	3.6	✓	✓	✓
	Indirect Economic Impacts	203-2				
	Customer Privacy	418-1				
Respect for human rights	Non discrimination	406-1	5.3	✓	✓	✓
	Child Labor	408-1				
Employer and employee relations	Employment Relations	401-2	5.3	✓	✓	✓
	LaborManagement Relations	402-1				
Employee welfare and compensation	Economic Performance	201-1	5.3	✓	✓	✓
		201-3				
	Employment Relations	401-2				
Occupational health and safety	Occupational Health and Safety	403-1	5.5	✓	✓	✓
		403-4				
Protection of confidential information	Customer Privacy	418-1	3.6 6.2	✓	✓	✓
Regulatory compliance	Socioeconomic Compliance	419-1	3.6	✓	✓	✓
Waste management	Effluents and Waste	306-1	4.3 4.4 4.7	✓	✓	✓
		306-2				
		306-3				
		306-4				
		306-5				
Energy resources management	Energy	302-1	4.3 4.5	✓	✓	✓
		302-3				
		302-4				
		302-5				
Customer service and satisfaction	Others (※)		6.4	✓	✓	✓

Material Topics	GRI Standards (2016)		Corresponding chapter of Management approach	Value Chain of the Identification of Boundaries			
				Giga Solution	Customers	Suppliers and contractors	Creditors
Risk management	General Disclosures	102-30	3.6	✓	✓		✓
	Indirect Economic Impacts	203-2					
	Customer Privacy	418-1					
Respect for human rights	Non discrimination	406-1	5.3	✓		✓	
	Child Labor	408-1					
Employer and employee relations	Employment Relations	401-2	5.3	✓		✓	
	LaborManagement Relations	402-1					
Employee welfare and compensation	Economic Performance	201-1	5.3	✓		✓	
		201-3					
	Employment Relations	401-2					
Occupational health and safety	Occupational Health and Safety	403-1	5.5	✓		✓	
		403-4					
Protection of confidential information	Customer Privacy	418-1	3.6 6.2	✓	✓	✓	
Regulatory compliance	Socioeconomic Compliance	419-1	3.6	✓			
Waste management	Effluents and Waste	306-1	4.3 4.4 4.7	✓			
		306-2					
		306-3					
		306-4					
		306-5					
Energy resources management	Energy	302-1	4.3 4.5	✓			
		302-3					
		302-4					
		302-5					
Customer service and satisfaction	Others (※)		6.4	✓	✓		

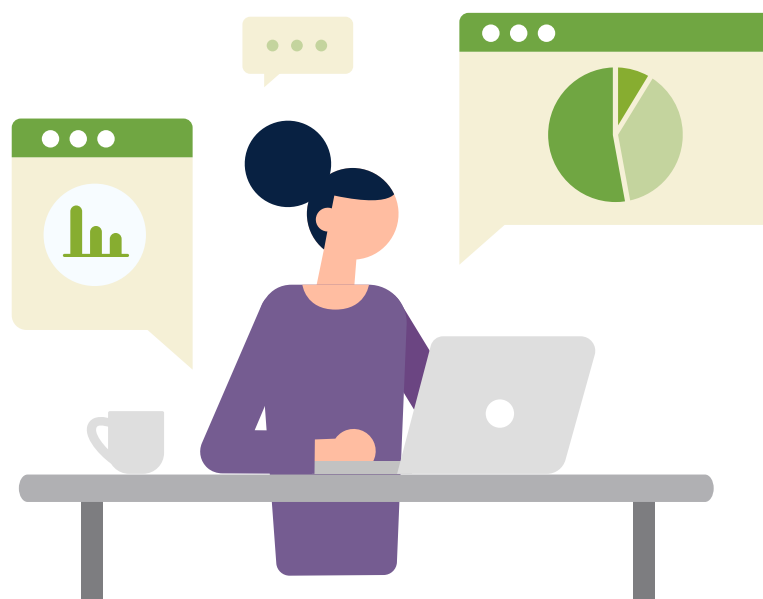
※ Material topics identified by stakeholders' feedback

## Description of New Topic Impact Boundary

Ardentec acquired 100% equity of Giga Solution Tech. Co., Ltd. in 2017. It has become a new subsidiary of Ardentec.

## Description of Material Topics Changing

Change	Topics	Description
New add	Respect for human rights	The issue of respecting human rights from 2016 was renamed as human rights protection in response to the identifying of issues which deepened the protection of migrant workers and motherhood in 2017
	Waste management	Ardentec is a low-energy consumption, low-resource, and low-emission industry. The significant issue of environmental protection from 2016 has been divided into two significant issues for management after analysis and evaluation in response to the increasing number of initiatives we take due to influence of climatic factors and environmental protection.
	Energy resources management	
Reduce	Environment Protection	Changed to be managed by two material topics : waste management and energy resources management.
	Growth potential	Combined into material topic of customer service and satisfaction from 2017
	Technical know-how and support	
	Quality and product service	
	Price and delivery	
	Integrity management	Ardentec's long-term performance with honesty and steady operation has earned the stakeholders' confidence; the issue of identification process is important but does not need to be listed as material.
	Business performance and profitability	
	Talent nurturing	Combined into employee welfare and compensation.



## Management of Material Topics

Material Topics	Policies	Management measures/ projects	Goals	Evaluation mechanism
Risk Management	Business continuity policy	Risk related committees engaging in daily risk management: Business Continuity Management Committee Occupational Safety and Health Management Committee Information Security Committee Ensuring a sound risk-related management system by third-party verification: ISO 22301 Business Continuity Management System (BCMS) international standard verification Common Criteria Verification	Zero risk	Implemente periodic internal audit
Respect for human rights	Labor Policy of Ardentec's Corporate Social Responsibility Code of Conduc	Establishing human rights protection operation regulations for the operational compliance. Setting up onymous or anonymous suggestion box as reporting channels.	Zero child labor, zero discrimination, and zero charge	Full audit of foreign-recruited workers Regular inspection ensuring there are no reports of labor policy violation
Employer and employee relations	Labor Policy of Ardentec's Corporate Social	Regular labor-management meetings	No labor-management disputes	Convening management
Employee welfare and compensation	Labor Policy of Ardentec's Corporate Social Responsibility Code of Conduct	Annual review of changes in the remuneration regulations to ensure that employees' wages, overtime pay, and other benefits are better than those provided in the regulations Every year, performance appraisal is performed based on employee contribution and performance as the basis for employee salary and compensation distribution. Employee compensation is not affected by gender, age, race, religion, politics, or marital status.	Employee compensation is 100% in compliance with the law	Quarterly implementation of regulatory identification Performance appraisal
Occupational health and safety	Complying with regulations and international standards, establishing a safe and healthy working environment, and continuously improving to enhance safety and health performance	Establishing Occupational Safety and Health Management Committee Promoting OHSAS 18001 Occupational Safety and Health Management System verification	Zero disaster	Implement quarterly management review meeting

Material Topics	Policies	Management measures/ projects	Goals	Evaluation mechanism
Protection of confidential information	All employees to duly comply with the security regulations and requirements and implement the information security items to ensure the security of customers' and the Company's information and facilities.	Setting up an Information Security Committee to promote information security related management Promote Common Criteria verification to ensure the effectiveness of the information security management system	Zero information security incidents	Regular audit and management review
Regulatory compliance	The Company's overall business activities comply with relevant laws and regulations	Stipulating Law and Regulation Identification Procedure to list the relevant laws and regulations as the basis for inspection	Legal compliance: 100%	Quarterly implementation of legal compliance audit Convening management review meeting every six months
Waste Management	Complying with laws and international standards to protect the environment and promote sustainable use of resources	ISO 14001 Environmental Management System verification Improve waste recycling and reclamation	Zero pollution	Quarterly implementation of audit and management review meeting
Management of energy and resources	Complying with laws and international standards to protect the environment, promote energy conservation and carbon reduction, and develop a sustainable environment	Calculating the annual energy consumption per unit by the number of turned-on test machines and setting the goal of continuous improvement for each year	1% reduction per year	Annual implementation of greenhouse gas inventory Quarterly implementation of audit and management review meeting
Customer service and satisfaction	With industry-leading technology in wafer testing, Ardentec offers customers comprehensive services, making it the best partner for customers	Establishing individual customer projects in order to build a smooth service system and communication channel	More than 76% customer satisfaction	Annual implementation of customer satisfaction survey

## 2.6 Communication with Stakeholders

Through various channels and by transparent and two-way interaction, Ardentec communicates with stakeholders and jointly examines and provide feedback on specific achievements of Ardentec in its implementation of corporate social responsibility. Stakeholders may communicate with the Company at any time through the Contact Us section on the official website, and the Company can immediately respond.

### Communication Channels with the Stakeholders and the Frequency

Stakeholder category	Communication methods and channels	monthly	Quarterly	Annually	Irregularly scheduled
Employees	Labor-management meetings		✓		
	Safety window meetings		✓		
	Occupational safety and health committee meetings		✓		
	Intranet e-platform				✓
	Suggestion (on-line or box)/ telephone/Email				✓
	Announcements				✓
	Department meetings				✓
Customers	Meeting/audit				✓
	Customer satisfaction management or survey			✓	
	Customer visit				✓
	Company website				✓
Suppliers and contractors	Contractor training	✓			
	Supplier CSR and Business Ethics Guidelines			✓	
	Protocol meeting				✓
	Supplier/contractor audit			✓	
	Meetings or communications				✓
Government and regulatory agencies	Regulation seminars or public hearings				✓
	Financial statements		✓	✓	
	Reports or responses on demand				✓
	Official correspondences				✓
	Industrial development conference				✓
	Report and reply of each business				✓

Stakeholder category	Communication methods and channels	monthly	Quarterly	Annually	Irregularly scheduled
Investors	Shareholder meetings			✓	
	Investor meeting				✓
	Financial statemen or annual report			✓	
	Market Observation Post System				✓
	Company website				✓
	Meetings or communications				✓
Cooperation institutions	Audit				✓
	Meetings or communications				✓
	Enterprise-academy collaboration program				✓
Creditors	Relevant information providing or reply as required				✓
	Meetings or communications				✓
	Financial statements				✓
Community	Company website, e-mail				✓
	Social welfare activities				✓







# CORPORATE GOVERNANCE

- 3.1 Governance Principles
  - 3.2 Board of Directors
  - 3.3 Executive Compensation Policy
  - 3.4 Ethical Guidelines
  - 3.5 Internal Controls
  - 3.6 Risk Management
  - 3.7 Major Investment
-





## 3.1 Governance Principles

corporate governance, embrace enthusiasm, and care about environmental and social sustainability to run an everlasting enterprise. Therefore, we have established the “Corporate Governance Best Practice Principles”, “Ethical Corporate Management Best Practice Principles”, and “Corporate Social Responsibility Best Practice Principles” as the code of conduct of Ardentec.

Ardentec has incorporated topics of environmental protection, employee care, and society feedback into its corporate governance. In 2016, the Board of Directors conducted further reviews and enhancements to the

corporate value, CSR policy and functioning of the CSR Committee to strengthen the implementation of CSR.

On the corporate website, we have set an investor email ([investors@ardentec.com](mailto:investors@ardentec.com)) for shareholders, employees, and other stakeholder groups to express their advice on organizational operations and suggestions to the highest governance body.

We also establish our governance framework in accordance with relevant laws and regulations and standards at home and abroad, such as the Company Act and Securities and Exchange Act of the Republic of China, ISO

standards, and the RBA Code of Conduct. Stakeholders can enquire important codes and regulations relating to corporate governance on the CSR site of our corporate website. These codes and regulations include: Ardentec Articles of Incorporation, Rules for Election of Directors and Supervisors, Rules of Procedure for Meetings of Shareholders, Procedure for Acquisition or Disposal of Assets, Procedure for Engaging in Derivatives Transaction, Procedure for Loaning of Funds to Others, and Procedure for Making Endorsement/Guarantee for Others.

After the CPA audits and certifies

our annual financial statements, we will submit them together with the business report and profit distribution proposal to the supervisor for review and issuing an audit report.

We also timely disclose material information of the company over the Market Observation Post System in accordance with the “Guidelines for Online Filing of Public Information by Public

Companies” promulgated by the Securities and Futures Bureau of the Financial Supervisor Commission.

- ※ Corporate Governance Best Practice Principles : <http://web.ardentec.com/zh.php?m=127>
- ※ Ethical Corporate Management Best Practice Principles : <http://web.ardentec.com/zh.php?m=128>
- ※ Corporate Social Responsibility Best Practice Principles : <http://web.ardentec.com/zh.php?m=126>

## 3.2 Board of Directors

The Board of Directors of Ardentec has 13 seats and 6 of the directors are corporate entities, which accounts for half of total directors, 4 seats are for independent directors which accounts for 1/3 of the board

of director. 1 is female which accounts for 7.7%. All members are in the age over 50, all have rich professional background and technical experiences.

Upholding the principles of corporate governance, all board

members, managerial personnel, and administrators do not hold shares of the companies of suppliers and other stakeholders, and no board member represents any financial holding company.

### List of Ardentec Directors

#### Chairman

**Chih-Yuan Lu**

Now :  
Chairman and CEO of  
Ardentec

Director and President of Macronix International Co., Ltd.  
President of Vanguard International Semiconductor Corporation  
Deputy General Director of ERSO, ITRI  
Ph.D. in Physics, Columbia University, U.S.A.

#### Vice Chairman

**Chi-Ming Chang**

Now :  
Vice Chairman  
and President of  
Ardentec

Division Director of Vanguard International Semiconductor Corporation  
Deputy Division Director of ERSO, ITRI  
Ph.D. in Industrial Engineering, Texas Tech University, U.S.A.

#### Director

**Liang-Po Chen**

Now :  
Director and President  
of Giga Solution Tech.  
Co., Ltd.

Deputy director of National Nano Device Laboratories  
Ph.D. in Electronic Engineering from National Cheng Kung University

**Corporate Director**

**Representative of  
Macronix International /  
Yen-Hie Chao**

**Now :**  
Vice President of  
Macronix International  
Co., Ltd.

Department of Material Science and  
Engineering, National Tsing Hua University

**Corporate Director**

**Representative of  
Kingwell Investment /  
Mickey Ken**

**Now :**  
Vice President of  
Product and Quality  
Assurance Center,  
Etron Technology, Inc.

Master of Electronics Engineering, National  
Chiao Tung University

**Corporate Director**

**Representative of Hong  
Ming Consulting:  
Ding-Hua Hu**

**Now :**  
Chairman of Hong  
Ming Consulting Co.,  
Ltd.

Professor and Department Head of Engineering,  
National Chiao Tung University

President of Han Ding Co., Ltd.

Ph.D. in Electrical engineering from University  
of Missouri

**Corporate Director**

**Representative of Chiu  
Chiang Investment:  
Jing Amy Chao**

**Now :**  
Director and Chief  
Financial Officer of Te-  
Mao-Hsing Investment

Vice President of General Administration, China  
Times

Master in Economics, California State  
University, U.S.A.

**Corporate Director**

**Representative of Sheng  
Tang Investment:  
James Song**

**Now :**  
Vice President of Etron  
Technology, Inc. Ltd.

Executive Vice President of Semiconductor  
Manufacturing International. Ph.D. in EE, Texas  
Tech University, U.S.A. Institute of Technology,  
U.S.A.

**Corporate Director**

**Representative of  
VALUTEK INC  
Dahchieh Otto Cheng**

**Now :**  
President of China  
General Plastics  
Corporation

President of Taita Chemical Company, Ltd.

Ph.D. in Chemistry, Michigan State University,  
U.S.A.

<b>Independent Director</b> <b>Ta-Hsiung Chen</b>	<b>Now :</b> <b>Special consultant,</b> <b>Shanghai Baosteel</b>	Senior Consultant, Lianhua gas company General manager of Asia, Praxair, Inc. General manager, Praxair Chemax Semiconductor Materials Co. Ltd Ph.D. in Chemical Engineering, University of Houston
<b>Independent Director</b> <b>Wei-Shan Hu</b>	<b>Now :</b> <b>Professor of Chung</b> <b>Yuan Christian</b> <b>University</b>	Vice President of Chung Yuan Christian University Ph.D. in Financial Management, University of Oklahoma, U.S.A.
<b>Independent Director</b> <b>Chen-I Chia</b>	<b>Now :</b> <b>Professor of Chung</b> <b>Yuan Christian</b> <b>University</b>	President of Retail Banking Business Group, Chien Hua Bank MBA, University of Wisconsin, U.S.A.
<b>Independent Director</b> <b>Lai-Juh Chen</b>	<b>Now :</b> <b>Chairman of Ten Life</b> <b>Corporation</b>	EMBA of Thunderbird School of Global Management Ph.D. in Chemical Engineering from National Tsing Hua University

The Board of Directors of the Company exercises the powers of the Board of Directors in accordance with the Company Act, Regulations Governing Procedure for Board of Directors Meetings of Public Companies, Articles of Association of the Company and Regulations Governing Procedure for Board of Directors Meetings. When the Board of Directors encounters an agenda involving the avoidance matter specified in the Regulations Governing Procedure for Board of Directors Meetings or Director's interests related

to the Company's interests, the director must recuse himself/herself from discussion or voting, and may not act as another director's proxy to exercise voting rights.

In 2017, a total of six board meetings were convened to supervise the Company's management in economic, social, and environmental aspects, and assist the Company in strengthening internal controls and enhancing corporate governance.

According to the regulations of Directions for the Implementation

of Continuing Education for Directors and Supervisors of TWSE Listed and GTSM Listed Companies, each year the members of the Board have been arranged to attend training sessions to improve their function.

The attendance and operation of the abovementioned Board of Directors and the content and hours of the Board Members' training sessions have been announced on the Taiwan Stock Exchange Market Observation Post System.

### 3.3 Executive Compensation Policy

A Compensation Committee was composed of 4 independent Directors of Ardentec's Board of Directors. Its function includes establishing the policies and system related to the performance and salary remuneration of the Directors, Supervisors and Managers and regularly reviewing the salary remuneration of the Directors, Supervisors and Managers to achieve the goal of reasonable remuneration and retaining talents. A total of 4 meetings have been held in 2017, and proposals were formulated in accordance with the resolutions of the meetings and were submitted to the Board of Directors for review. Ardentec adopts a gender and age-neutral approach when remunerating its management officers. Employees' compensations are set to reflect individual and team performance as well as the future risks of the company, at levels that

are comparable to industry peers. Compensations are also formulated in such a way that attracts, inspires and retains top talent.

Compensation for directors and supervisors comprise travel allowances and remunerations. Travel allowance is paid based on their attendance at board meetings, while remuneration is determined based on current year earnings at proportions laid out in the Articles of Incorporation, and distributed once resolved during the meeting of shareholders. Managers are remunerated at levels comparable to competitors given their roles, while taking into consideration their responsibilities and contributions to the company's targets. Compensation for employees are determined based on current year earnings at percentages specified in the Articles of Incorporation, and are distributed once resolved by the meeting of shareholders.

Remunerations to directors, supervisors, and managers<sup>2</sup> are subject to the Compensation Committee's review and Board of Directors' resolution, and are fully disclosed in the company's annual reports. When discussing remuneration proposals, related members of Board of Directors would disassociate themselves from discussions and voting that pose conflicts against their own interests.

Based on the company's Articles of Incorporations, we respectively appropriate 12% and 3% of the profit of the current year as compensations for employees and remunerations to directors. However, when there are accumulated losses, they should have been covered. In 2017, the remuneration for directors and supervisors is NT\$53,722,842 and the compensation for employees is NT\$214,891,367.

※ Note 1 Managers refer to those who are Senior Director or above and the Chief Finance Officer

※ Note 2 Profit of the current year refers to the profit balance after deducting the compensations for employees and remunerations to directors and supervisors from the income before tax.

## 3.4 Ethical Guidelines

Ardentec's belief in being “A Testing Partner You Can Trust” is manifested in its technical service as well as its business activities and employees' conduct.

Ardentec has been insisting on the integrity management since it was founded. Ardentec promotes and advocates the moral behavior of integrity management to all employees. Any forms of corruption, extortion and misappropriation of public funds are strictly prohibited. We refuse to provide or accept any improper benefits, abide by fair trade, and do not participate in illegal market competition such as false advertisement. Ardentec also continues to sign customer CSR and business ethnic commitment to show Ardentec's recognition and

support of the business ethical standards. In 2017, all business personnel and managers graded department head and above had completed their "Conflict of Interest Reports." No corruption has occurred in 2017.

All employees are required to accept moral standards and anti-corruption training. As of December 31, 2017, all employees of Ardentec have completed the anti-corruption training.

### Handling Violations of Ethical Guidelines

A business ethics grievance hotline ((03) 597-6688 ext. 1211) and a grievance email (grievance@ardentec.com) have been established and also announced on the corporate website. Employee or external party may file a signed or

unsigned grievance or report on matters of violation to our code of business ethics, relevant laws and regulations, or organizational integrity. After receiving a grievance or report, the HR Division will initiate an investigation and report to the management. If the grievance or report is confirmed, for employees violating such codes will be punished according to the “Employee Reward and Punishment Regulations”, for suppliers violating such codes, we will cease all transactions with this supplier. If this also violates the law, the case will be referred to relevant authorities. Retaliation is strictly prohibited to whistleblower.

## 3.5 Internal Controls

To ensure the efficiency of business operations, reliability of financial reports and compliance with applicable laws and regulations, Ardentec has designed, implemented and maintained its internal control systems in accordance with "Regulations Governing Establishment of Internal Control Systems by Public Companies" promulgated by the Financial

Supervisory Commission(FSC). Competent and appropriate auditors are allocated in the audit office under the Board of Directors. The audit office drafts an annual audit plan in accordance with regulations which should be approved by the board of director in order to carry out the audit for each item and propose suggestions for improvement. All audit reports

are subject to the Chairman's acknowledgment as well as independent directors' and supervisors' review, before they are reported during board meetings. By conducting audits, the Internal Audit Office is able to assist the board and the management with their internal control and risk management.



## The highlights of the 2017 audit include

- ◆ Audit the annual audit items required by the FSC: It includes acquisition or disposition of assets, engagement of derivative transaction, loans to others, management of endorsement or assurance to others, supervision and management to the subsidiaries, management of meeting operation of the Board of Directors, information and communication security check, sales and receivable cycle, procurement and payment cycle, management of International Financial Reporting Standards (IFRS), accounting professional judgment procedure, accounting policies, procedure of projected change, and the management of the operation of the Compensation Committee.
- ◆ In addition to the annual audit items required by the FSC, part of the operating cycle and control activities are included in the annual audit items based on the result of risk assessments.

Supervise the internal units and subsidiaries to conduct self-check and review the self-check reports provided by each units and subsidiary in order to determine the effectiveness of the design and implementation of the internal control system.

## 3.6 Risk Management

Sound risk management, proper crisis management and constant attention to stakeholders' interests are the keys to ensuring business sustainability. The various risk management results are regularly reviewed by the general manager or management representatives, and the improvement plans are formulated to ensure the continuous improvement of the effectiveness of risk management.

### Operational Risks ISO 22301



## Risk Category

## Risk Management Strategies



## Operational Risks

For business continuity and emphasis on the rights and interests of stakeholders, and in order to ensure that the overall operation is free of any risks that may cause interruption, ISO 22301 Business Continuity Management System (BCMS) International Standard verification was approved in 2016, covering the Kaiyuan factory, Dingxing factory, Baoqing factory and Gaosheng factory.

The Business Continuity Policy and Business Continuity Management Handbook have been established. All employees must duly comply with business continuity related operation procedures and protect the Company in the event of operation disruption so as to safeguard key operational processes from the effects of major disasters, sabotage, or equipment failure. The Supply Chain Risk Assessment Guidelines are established to prevent supply chain disruption and reduce the risk of operational resources disruption.

Ardentec has established the Business Continuity Management Committee, complies with the business continuity operation, and performs regular business impact analysis (BIA), risk assessments (RA), disaster drills, and surveys of stakeholder issues of concern. Every year, the Committee conducts internal audits and management review meeting on the Company's business continuity management system, during which the system is monitored, measured, analyzed, and evaluated to ensure the effectiveness of the Business Continuity Management System. All employees must perform annual business continuity management training.

To continuously strengthen the management ability of business continuity risks, all supervisors implement daily management tasks, observing internal and external changes. When latent risks are likely to pose an impact on the Company, they must comply with the response measures and plans of the business continuity management system to reduce the probability of business disruption.

## Financial Risks

Focusing our efforts solely on the semiconductor testing business, and not engaging in any high-leverage or high-risk investments. Ardentec and its subsidiaries all implement a stringent approach towards financial and financial market management; we also control our operations and profit risks at all times, and further coordinate in devising strategies to accommodate changes in the industry economy and ultimately deliver stable semiconductor testing business performance and earnings.



## Safety Risks

The company has a set of Environmental Measurement/ Hazard Identification and Risk Assessment Procedure in place to identify the existence characteristics and risk level of causes that may possibly result in staff injuries, illnesses, loss of property, damages to the work environment, or the combination of any of the aforesaid latent risks, for the reference of continuous improvement decision for safety and health policy, goals and management plan.

Establishing Emergency Response Plans according to the Emergency Response Control Procedure, which provide response measures for typhoons, earthquakes, and other natural disasters. Each factory area has its own emergency response team in place and holds regular emergency response drills and fire evacuation drills to develop employees' responsiveness to emergencies and raise their safety awareness which ultimately reduces the risk of accidents during disasters.



## Legal and Intellectual Property Right Risks

The Company has established PIP Management Specification to ensure the protection and proper use of intellectual property rights in the technology industry. Monitoring changes in local and foreign policies, social and economic laws and regulations that affect the operational situation, or patents that are relevant to the Company's operations at all times. As of 2017, there were no violations of laws and regulations.




The Corporate Social Responsibility Committee identifies the compliance of various business-related laws and regulations on a quarterly basis according to the Law and Regulation Identification Procedure. Necessary adjustments are made to the internal systems and business activities in response to changes in laws and regulations to ensure the legality and lawfulness of the Company's operations.



## Information risks

Information is the lifeblood of the technology industry and customers. In order to achieve strict protection of information security, documents related to information security, including the Information Security Manual, have been developed. All employees must follow the information security regulations and requirements and implement the protection of information security matters to ensure the safety of customers and Company's information and facilities. All employees must attend information security education every year.

All system development and maintenance, data access, backup mechanism, virus and network intrusion have rigorous protection measures. The computer room is equipped with an automatic fire extinguishing system, uninterruptable power system, and video surveillance measures

Risk Category	Risk Management Strategies
	<p>The Information Security Committee has developed multiple information security protection mechanisms and conducts regular risk assessments. The Committee convenes a management review meeting every six months and continues to make improvements. The Company passed ISO 27001 standard verification in 2008. As of 2017, Ardentec headquarters Tingshin site, Kaiyung site, Gaosheng site data room, Paoching site data room, and Singapore subsidiary have all passed the Common Criteria verification. Under the robust protection of Ardentec's information security system and physical security system, there had been no incidents of leakage of commercial or personal information resulting in customer complaints as of 2017.</p>
	<p>There are human rights protection guidelines and specific types of fixed-term employment contract labor intermediary and management regulations to ensure that workers are under proper human rights protections. The Company also has a variety of reporting and complaint channels announced within the Company and on the official website. Any human rights related issues can be anonymously or onymously reported to ensure smooth channels for all human rights concerns to be promptly eliminated. Protective operation of the Human Resources Department to check the recruitment process of all labor recruited abroad; each year, the Human Resources Department audits domestic and foreign agencies to confirm that employees do not have any human rights risks in the recruitment process. As of 2017, there have been no violations of labor or human rights.</p>
	<p>Establishing a business ethics risk management procedure to identify potential risks in business ethics. Business activities identified as high risk are subject to appropriate control mechanisms to reduce risk.</p> <p>Each department conducts annual business ethical risk identification and assessment. According to the results of the 2017 annual assessment, the possibility of risk occurrence is extremely low, and the existing control measures can properly control risks, so there have been no violations of business ethics.</p>

## 3.7 Major Investment

In order to increase the service scope of the Wireless/RF Test and provide customers with a more complete test service blueprint, the Company obtained 100% of equity of Giga Solution Tech. Co., Ltd. on August 30, 2017. Giga Solution Tech. Co., Ltd. is a listed company on the Taiwan Stock Exchange. Its labor-management relations and employees' human rights are protected under Taiwan's Labor Standards Act and relevant regulations, and are in complete compliance with regulatory requirements.

In order to extend the leading position of Taiwan's

semiconductor supply chain, deepen cooperation with international semiconductor vendors and expand the global market, the Company's Board of Directors approved the resolution on October 13, 2016, to establish the wholly-owned Ardentec Nanjing Co., Ltd. in Nanjing, Jiangsu Province, China. The investment amount was 45,000,000 USD; this was approved by the Investment Commission, MOEA on November 30, 2016. The construction of Ardentec Nanjing Co., Ltd. started on April 21, 2017 and the beam-raising ceremony was completed

on August 21, 2017. The construction progress of each plant was implemented according to plan.

The main sources of funds for the above two investments were the Company's own funds and financing of financial institutions, so it had no significant impact on the financial aspects of the Company; the above two investments will be the cornerstone of the Company's continuous growth in the future and are expected to keep creating greater benefits for shareholders.







Photographer | Peter Yang

# ENVIRONMENTAL PROTECTION

- 4.1 Environmental Policy
  - 4.2 Environmental Protection Expenses and Investment
  - 4.3 Green Management System
  - 4.4 Disclosure of Environmental Information
  - 4.5 Greenhouse Gas Management
  - 4.6 Water Resource Management
  - 4.7 Waste Management
-



## 4.1 Environmental Policy

Ardentec is committed to energy saving, carbon reduction, maintenance of ecological environment, implementation of “environmental sustainable development” policies and practice the concept of environmental sustainable development.

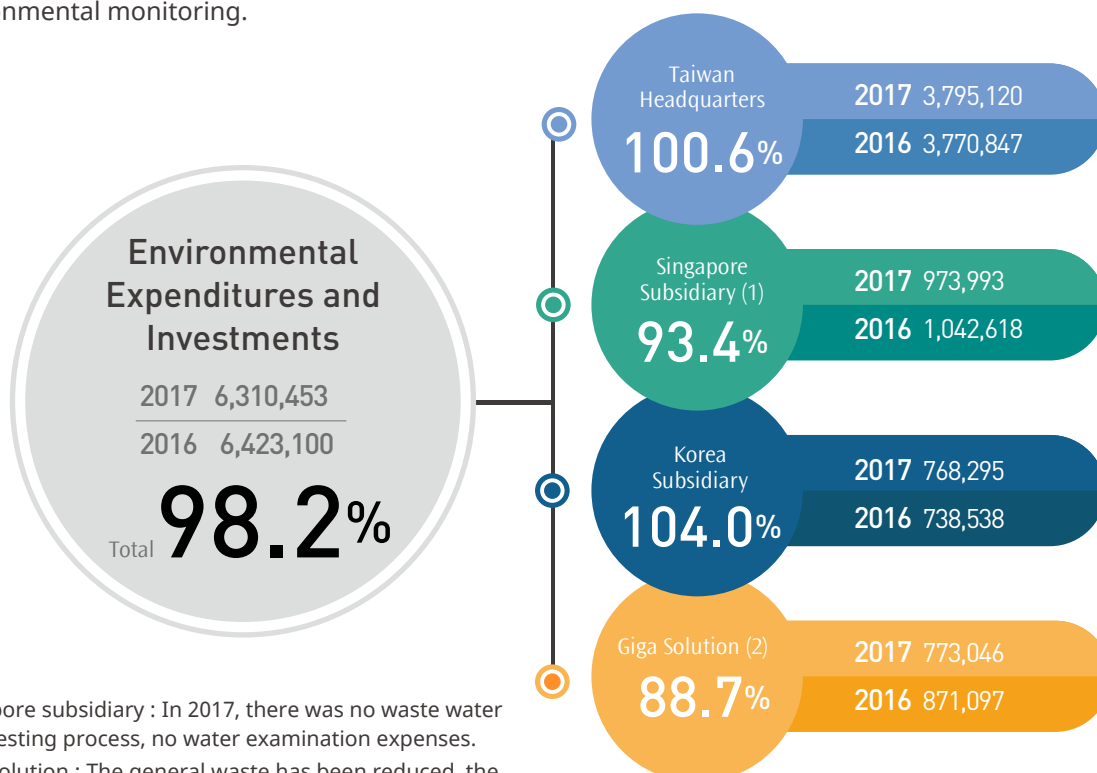
Regarding the purchase of each site or lease assessment, selection and business activity planning, our first consideration is to be away from the habitat and conservation areas with rich biodiversity. In addition, another important selection factor is to be as close as possible to the clients to achieve low-carbon and energy saving transportation. We do our best to minimize the transportation mileage and energy consumption of daily operation in order to reduce the impact on the environment. All dormitories are located within the walking distance of the site to reduce the carbon emission generated by vehicles.

### Environmental Sustainable Development Policy

Devoted to environmental protection through legal and international standard compliance. Promote energy saving and emissions reduction and sustainable use of resources. Continuously improve environmental performance and develop a sustainable environment.

## 4.2 Environmental Protection Expenses and Investment

The company's environmental protection expenses and investment primarily comprises the cost of environmental system standard audit, pollution prevention, and environmental monitoring. The cooperation units include third party verification units and units for recycling, professional waste removal, and environmental monitoring.



※ (1) Singapore subsidiary : In 2017, there was no waste water from testing process, no water examination expenses.

(2) Giga Solution : The general waste has been reduced, the waste handling charge also reduced.

※ Unit : NT dollars

## 4.3 Green Management System

With the exacerbation of global warming, energy crisis and climate change, the requirement of relevant environmental protection regulations will become stricter. The primary task of improving the impact of climate change is to reduce greenhouse gas emissions.

The main energy used by semiconductor testing is electricity. The gradual increase in energy and environmental protection costs caused by climate change is an inevitable trend.

### Environmental Management System

Ardentec follows the government's relevant environmental protection

regulations in its establishment of an integrated management system, introducing environmental protection personnel, formulating, promoting, and maintaining environmental management systems and action plans. Ardentec reviews the overall operational processes to perform greenhouse gas inventory and reduction, water resources inventory management and waste reduction/recycling and other improvement measures, to reduce and manage greenhouse gas emission from the source. In addition, Ardentec is committed to energy-saving projects, minimizing environmental consumption, optimizing cost

management, and reducing the impact of global warming to enhance our competitiveness and achieve environmental sustainability goals.

The Ardentec headquarters, Singapore subsidiary, Korea subsidiary, and Giga Solution Tech. Co., Ltd. have all been verified by the ISO14001 Environmental Management System.

In 2017, there were no incidents of major leakage or pollution related fines, lawsuits or environmental damage costs incurred by Ardentec headquarters, its Singapore subsidiary, Korea subsidiary, or Giga Solution Tech. Co., Ltd.

### ISO14001 Certificat



Headquarters



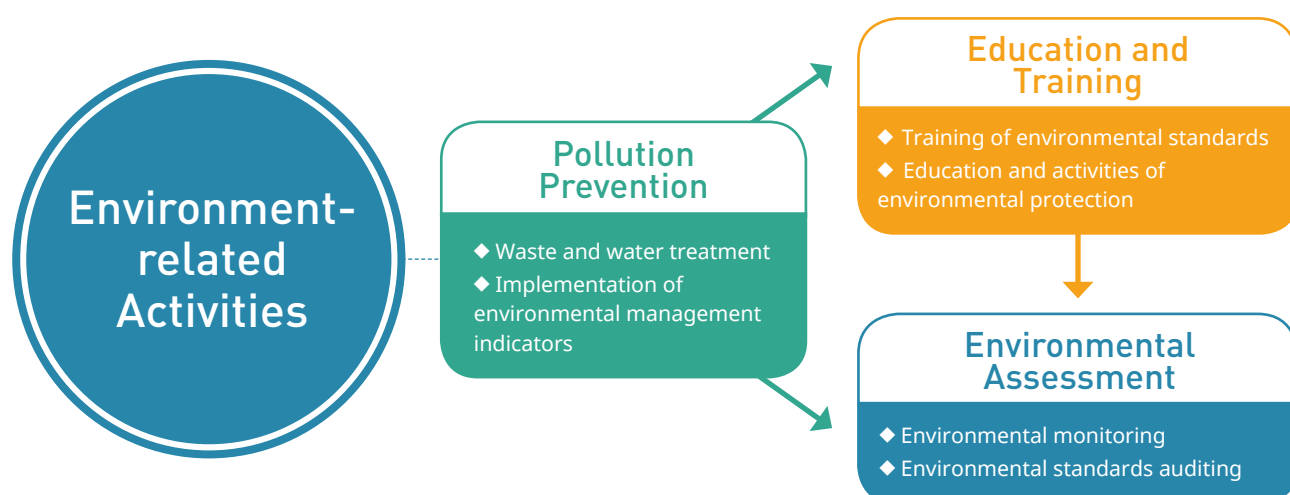
Singapore Subsidiary



Korea Subsidiary



Giga Solution Subsidiary



## Environmental Management Goals and Effectiveness

Semiconductor testing is positively correlated to the consumption of energy and water resources, waste generation and the amount of test equipment used. Ardentec establishes specific energy-saving and waste-saving projects and goals and

includes them in long-term improvement strategies. In that way it can achieve reduction and encourage external suppliers and contractors to achieve the goal of greenhouse gas reduction in the industry chain. In order to continuously improve the

performance of environmental management, we calculate the annual energy consumption per unit by the number of turned-on test machines and set our environmental management goal to a reduction of 1% each year.

## Management Effectiveness of Energy

		2016	2017	Reduce in 2017
Electricity	Taiwan Headquarters	118,394	117,576	0.69%
	Singapore Subsidiary	143,193	143,128	0.05%
	Korea Subsidiary	122,862	117,616	4.27%
	Giga Solution	87,873	87,423	0.51%

※ By average running testing equipment

※ Data has been adjusted for including Giga Solution in 2016.

## Management of Hazardous Substances




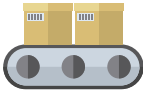




Ardentec has formulated a Non-Hazardous Substance Policy, regularly implementing internal audits to manage and review the Company's Non-Hazardous Substance Goal every six months. The four factories at the Taiwan headquarters have all incorporated the IECQ QC 080000 hazardous substance process

management system and passed the verification. All of their operational activities conform to international regulations such as the EU's Restriction of Hazardous Substances Directive (RoHS) and the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulations. Ardentec's services adhere to international laws and regulations and comply with customers' requirements for green products and management of hazardous substances.

## 4.4 Disclosure of Environmental Information

The main environmental resource consumed during Ardentec's business operation is the electricity for the testing machines that run 24 hours a day. This is followed by the water, electricity, oil, and refrigerant consumed, and the small amount of waste produced, during site operations, cooling, transportation and personnel activities.

### Operations and Related Consumption of Environmental Resources/Energy

Use			Operational activities	Emission/Discharge		
 Energy	2016	2017		 GHG inventory MTCO <sub>2</sub> e	2016	2017
1 Diesel <div>Million Joule</div>	406,618	266,215		Direct emission	420	495
2 Electricity <div>Million Joule</div>	469,794,859	545,593,666		5 Indirect emission	61,427	65,105
Electricity intensity <div>Million Joule / Revenue million NT\$</div>	75,042	69,414		Total	61,847	65,600
※ Heating value refer to Energy Statistics Manual of 2016, ROC						
 Water (MT)	2016	2017		 Waste Water (MT)	2016	2017
3 Water use	278,686	297,468		6 Waste Wate	111,938	113,063
 Packing materials (Kg)	2016	2017		 Waste (MT)	2016	2017
Carton <div>recyclable</div>	210,868	202,335		7 General industrial waste	196	160
Cushioning material <div>recyclable</div>	56,353	14,728		8 Hazardous Industrial Waste	4	5
Foil bags <div>recyclable</div>	30,857	31,546				
Recycle and reuse%	89.6%	87.3%				

#### Notes

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1 Generator is for annual maintenance, routine operation testing or power outage use</li> <li>2 Electricity for testing and office, 2017 includes Giga Solution</li> <li>3 Air conditioning water and general domestic water</li> <li>4 GHG inventory include Ardentec headquarters and Singapore subsidiary</li> </ul> | <ul style="list-style-type: none"> <li>5 Indirect emissions from externally purchased</li> <li>6 Wasterwater of cooling towers of air conditioning/ general domestic water and process wastewater</li> <li>7 Packing materials, confidential documents, garbage, sludge, etc</li> <li>8 Customer's scrap IC or wafers, probe card cleaning solutions, etc.</li> </ul> |
|--|---|

## 4.5 Greenhouse Gas Management

GHGs are categorized into three categories of emission, as shown in the table below

Scope	Inventory item	Coverage	Source of emission	
I	Direct Emission	Production process emissions, emergency and move emissions sources, including CO2, CH4, N2O, HFCS and PFCS	Emission of GHG while generating electricity, heat, steam, or during combustion of fossil fuel.	Diesel (gasoline) used in emergency generators
			GHG emitted from transportations that the Company has control over.	Diesel (gasoline) used in trucks and company vehicles
			Fugitive emissions.	Methane gas from the septic system, refrigerant used in the air-conditioning system, carbon dioxide used in fire extinguishers, and SF6 used by electric switches
			GHG emissions from biological, physical or chemical processes.	Chemical reactions
II	Indirect Emission	From externally purchased electricity, including CO2, CH4, N2O	Emission of GHG from purchased supply of electricity, heat, steam, or outsourced combustion of fossil fuel.	Purchased electricity
III	Other indirect Emission	Other emission not belonging to self-owned or self-controllable	Emission from other organization owned or controllable, such as emission from vendors	Vehicles used by contractors or for employees' commuting and travel, fuels used in outsourced employee cafeteria, outsourced wastewater treatment, outsourced waste disposal, etc.

The types of GHG have been classified given Ardentec's business characteristics; it does not represent that Ardentec is an emitter of all GHG types.

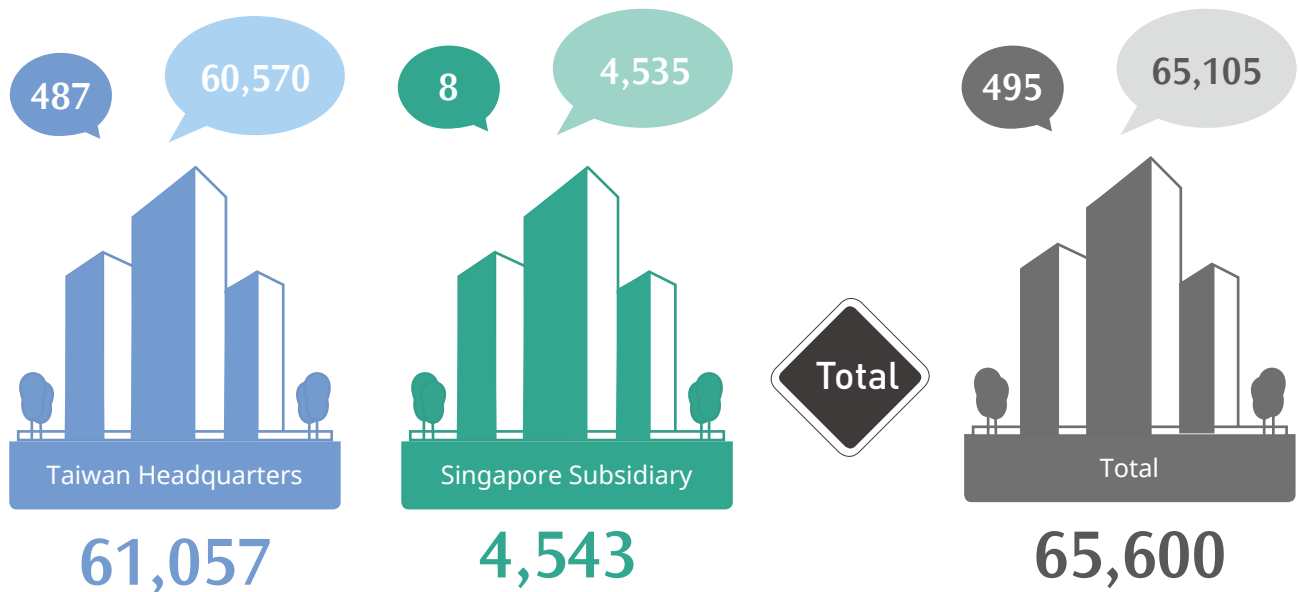
### GHG Inventory

Electricity and cargo transportation is the main type of energy used by Ardentec. Taiwan headquarters and Singapore subsidiary have adopted ISO 14064-1 standards. The GHG emission inventory is based on

the annual period of January 1 to December 31. According to the inventory result, emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O were mostly indirect emissions from electricity for testing machines that run 24 hours a day. HFCs from air-

conditioning refrigerants were the second largest group of GHGs emitted, followed by minor amount of PFCs (CF<sub>4</sub>) emitted when testing equipment is used.

## 2017 GHG Emissions



1. Scope I and Scope II emission include CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC<sup>5</sup>, PFC<sup>5</sup>
2. There is no SF<sub>6</sub> and NF<sub>3</sub> emission during the business operation. A small amount of R123, R22, HCFC-141b and HCFC-124 controlled by the Montreal Protocol was emitted in 2017.
3. Discharge coefficient is refer to Bureau of Energy announced 2016 power Discharge coefficient of 0.529 KgCO<sub>2</sub><sup>e</sup>/Kwt, GWP value adopted the coefficient of IPCC announced 4th evaluation report in 2007.
4. The statistic of greenhouse gas adapted by operation control.

■ ■ ■ Scope I  
■ ■ ■ Scope II  
 ※ Unit : MT CO<sub>2</sub>e

The results of GHG inventory provides insight into the influence and impact of the Company's business activities on the environment, and serve as a reference base for developing continual carbon reduction action plans and goals.

## 2017 ISO 14064 GHG Emission Opinion Statement

**bsi.**  
Opinion Statement

**Greenhouse Gas Emissions**  
Verification Opinion Statement

This is to verify that: **Andaerit Corporation**  
Rm. 3, Gungye 3rd Rd,  
Hsinchu Industrial Park,  
Hsinchu  
Taiwan

Issue Statement No: **GHGEV 1342**

**Verification opinion statement**  
As a result of carrying out verification procedures in accordance with ISO 14064-3:2006, it is the opinion of BSI with reasonable assurance that:

- The Greenhouse Gas Emissions with the Andaerit Corporation for the period from 2017-01-01 to 2017-12-31 is 61,057.33 tonnes of CO<sub>2</sub> equivalent, including Scope 1 emissions 487.33 tonnes of CO<sub>2</sub> equivalent and Scope 2 emissions 60,570 tonnes of CO<sub>2</sub> equivalent.
- No material misstatements in the period from 2017-01-01 to 2017-12-31 Greenhouse Gas Emissions calculation were revealed.
- Data quality was considered acceptable in meeting the principles as set out in ISO/IEC 14064-1:2006.
- The emission factor for electricity for the year 2017 was published by Taiwan government so far, the emission factor used for electricity is 0.529 kilograms of Carbon Dioxide equivalent per kWh issued which may potentially result in different Greenhouse Gas Emissions estimates.
- The detailed Greenhouse Gas Emissions for the year 2017 of each sub location are described as follows:

For and on behalf of BSI: *[Signature]*  
Managing Director BSI Taiwan, Peter Pi

Originally issued: 2018-03-30  
Latest issue: 2018-03-30  
Page: 1 of 2

**making excellence a habit.**

**bsi.**  
Certificate of Registration

**CARBON FOOTPRINT VERIFICATION**  
VERIFICATION OPINION STATEMENT

This is to certify that: **Andaerit Singapore Pte Ltd**  
12, Woodlands Link,  
#01-04, #02-01, #03-01,  
Singapore 738083

Issue Statement No: **GHGEV 68518**

**Verification opinion statement**  
As a result of verification procedures, it is the opinion of BSI with reasonable assurance that:

- The Greenhouse Gas Emissions for Andaerit Singapore Pte Ltd at the period from 01/01/2017 to 31/12/2017 is 4,543.33 tonnes of CO<sub>2</sub> equivalent.
- Main operational activities carried out in the defined organisational boundary includes Provision of semi-conductor Test Services and Backend Services.
- No material misstatements in the selected base year Greenhouse Gas Emissions calculation were revealed.

Data quality was considered acceptable in meeting the principles as set out in ISO 14064-1:2012.

For and on behalf of BSI: *[Signature]*  
Evelyn Ng, Technical Manager

Originally registered: 11/05/2018  
Effective Date: 11/05/2018  
Latest issue: 11/05/2018

**making excellence a habit.**

Headquarters

Singapore Subsidiary



## Reduction of Greenhouse Gases (GHGs)

Although wafer testing is not a high electricity-consuming business in the semiconductor industry, we persistently search for every opportunity to save energy in our business activities, given that every little bit helps. We aggressive promote energy

saving and electricity saving at every site. The CSR Committee assigns the Facility Department which manages all powered equipment and provides resources including water, electricity, and compression air to form a cross-site energy

saving team by integrating with the quality control circle (QCC) concept. With strategic and integrated management, we aim to optimize and minimize the energy consumption of infrastructures.

## 2017 Energy Conservation Projects

Energy conservation is Ardentec's direction and goal in adapting to climate change. Ardentec and energy technology professional BenQ ESCO Corporation have cooperated to develop two energy conservation projects for factory and non-factory areas since March 2017.

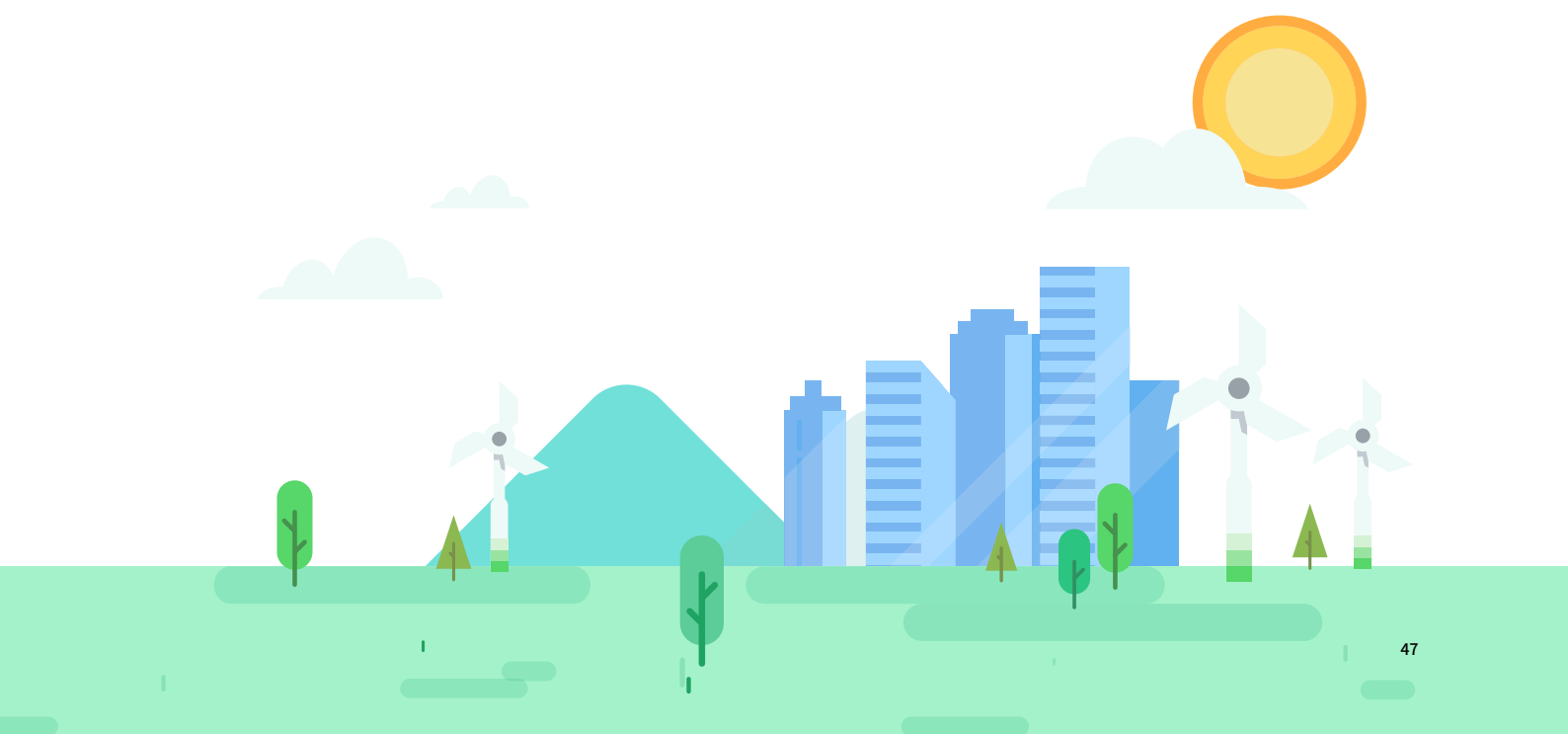
**Factory area:** The AC power supply of the FFU (fan filter unit) system driving fan motor of the clean room production area has been replaced with DC power supply.

**Non-factory area :** Including office area and public area: High-power consumption traditional lighting has been completely replaced by low-power consumption LED lighting.

The above two projects have achieved remarkable results in energy conservation. The average energy saving rate after improvement is about 53%. It has exceeded the basic threshold of the 30% energy savings rate in the Y2017 Energy Saving Efficiency Guarantee Project

Demonstration and Promotion Grant Project of the Bureau of Energy, MOEA. Therefore, Ardentec passed performance verification of the Bureau of Energy in November 2017 and obtained the NT\$15 million grant offered by the Bureau of Energy, the highest offered.

This energy-savings project saves the company NT\$6.5 million in electricity each year, which is an approximate reduction of 1,328 metric tons of carbon emissions per year.



## The Promotion of 2017 Energy Conservation Projects and Effectiveness

Factory area	Energy conservation projects	Project description	Electricity savings (kWh) <sup>(1)</sup>	Electricity savings Megajoule (MJ) <sup>(2)</sup>	CO <sup>2</sup> emissions reduction (metric tons)	Electricity savings(NT\$)
Headquarters	2017 Energy Conservation Projects	Non-factory areas use low-power consumption LEDs in place of high-power consumption traditional lighting The AC power supply of the fan filter unit driving fan motor in the factory area has been replaced with a DC power supply.	2,510,044	9,036,058	1,328	5,798,201
	UPS energy saver	Changing to high efficiency UPS	16,146	58,125	9	37,297
	Optimizing vacuumizer operation	Arranging the more efficient vacuumizer as the main machine, and the less efficient one as the auxiliary machine	39,160	140,974	21	90,460
Korea Subsidiary	Energy savings from air conditioning in the UPS battery room	Automatically turning off the air conditioner when the temperature is lower than 25 degrees	52,488	188,955	24	154,415
Total			2,617,838	9,424,112	1,382	6,080,373

※(1) The energy savings of various energy conservation projects are estimates

※(2) Referencing the 2016 Energy Statistics Handbook of Republic of China for heating value data

In 2017, Taiwan Headquarters and Korea Subsidiary saved a total of 2,617,838 kWh of electricity, reducing GHG emissions at 1,382 ton of CO<sup>2</sup>e.

### Calculation Basis

	Unit	Headquarters	Korea Subsidiary
Conversion rate per kWh Announced by		Ministry of Economic Affairs	South Korean Ministry of Environment
Power unit	kWh	kWh	kWh
CO <sup>2</sup> emission	kgCO <sub>2</sub> e	1kW · hour x 0.529	1kW · hour x 0.4653
Price/kWh		NT\$ 2.31	KRW 111

There is a consensus among all Ardentec employees to save energy by changing work habit to drastic reduce the carbon footprint of their lifestyles

## Simplification of Lighting and Air-conditioning

Partitioning and time interval control and management of air conditioning and lighting, for example: concentrating the night and holiday on-duty personnels' work areas to reduce the lighting and air conditioning energy consumption area; encouraging employees to turn off the area lighting and air conditioning when leaving the office in accordance with the control chart to conserve energy. Corridors with natural lighting have been equipped with light sensors so that lighting will be turned off automatically when there is sufficient light in the area; corridors people seldom visit have built-in infrared sensors. Only when people pass through the area will the lighting turn on. This minimizes unnecessary energy consumption.

## Saving energy on Management Information System

Energy-saving measures are taken for all information management devices. When computers are not in use, screens are shut down, dimmed and set to go into sleep mode under pre-configured circumstances to reduce energy consumption and CO<sup>2</sup> emission.

## Mitigating Global Warming

### "Meat-free Monday"

2017 is the 10th year of Meat-free Monday. Through a meat-free day a week, all employees have reduced the carbon footprint of food from their plates. With a reduction of 10% livestock products from the daily diet, we not only reduce the livestock's harm to the global warming but also give our employee a chance to practice the healthy, low-

carbon and green lifestyle.

### Forest Protection: Use of Unbleached Recycled Paper

In an attempt to preserve our forest, Ardentec has adopted the practice of using only "unbleached, reprocessed toilet paper and paper towel". By reusing our resources, we can reserve our forest as habitat for a great number of species, and in the meantime reduce the impact of garbage processing on the environment. Furthermore, without the bleaching process, there would be lesser pollution to the air and water. In 2017, we consumed a total of 70,000 recycled toilet rolls and 25,000 packs of paper towels, reducing GHG emissions at a total of 8 ton of CO<sub>2</sub>e.

Carbon emissions reference: Cheng Loong Corp. (original paper: Mayflower; recycled paper: Dandelion)



## 4.6 Water Resource Management

### Use of Water Resources

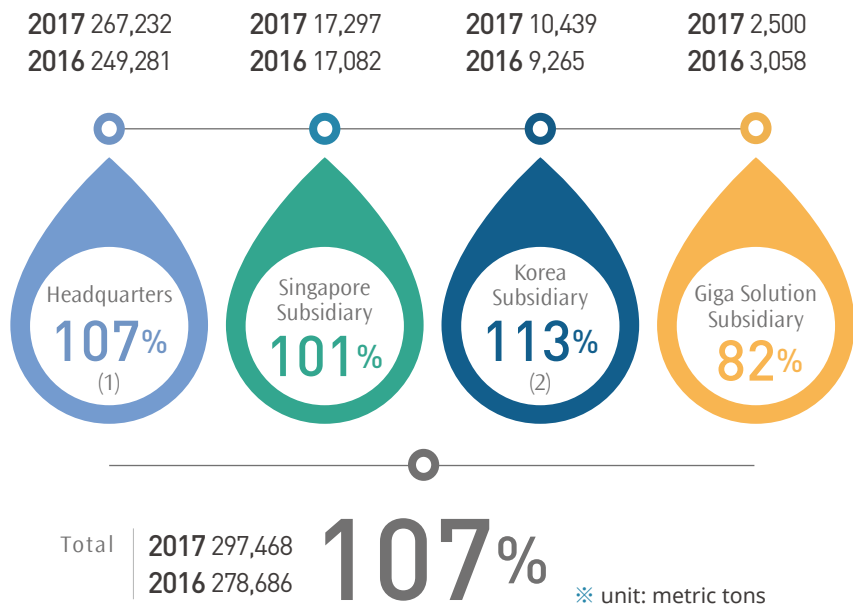
The bulk of Ardentec's water usage was for air conditioner cooling in its 24-hour testing fabs. Other water usages include general and fire safety purposes. In 2017, Ardentec used 297,468 metric tons of water, in total.

### Water Conservation Results

Even though it uses a relatively small amount of water, Ardentec is committed to "reduce, recycle and reuse" water resources while continuously introducing new water-saving facilities and management practices. The air conditioning condensation water and the RO discharge from the manufacturing process have been reused as cooling water for the air conditioning, which maximizes the recycling and reuse rate of water resources, thereby reducing the depletion of water resources. The cost saved from water conservation will be transferred to environmental education related to water resources, to promote positive feedback loops in the green management system.

In 2017, a total of 14,545 metric tons of water were recycled from the Headquarters and Singapore subsidiary, and the amount recycled accounted for 5.1% of the water consumed.

### Water Resources Consumption in 2016 and 2017



※(1) Headquarters : Increased by 7%, primarily due to the increase in the amount of water used for air conditioner cooling in Paoching Site expansion of production space and equipment.

※(2) Korea Site: Increased by 12% primarily due to the increase 18% of employees.

#### ※ Water sources

Headquarters – Before June of 2017 was from Baoshan No. 2 Reservoir in Hsinchu, Shimen Reservoir was the source from July 2017.

Singapore Site - Source of industrial water is reclaimed water treated by government-approved procedures; source of domestic water is rainwater and desalinated sea water

Korea Site - Jinwi River and Lake Paldang

Giga Solution - Baoshan No. 2 Reservoir

These water sources are points of extraction approved by the government for business purposes, and hence there were no concerns regarding negative impact on the environment or living organisms.



## 4.7 Waste Management

### Management Principles

Ardentec headquarters and all operating subsidiaries have closely controlled waste or sewage treatment, ensuring that there is no environmental pollution, outflow to habitats, or impact to ecology or diversity of any species.

Ardentec's operation waste can be divided into general industrial waste and hazardous industrial waste. The waste has been centralized, stored, and managed to effectively control the output

of waste sources. The waste has been classified as appropriate, and the waste that cannot be recycled is entrusted to be treated by professional, qualified waste organizations according to the best treatment technology corresponding to the waste characteristics. The Company conducts non-periodical follow up to ensure that the waste is properly disposed of, and the hazardous industrial waste is not transported to be treated abroad.

In 2017, Ardentec removed a total of 160 metric tons of general industrial waste. About 5 metric tons of hazardous industrial waste from Ardentec headquarters and Giga Solution. The Singapore subsidiary and the Korea subsidiary do not produce hazardous industrial waste. The general industrial waste of Ardentec's headquarters decreased by 21% in 2017 as compared to 2016.

### Waste Items and Treatment

Category	Type	2016				Cause of waste	Treatment
		Headquarters	Singapore Subsidiary	Korea Subsidiary	Giga Solution		
General industrial waste	Mixture of waste plastic	28	0	1	0	Packing materials	Incineration
	Mixture of waste paper	11	0	1	0	Shredded confidential documents	
	Daily living waste	86	3	4	4	General garbage	
	Sludge	59	0	0	0	Wastewater(1)	Physics treatment
Hazardous industrial waste	Waste electronic components, offal products, defective product	0	0	0	0	Scrapped IC/ Wafer (2)	Chemical treatment
	Waste liquid	4	0	0	0	Alkaline solution from probe card rinsing	Chemical treatment

※(1) Sludge produced by the treatment of wastewater from the WLCSP process.

※(2) Requested by customer to scrap their product; not generated scrapped IC/wafer from Ardentec/Giga Solution service process.

## Waste Items and Treatment

Category	Type	2017				Cause of waste	Treatment
		Headquarters	Singapore Subsidiary	Korea Subsidiary	Giga Solution		
General industrial waste	Mixture of waste plastic	36	0	1	0	Packing materials	Incineration
	Mixture of waste paper	0	0	1	0	Shredded confidential documents	
	Daily living waste	83	3	5	4	General garbage	
	Sludge	27	0	0	0	Wastewater (1)	Physics treatment
Hazardous industrial waste	Waste electronic components, offal products, defective product	1	0	0	1	Scrapped IC/ Wafer (2)	Chemical treatment
	Waste liquid	3	0	0	0	Alkaline solution from probe card rinsing	Chemical treatment

※(1) Sludge produced by the treatment of wastewater from the WLCSP process.

※(2) Requested by customer to scrap their product; not generated scrapped IC/wafer from Ardentec/Giga Solution service process.

## Waste Reduction Initiatives

### Reuse and Reduction of Packaging Materials

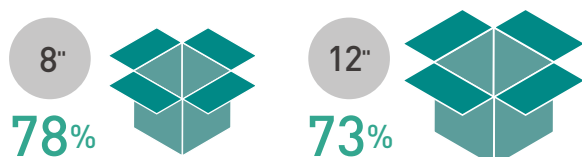
Ardentec rigorously encourages upstream and downstream vendors to reduce waste by enhancing the recycling and reuse rates of their various packaging materials. Except for specific products of the customers that are not suitable for packaging material re-

use, Ardentec cooperates with customers to re-use packaging materials of shipments to Ardentec for Ardentec's future shipments back to the customers. For example, the special wafer pods are professionally cleaned and re-used for shipments, and the cardboard boxes are reused;

from July to December of 2017, a total of 12 metric tons of aluminum foil bags shipped by the customers were recycled by professional vendors to make re-used plastic material resources. Reuse of packaging materials includes the second time or more reuses.

### Reuse Resources

#### Cartone



#### Wafer cassettes



※ Including two or more reuses



## Resources Recycled and Reused

※ Unit : kg

Waste Resource	Item	Method of reuse	2016			
			Headquarters	Singapore Subsidiary	Korea Subsidiary	Giga Solution
Paper	Cartons and documents	Paper raw materials	38,240	155	385	81,475
Cassette	Scrapped wafer cassettes	Plastic raw materials	16,007	81	0	2
PVC	PVC gloves	PVC raw materials	3,545	62	145	2,332
Plastic	Plastic bags, bubble wraps, and other plastic	Reused by the recycling agent	1,243	67	0	0
Mixed metal		Recycling agent to extract precious metals or for other purposes	0	91	285	470
Iron	Engineering waste, scrapped equipment...	Recycling agent to extract other metals	3,165	28	165	59

※ Unit : NT\$

Others	Scrapped PC, monitors, lamps, batteries...	Reused by the recycling agen	4,085	312	0	0
--------	--	------------------------------	-------	-----	---	---



## Resources Recycled and Reused

※ Unit : kg

Waste Resource	Item	Method of reuse	2017			
			Headquarters	Singapore Subsidiary	Korea Subsidiary	Giga Solution
Paper	Cartons and documents	Paper raw materials	39,995	161	600	59,260
Cassette	Scrapped wafer cassettes	Plastic raw materials	5,734	74	0	0
PVC	PVC gloves	PVC raw materials	12,917	59	255	2,320
Plastic	Plastic bags, bubble wraps, and other plastic	Reused by the recycling agent	235	64	0	0
Mixed metal		Recycling agent to extract precious metals or for other purposes	0	87	275	1,390
Iron	Engineering waste, scrapped equipment...	Recycling agent to extract other metals	46,665	31	130	241

※ Unit : NT\$

Others	Scrapped PC, monitors, lamps, batteries...	Reused by the recycling agen	32,380	304	13	0
--------	--	------------------------------	--------	-----	----	---

## Refuse to Use of Disposable Dining Utensils

Most of the disposable dining utensils are made from fossil materials that produce high amounts of carbon when incinerated. 75% of disposable chopsticks contain bleach, sulfur dioxide, hydrogen peroxide and a number of chemical substances that are harmful to our health. As Ardentec believes in the idea that "health comes to those who are friendly to the environment". It had saved nearly 336,000 meal's worth of disposable dining utensils in headquarters in 2017, and reduce the amount of carbon they emit and the level of pollution they could have done to the environment.

## Waste or Polluted Water Discharge

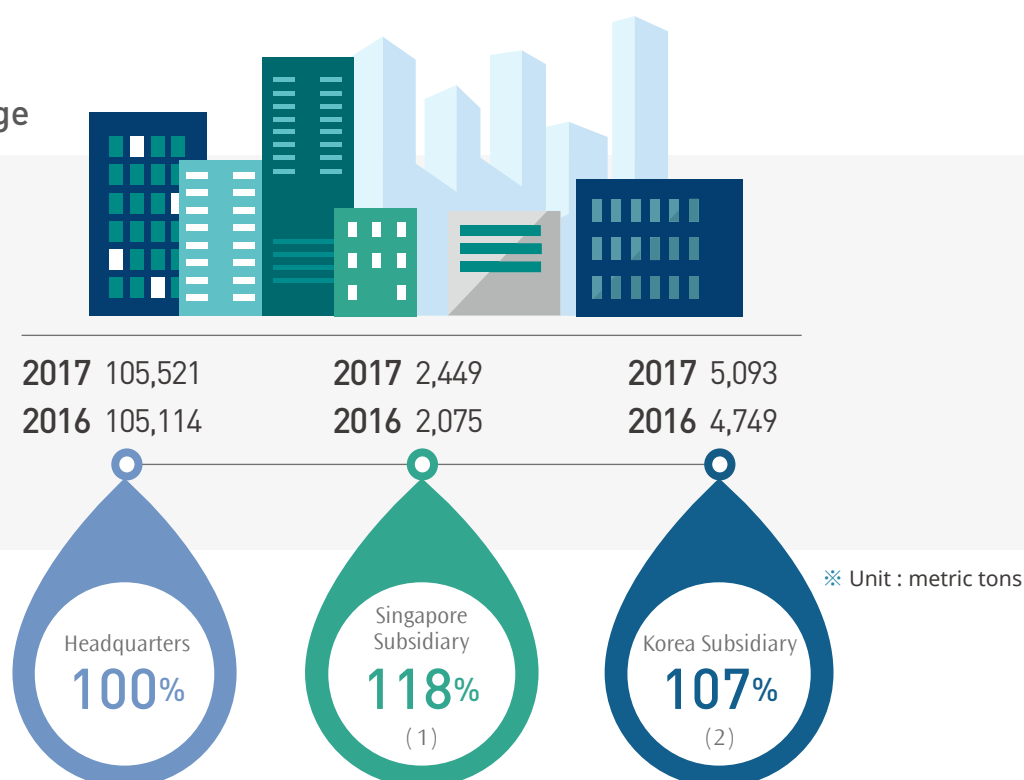
The polluted water is mainly discharged from the wastewater of the cooling water tank operated for the plant's air-conditioning and general domestic water. The Ardentec headquarters has monitoring facilities in place to manage and control the polluted water to be in compliance with the discharge standards of waste (sewage) water in the sewers of Hsinchu Industrial Park before discharging, ensuring that wastewater reaches the PH, COD and SS discharge

standards of waste (sewage) water in the sewers of Hsinchu Industrial Park. This ensures that subsequent treatment of water quality reaches the standards for discharge into streams. As a result, the water discharge of Ardentec headquarters does not influence or impact the biodiversity or habitat in regions near the Xinfeng River and on areas of high biodiversity outside of protected areas.

Giga Solution subsidiary is located in the Hsinchu Science Park, and the polluted water is discharged

according to the system of the Science Park Bureau. Regarding overseas businesses, wastewater is discharged through wastewater treatment plants after reaching the wastewater (sewage) treatment standard of the industrial park. Industrial wastewater at the Singapore subsidiary is discharged to the government's NEWater Plant, and domestic wastewater is discharged to the sea after being treated; Korea subsidiary discharges its wastewater to Hwanggugicheon River.

### 2016 and 2017 Sewage Discharge



※(1) Singapore Subsidiary: In 2017, the ordinary water used as cooling water for air conditioners was replaced with recycled water. The proportion of sewage produced was higher due to the conductivity of recycled water.

※(2) Korea Subsidiary: 18% increase in the number of employees, resulting in an increase in domestic wastewater.

※(3) Giga Solution Tech. Co., Ltd. is a rental factory shared with the landlord. The sewage is processed by the landlord's system and cannot be calculated separately.



Photographer | Ming-Chi Hung

# EMPLOYEES AS PARTNERS

5.1 Employee Partnership Policy

5.2 Right People for Right Job

5.3 Compensation and Benefits

5.4 Career Growth

5.5 Workplace Health and Safety

5.6 Labor-Management Harmony

5.7 Workforce Structure

---

## 5.1 Employee Partnership Policy

By viewing employees as partners of the company, Ardentec has developed an employee partnership policy that is centered on 4 core values: "Right People for the Right Job," "Reasonable Compensation and Benefits," "Career Development," and "Workplace Health and Safety." Through empathy and trust, we strive to grow with our partners. We hope that employees not only enjoy their work, but also the time they have with their families. Moreover, we long to see Ardentec employees become the core of the company's competitiveness in the global semiconductors industry, working alongside the company for a brighter future.

### Employee Partnership Policy



## 5.2 Right People for Right Job

Ardentec evaluates the professional skills of job applicants with discreet standards and a systemic assessment process. Moreover, we look for hard-working professionals who have similar beliefs and are willing to grow with Ardentec. Ardentec is committed to creating more opportunities to take care of more families. We comply with local employment regulations in every place we do business. We

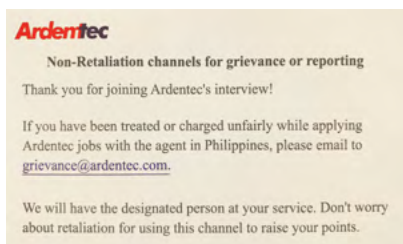
recruit employees under of the principles of equal opportunity and recruiting the right people for the right job. We give priority to hiring local talent. When it no longer responds sufficiently to the production workforce requirements, Ardentec then files an application with the Ministry of Labor to hire foreign workers in manners compliant with laws, so that it can add to the workforce required for

operational growth, grow its business, and create more jobs for the local population. Ardentec rigorously chooses recruitment agencies with excellent human rights protection records to cooperate in admitting foreign labor. Complying with the RBA CoC, for any foreign workers who have been admitted by Ardentec since 2016, all the expenses, plane tickets, and health check fees required by the laws incurred



during the interview process or the hiring and employment process after assuming the post must all be borne by Ardentec. The workers just need to carry their luggages and enjoy their jobs at Ardentec.

When hiring foreign workers, the company does not discriminate against potential candidates based on race, skin color, age, gender, ethnicity or nationality, disability, pregnancy, religion, political affiliation, or marital status. During each overseas recruitment, Ardentec's human rights policy and non-discrimination policy will be announced to all candidates, and they will be given a small complaint channel card to provide the candidates with a channel to lodge complaints about any violation of the Ardentec policies.



Small complaint channel card to provide the candidates with a channel to lodge complaints about any violation of the Ardentec policies.

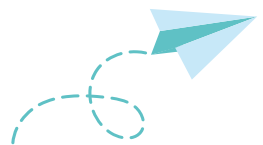
Ardentec prohibits the hiring of child labor aged below 16. It has a due diligence process in place that verifies the age of any employee it hires and ensures compliance with labor regulations

local to the place of business. Ardentec's headquarters and subsidiaries in various countries all adopt the policy of hiring local workers as the first priority. Ardentec treats every employee fairly and equally; employees have the same opportunities for recruitment, rewards and promotions regardless of their race, religion, or gender. 100% of the management of Ardentec headquarters, its Singapore subsidiary, and Giga Solution Tech. Co., Ltd. are recruited locally; except for the two senior executives assigned by the headquarters, 60% of the Korea subsidiary employees are recruited locally. The Nanjing subsidiary was in plant construction stage in 2017, and the operation has not yet started. The plant construction stage is to set up the operation system of the headquarters. Seven senior executives (100%) are assigned by the headquarters to establish the plant and operation system of the Ardentec system.

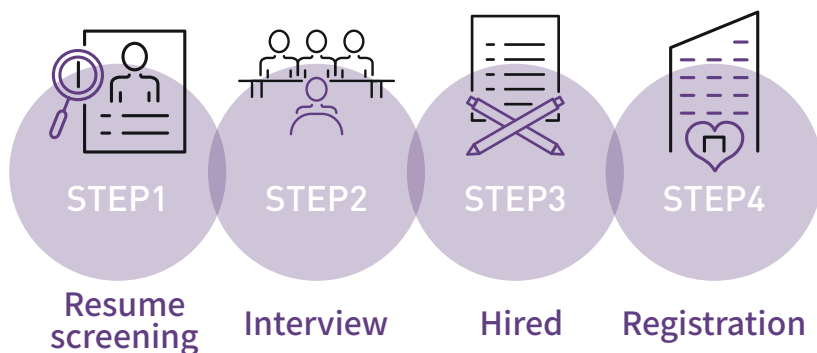
All employment contracts are established with the consensual agreement between the employer and the employee. As required by law, any changes to the terms of employment would need to be consented by the employee. Ardentec sources talent through supportive and protective

workforce agencies. It takes into consideration the suitability of disabled persons to create job opportunities for them, and thereby increases the chances for the socially disadvantaged to work at the Company. In addition to making changes to the nature of work and the working environment, the Company also provides disabled employees with full training so that they can realize their best potentials on their own, and improve their quality of life while contributing towards the development of society.

Meanwhile, the company also requires its suppliers to avoid unfair treatments and eliminate any form of forced labor. It is imperative for labors to perform work out of their own free will. This initiative ensures that Ardentec's CSR extends to other ends of the supply chain.



## Hiring Process



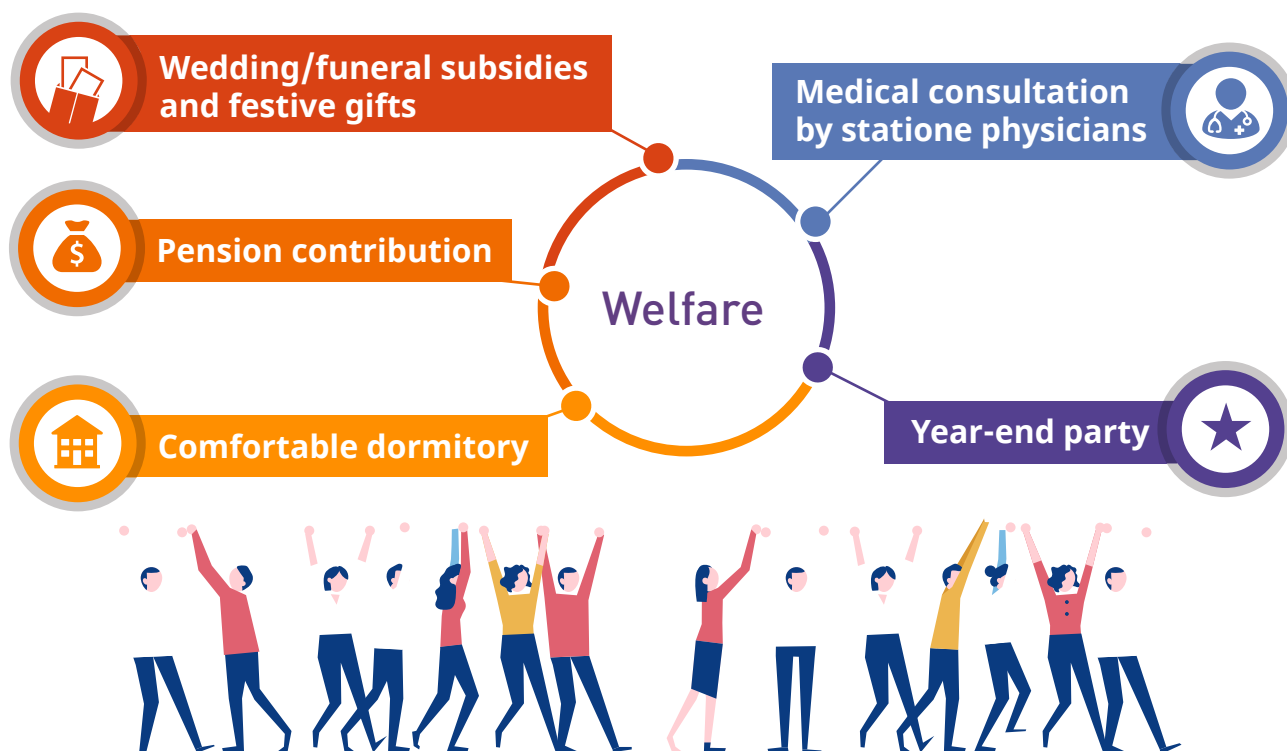
## 5.3 Compensation and Benefits

Ardentec employees' salaries are set at a highly competitive level within the given industry. Review of salary is in no way connected to employees' gender, and while doing so the Company ensures full compliance with labor regulations local to its places of business. Market salary level, industry pay level and the Company's operating performance are regularly assessed. Performance evaluation

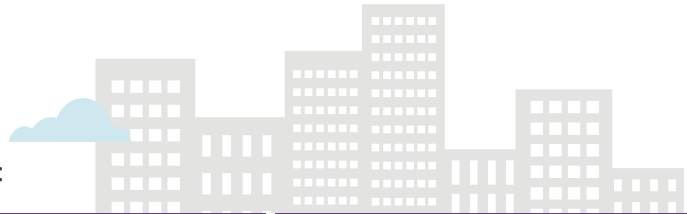
and salary adjustment are carried out in the first quarter of each year based on the contribution, performance and responsibilities of previous year. Gender, race, religion or marriage status does not make a difference. Our salary policy ensures that the Company's talent maintains a high degree of competitiveness in the regional job market. In 2017, the Taiwan headquarters and subsidiaries spent a total of

NTD 1,939,756,000 on employees' salary, welfare and training.

The Articles of Incorporation states that employees are entitled to share the Company's earnings when the Company is profitable on governmental accounting base. This system is consistent with Ardentec's view that employees are its closest business partners. The 2017 surplus of Taiwan Headquarters allocable to the employee is NT\$214,891,367.







Besides, there are also various welfare measures:

Headquarters	Singapore Subsidiary	Korea Subsidiary
<ul style="list-style-type: none"> <li>◆ Profit sharing</li> <li>◆ Health insurance, labor insurance,</li> <li>◆ Group medical insurance, life insurance, and travel insurance</li> <li>◆ Regular health exam</li> <li>◆ Long-term service trophy and bonus</li> <li>◆ Production/ operation bonus</li> <li>◆ Free night meal</li> <li>◆ Lunch and dinner subsidies</li> <li>◆ Annual employee travel</li> <li>◆ Multi-functional health center</li> </ul>	<ul style="list-style-type: none"> <li>◆ Group medical insurance, life insurance, and travel insurance</li> <li>◆ Vision and dental allowances</li> <li>◆ Long-term service trophy and bonus</li> <li>◆ Production/ operation bonus</li> <li>◆ Free night meal</li> <li>◆ Zero MO birthday leave</li> <li>◆ Commute shuttle service</li> <li>◆ Welcome luncheon and weekly tea party</li> <li>◆ Vacuum bottle</li> </ul>	<ul style="list-style-type: none"> <li>◆ Health insurance, labor insurance,</li> <li>◆ Vision and dental allowances</li> <li>◆ Free night meal</li> <li>◆ Free 3 meals a day</li> <li>◆ Commute shuttle service</li> </ul>
		Giga Solution
		<ul style="list-style-type: none"> <li>◆ Profit sharing</li> <li>◆ Health insurance, labor insurance,</li> <li>◆ Regular health exam</li> <li>◆ Long-term service trophy and bonus</li> <li>◆ Annual employee travel</li> </ul>

## Pension Compensation

The Headquarters and Giga Solution subsidiary transfers the pension contribution to the employees' personal bank accounts every month in accordance with the new retirement policy. Pension contribution following the old retirement contribution is also deposited to the specific accounts every month in accordance with the law. Every year, the Company hires actuaries to calculate the rate of employees' pension contributions, in order to ensure that monies provided to the defined benefit account held with Bank of Taiwan and amounts budgeted for pension contributions do suffice to guarantee employees' lifestyles after retirement. A

Pension Supervisory Committee comprising of employee and management representatives would review the pension account every quarter and discuss issues regarding employees' retirement. The Singapore subsidiary complies with local regulations by contributing to the government-managed Central Provident Fund (CPF), whereas the Korea Site follows the "Pension Protection Act" and makes contributions to a "Defined Contribution" (DC: Defined Contribution Retirement Pension) plan that the employer and the employees have agreed upon.

The Headquarters and its subsidiaries made pension contributions totaling 4.2% of employees' salaries in 2017.

## Gender Equality

Ardentec respects what employees have planned for their careers. It adopts an equal gender perspective and accepts applications for child care leave of absence. In 2017, there were 31 females and 4 males applied for child care leave of absence in 2017, a total of 34 females applied for maternity leave and a total of 42 males applied for paternity leave.

The welfare committee organizes employee trips on an annual basis so that employees and their families can explore the beauty of Taiwan and enhance their interaction and affection with their family and friends.

The Company's health center is equipped with treadmills, static bicycles, ping pong tables, and pool tables, offering a broad range of training courses that

differ every quarter, including aerobics, pilates, yoga, and belly dancing. The different choices of exercise activities are aimed at helping employees strengthen their physical fitness and relax their body and mind!

Clubs in Ardentec: soft pitch, mountain climbing, badminton, yoga, snooker, cycling, basketball, table tennis, belly dancing, photography, volunteering, water

activities, and triathlon. Clubs occasionally organize events that can be fun and games or physically challenging.

The Singapore subsidiary has for 2 consecutive years invited the children of its employees to work at Ardentec for a day to show them what their parents do at work. It also encourages family members to identify with Ardentec.

#### Ardentec has a number of clubs including

- ◆ Soft pitch
- ◆ Mountain climbing
- ◆ Badminton
- ◆ Yoga
- ◆ Snooker
- ◆ Cycling
- ◆ Basketball
- ◆ Table tennis
- ◆ Belly dancing
- ◆ Photography
- ◆ Volunteers
- ◆ Water Sports
- ◆ Triathlon



Friendly basketball matches at Hsinchu Industrial Park



Friendly match between badminton club and Chipbond Technology



The Xinshenger Cup friendly badminton match held together with Solartech Energy Corp.



Charity haircuts by volunteers



The Singapore subsidiary invited the children of its employees to work at Ardentec for a day to show them what their parents do at work. It also encourages family members to identify with Ardentec.



Swimming across Sun Moon Lake event



The cycling club explores the beauty of Hsinchu's bike routes

## 5.4 Career Growth

Talent training is the key to sustainable business for any company. In Ardentec, nurturing talent in the direction of the Company's growth has become one of the critical management focuses. We have developed a multitude of training solutions that are centered on the Company's goals and employees' career development. Through the use of systematic learning roadmaps, we have built an environment where employees may learn and grow on the job. The performance evaluation in the first quarter of each year involves training requirement

and personal development plan (PDP) review. The supervisor and employee discuss the personal work and annual growth requirement required by the future target and create a customized training program in order to assist the employee's career development and lifelong learning.







Technical skill development is one of the major focuses in the company's training. Employees who have been trained on Ardentec's testing procedures and system operations are given

the responsibility to pass on their knowledge and bring new comers to the expected standard of professionalism.

Apart from the five main types of training, the company has also

organized seminars featuring a variety of issues to broaden the scope of employees' learning and to enrich their lives.



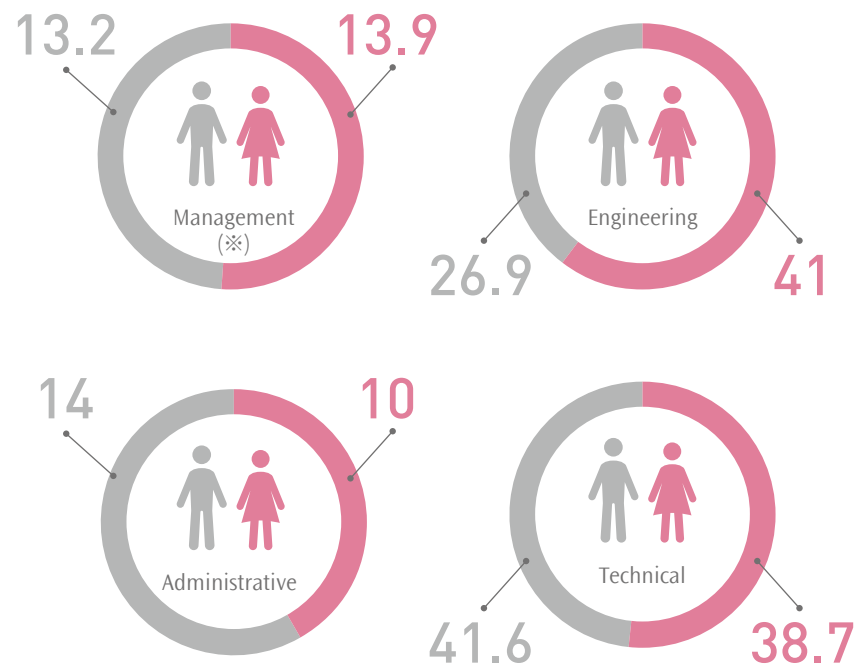
Ardentec places special emphasis on the human rights and ethic training. As of 2017, accumulated total of 5,178 hours of “Human Rights and Ethics” training, and a total of 3,207 hours of “CSR and RBA Code Introduction” was provided, and it achieved 100% completion training rate.

Training of human rights policies and consideration has been provided to all security responsible for security control, to ensure that they comply with Ardentec's respect for human rights when performing their duties.

In 2017, Ardentec's headquarters and subsidiaries organized 75,837 hours of training in total. On average, every male employee

had 27 hours of training. Every female employee had 35 hours of training. 100% of employees received training.

### 2017 Training Hours by Job Role and Gender



※ Refers to managerial roles of section grade and above.

## 5.5 Workplace Health and Safety

### Safety and Health Policy

「Legal and regulatory compliance, safe and health work environment, continuously improving safety and health performance.」

### Occupational Safety and Health Management System

Ardentec and its operating sites follow the regulations on occupational safety and health and the regulations of domestic

and foreign management systems to promote various safety and health measures. The Ardentec headquarters and its Singapore and Korea subsidiaries have all passed OHSAS 18001 Occupational Safety and Health Management System verification. Health and safety risk assessments are performed for each project to identify possible risks, with audits to timely control risks and achieve continuous improvement goals.

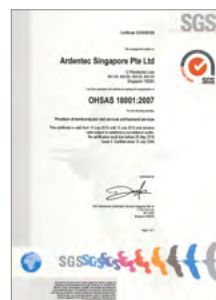
### Occupational Safety and Health Management Committee

The labor representative of the OSH Management Committee is at a percentage higher than the statutory requirements. Labor representatives of the labor-management meeting are directly selected by employees and the percentage of labor representatives is higher than that required by the statutory requirements at Ardentec and

each operating countries. The labor representative of the OSH Management Committee is at a percentage higher than the statutory requirements.



Headquarters

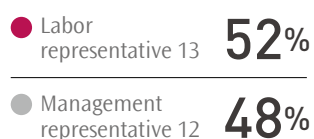


Singapore Subsidiary

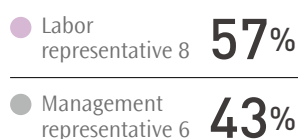


Korea Subsidiary

### Headquarters



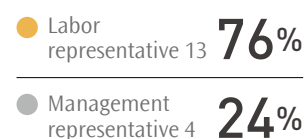
### Singapore Subsidiary



### Korea Subsidiary



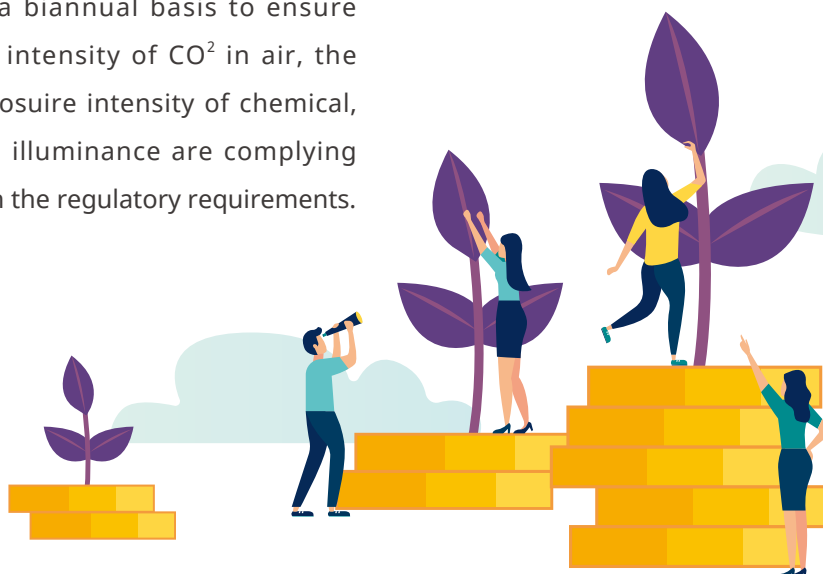
### Giga Solution



## Safe Workplace

Safety inspection must be carried out on a monthly basis; the head of each department shall perform work area inspection; occupational safety guards thoroughly inspect the Company, and deficiencies found must be pursued and improved upon to ensure the safety of the workplace. Factory safety inspection is conducted by Directors of the Fabs quarterly, and by the Vice Presidents every six months.

Working environment measurement is conducted on a biannual basis to ensure the intensity of CO<sup>2</sup> in air, the exposure intensity of chemical, and illuminance are complying with the regulatory requirements.





## Healthy Workplace Program

The four sites in Taiwan headquarters have received the Health Promotion Badge for Accredited Healthy Workplaces from the Health Promotion Administration of the Ministry of Health and Welfare since 2015. The badges are valid for 3 years. The programs of healthy workplace program include :

### Safety and Health Education

Regularly perform employee safety and health training sessions. We also require employees to complete relevant safety and health training according to the nature of their job before they can commence with their work; employees using chemicals must complete general hazard education and training and perform their work only after fully understanding the chemical characteristics and hazards, the use of protective equipment, exposure prevention measures, and emergency response measures.

### Health Management and Risk Identification

Every two years, all employee health checkups are conducted, and information such as employee age, work, and life schedule, operation data, and health risk trend are collected. This is performed along with organization and analysis of results of employee health checkups to identify the relations between health risks and work, and identifying high-risk group of employees as a reference for active health management.

For regular staff who have abnormal inspection results, medical center physicians will be arranged for individual health guidance and health education and medical treatment will be arranged if necessary.

Occupational disease specialists are invited to be stationed at each factory area to help prevent and provide consultation, first aid, and treatment of both general and occupational diseases and injuries. After being identified as a high-risk-group employee, the stationed physician will provide consultation, and the nurses will regularly track and care to reduce the risk of employees triggering major diseases.

### Emergency Treatment

Set up enough full-time professional nurses. Employees who fall ill or are injured are given immediate treatment, assessment of the need for care or medical care, pre-medical care and contact and arrangement of medical institutions.

Excessive first-aid personnel are set up in each class of each factory, and the first-aid personnel uniforms are specially marked. When emergency needs arise, emergency resources can be immediately sought.

Automated External Defibrillators (AED) are provided in all factories. Every year, training sessions are conducted to maintain employee familiarity with operation of AED and emergency care in case of emergencies.

### Pandemic Disease Control

Ardentec has established epidemic prevention mechanisms and supplies to prevent the spread of contagious diseases and viral infections. The Company also regularly provides the latest international information on epidemics and health education.

### Care for Female and Maternal Employees

The company arranges regular female three-in-one cancer screenings, offers exclusive parking spaces for pregnant employees, and provides uniforms of a specific color for pregnant employees to serve as a reminder for others.

### Health Promotion

Combined with lectures from mental health counselors, fitness centers, and clinics, multiple health-promoting activities have been organized, including stress management and weight loss management.

## Health and Safety Information Disclosure

Every year we produce statistics on the disabling injury frequency rate and disabling injury severity rate defined by the Ministry of Labor and the lost day rate and absence rate defined by GRI; review employee occupational accident management and health management; and use relevant data as the reference for continual improvement.

There were 31 cases of occupational hazard in 2017, 25 of which involved traffic accidents, and 6 of which occurred at the workplace. The cases involved minor injuries: a finger cut by tightening cable, a fall on wet floor, a fall down from chair and a finger clamped by door. Fatalities due to occupational hazards have never occurred at Ardentec.



## Occupational Injury Statistics

Items	Headquarters		Singapore Subsidiary		Korea Subsidiary		Giga Solution		Total
	Male	Female	Male	Female	Male	Female	Male	Female	
No. of occupational injuries	10	14	0	0	0	0	6	1	31
Disabling injuries	3	1	0	0	0	0	1	1	6
Work days lost	2	18	0	0	0	0	3	0	23
Frequency of disabling injuries	2.09	0.67	0.00	0.00	0.00	0.00	2.03	2.13	1.38
Severity of disabling injuries	1.65	11.97	0.00	0.00	0.00	0.00	6.09	0.00	5.38

The frequency of disabling injuries and severity of disabling injuries defined by the ministry of labor is calculated as follows:

Frequency rate of disabling injuries = number of disabling injuries / total work hours elapsed x 1,000,000

Severity rate of disabling injuries = total work days lost / total work hours elapsed x 1,000,000

※ Given the condition of Ardentec's workplace and employees' work nature, there are no concerns of occupational illness

※ Occupational injuries include commutation traffic accidents. The occupational injuries have never occurred in Singapore Site and Korea Site

## Absence Information

Item	Headquarters		Singapore Subsidiary		Korea Subsidiary		Nanjing Subsidiary		Giga Solution		Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
No. of absent days	328	1,102	313	331	96	36	0	0	348	499	3,053
Absence rate (%)	0.20	0.69	1.90	2.17	0.96	0.42	0.00	0.04	0.61	0.99	0.63

The number of days absent includes medical leaves, menstrual leaves, occupational injury leaves, and disease control leaves

Absence rate (AR) = (total days absent during the reporting period / total working days in the reporting period) x 100%

## 5.6 Labor-Management Harmony

### Employee Communication

Ardentec employees have not established a union, in accordance with the Collective Agreement Act. However, to create a harmonious relationship among employees and employers, we followed the Regulations for Implementing Employee-Management Meetings to establish the Labor Management Meeting Committee as an alternative to the Collective Agreement Act. In addition, the company has a number of labor management communication committees in place that thoroughly discuss and communicate about issues on a variety of topics, including labor safety window meetings, the Occupational Safety and Health Committee, and the Staff Welfare Committee. These committees comprise representatives from both the management and the employees; all employees' opinions and rights are protected by these functional committees. In an environment of open communications, Ardentec has been able to develop trust between the management and the employees; there has never been any employment-related dispute that has negatively

affected employee relations or resulted in losses.

In order to provide a more open means of communication, Ardentec has implemented a set of Employee Communication and Protection Guidelines that offers a diverse range of communication channels, from labor-management meetings to online and physical opinion/grievance boxes. These encourage employees to raise suggestions or problems concerning their work and the environment to the decision making bodies.

In addition to the communication channels provided by the Company, Ardentec respects the freedom of employees to associate, and employees may join or organize clubs to enrich their lives according to their personal preferences.

### Labor-management Meetings

A total of 6 management representatives have been assigned, comprising the Vice President of Operation and directors. A total of 6 labor representatives have been selected from among employees below the rank of Site Director. If no foreign worker is elected as an employee representative, a foreign worker communication

meeting will be held beforehand, and proposals made during the session will be submitted to the quarterly labor-management meeting for discussion.

Labor-management meetings are held on a quarterly basis, and on an interim basis when deemed necessary. Employees are able to raise suggestions regarding employment relations, employment terms and welfare, and speak freely during the meetings. During the labor management meetings, labor representatives can communicate with management and participate in labor-related decision-making. Employees are able to express their opinions while being protected under the labor meeting agreements. All issues discussed are recorded on file to enable follow-up tracking and subsequent improvements.

Any changes to the company's operations that require an adjustment to employees' jobs are notified to affected employees at least 30 days in advance. Meanwhile, all necessary assistance is given to employees to effect the new arrangement. For any employees out-stationed at overseas subsidiaries, Ardentec would provide the necessary subsidies

and make arrangements to have employees' family members accompany them overseas.

## Employee Complaints

Employees may file complaints personally to their line managers or to human resource should they encounter any problems at work, including but not limited to physical or verbal violence, coercive conducts, sexual harassment or assault. Handlers of employee complaints are required to discuss and explore solutions in the shortest time possible. Employees may file complaints anonymously by sending e-mails using their personal e-mail addresses to [grievance@ardentec.com](mailto:grievance@ardentec.com), and by describing clearly the circumstances, details and evidence involved. Where a complaint involves other employees, the investigator would be required to protect the basic rights of all those involved during investigation. All complaints, whether identified or anonymous, will be investigated with corrective measures implemented where appropriate. Line managers and the Human Resource Department have the responsibility to resolve employees' complaints, while in the meantime giving employees the rightful protections they deserve, including the right to

confidentiality.

## Suggestion Box

Suggestion boxes have been made available online and at the cafeteria, which employees may use to express opinions on an identified or anonymous basis. Queries raised through the suggestion box are answered or looked into by the relevant functional units. Where improvements need to be made, the underlying issues will be followed upon until completion, while in the meantime good communication with the proposer is maintained. Anonymous opinions that do not involve any particular person are announced publicly once resolved. In 2017, we received 54 mails from the suggestion box, including 27 suggestions or grievances from the internal on-line platform and 27 unsigned suggestions or grievances from the anonymous suggestion box. The comments and complaints via the Internet and electronic suggestion boxes have been replied. The comments from the anonymous suggestion boxes of each site have been replied by the relevant units and announced to the whole company in Chinese and English.

## Work-life balance

We admire employees who enjoy their work or are self-

## Suggestion Box



Physical suggestion boxes are placed at cafeterias of each site; result of investigation will be replied or announced to all employees

motivated in learning, and we also care for employees' work-life balance. We ensure strict compliance with local regulations regarding employees' work hours. The Taiwan headquarters, for example, adheres to the terms of the Labor Standards Act by providing "at least one day's rest for any seven-day period" and "at least 30 minutes of break time for every four consecutive work hours," while limiting work hours to "no more than 12 hours a day" and "no more than 46 overtime hours in a month." If there is a need to arrange overtime working, we would demand line managers to make overtime arrangements only with employees who are willing to participate. In order to ensure that employees' work hours are managed according to the above rules, the Company has implemented an electronic

overtime application system that caters for all overtime scenarios. Overtime arrangements that do not comply with such rules will be automatically rejected by the system without exceptions. Ardentec has strict rules to ensure that it does not exceed its authorities when managing employees' work hours and rights. There were no incidents of forced labor or violation of employees' rights in 2017.

### Respect for Career Plans

Employees who wish for a change of role or to take on different

career plans may do so by raising a transfer request, subject to department head's approval. Employees who wish to resign may do so freely by serving a required period of notice. Managers and human resource staff would stay in contact with employees who have left Ardentec, and invite them back to work at a proper time.

### Respect for Freedom

The Company fully respects the employee's rights to set up associations or participate in any legitimate organizations or union,

and encourage the employees to exercise their civil rights. The Company also has full respect for the political orientation of individual employees and has communicated this belief with the suppliers for a mutual understanding. Neither the Company nor its suppliers was involved in any violation of freedom in the reporting year.





## 5.7 Workforce Structure

As of December 31, 2017, Ardentec had 2,208 employees worldwide with a gender distribution of 1.07:1 (male:female). Details of which are as follows:

### Job Role/Gender Distribution

Job role	Headquarters		Singapore Subsidiary		Korea Subsidiary		Nanjing Subsidiary		Giga Solution	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Manager (※)	103	23	17	6	13	1	7	0	32	9
Engineering	446	142	48	13	21	2	22	8	171	20
Administrative	45	59	4	8	3	1	0	6	14	48
Technical	133	477	12	41	4	29	3	3	41	173

※ Section head or higher management

HQ: Includes 1 part-time consultants (male) and 12 interns (male 5, female 71)

### Academic Distribution

Education background	Headquarters		Singapore Subsidiary		Korea Subsidiary		Nanjing Subsidiary		Giga Solution	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
High school and below	89	191	5	8	8	26	0	2	26	61
College/University	508	451	33	11	30	5	26	13	171	177
Postgraduate and above	130	59	43	49	3	2	6	2	61	12

### Nationality Distribution

Nationality	Headquarters		Singapore Subsidiary		Korea Subsidiary		Nanjing Subsidiary		Giga Solution	
	Male	Female	Male	Female	Male	Female	Female	Male	Female	Female
Domestic	673	472	27	9	39	30	22	14	257	163
Foreign	54	229	54	59	2	3	10	3	1	87

### Age Distribution

Age	Headquarters		Singapore Subsidiary		Korea Subsidiary		Nanjing Subsidiary		Giga Solution		%
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
<30	183	197	19	25	2	16	19	13	64	73	28%
30~50	507	468	56	43	37	17	11	4	184	175	68%
>50	37	36	6	0	2	0	2	0	10	2	4%



Photographer | Joe Huang

# CUSTOMER SERVICE AND SUPPLIER MANAGEMENT

- 6.1 Customer Service
  - 6.2 Customer Secrecy Protection
  - 6.3 Quality Optimization of Customer Service
  - 6.4 Customer Satisfaction Surveys
  - 6.5 Supplier/Contractor Management
  - 6.6 Supplier Audits
  - 6.7 Supplier/Contractor Workplace Safety
-

## 6.1 Customer Service

With industry-leading technology in wafer testing, Ardentec aims to become customers' ideal business partner by offering comprehensive services as well as sustainable and mutually beneficial solutions.

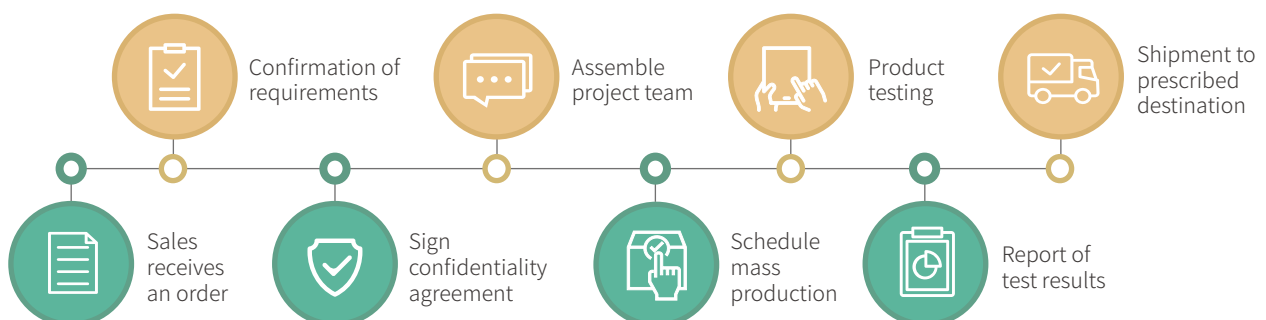
Ardentec has established an interdepartmental "customer project" for each customer in order to establish a smooth service system and communication channel. We build our support

team around the needs of individual customers. The project members include sales, customer service, production management, quality assurance, testing development, product engineering, manufacturing and information sectors. For the clients demanding high physical security, the Facility and General Service departments are included in the project members.

The government of the Republic of China has launched a "Taiwan

Trade Network Excellence" project in response to the "Framework of Standard to Secure and Facilitate Global Trade" developed by World Customs Organization (WCO). In 2010, Ardentec had past and keeps valid the certification for Authorized Economic Operator (AEO) issued by Customs Administration, Ministry of Finance, and hence enjoys privileged customs clearance.

### Customer Service Flow



## 6.2 Customer Secrecy Protection

At Ardentec, we value customer secrecy protection and sign the non-disclosure agreement (NDA) with every customer. Our service teams uphold the NDA principle throughout the service for customer to ensure the secrecy of customer products. To raise the level of information security, we passed third-party ISO27001 certification. In addition, the

Kaoyuan Site, Tingshin Site, Gaosheng Site IDC, and Paoching Site IDC, and Singapore Site have passed Common Criteria certification for site to build the most robust and solid protection wall for customer secrecy.

To closely control technical documents and customer data, the Document Control Center (DCC) is a dedicated department

for managing customer documents and assigning access privileges according to the level of classification to ensure no document can be accessed download without corresponding privilege to eliminate improper use of customer confidential information. We also include customer complaints about privacy infringement or

information leakage in the management review. In 2017, no violation of customer secrecy incidents were found.

Strengthening the management of external e-mails, reviewing the recipient's domain, and returning non-compliant letters to avoid occurrence of mis-delivery of letters and enhance the protection of customer confidentiality.

## 6.3 Quality Optimization of Customer Service

Quarter Business Reviews (QBRs) have been held to discuss the quality optimization with the key clients, and clients' expectation and feedback have been collected regularly. Sales related personnel and supervisors often visit clients to coordinate the clients' demands with the production sector. Ardentec work together with the clients and manage the available capacity, yield factor and delivery plan from the source to enhance the customer satisfaction and the partnership with clients.

Ardentec's proprietary production automation system provides customers with real-time update on the production progress and capacity. For each customer we serve, we develop a

platform that facilitates effective communications between the project team and its counterparts within the customer. This enables us to identify and resolve problems such as business, production and engineering support within the shortest time possible and thereby enhance competitiveness not only for us, but for our customers as well.

Information provided by the production automation system covers anything before mass production to WIP/EDAS testing; production progress and test results are generated real-time to facilitate communication with customers.

※ WIP - Work In Process  
EDAS - Engineering Data Analysis System

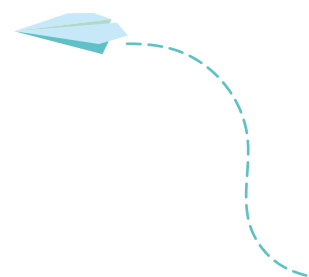
## 6.4 Customer Satisfaction Surveys

Ardentec invites customers to a "satisfaction survey" in January each year to give feedbacks on how they felt about working with Ardentec and any expectations they may have. This survey serves as a means to communicate for a win-win business partnership. The customer satisfaction survey inquires customers' opinions toward sales service, engineering service, shipment delivery, hazardous substance

control, quality control, and system services. Results gathered from customer satisfaction surveys are consolidated then reviewed by the Vice President of Sales personally. Employees of relevant departments would be instructed to conduct reviews and make improvements to address customers' suggestions, and therefore contribute towards total satisfaction.

Ardentec achieved a 97% customer satisfaction in 2017, which was higher than the 75% target the Company had imposed upon itself.

※ Satisfaction rate (the percentage of customers' requirements met) =  
Ardentec's performance/  
customer's requirements.



## 6.5 Supplier/Contractor Management

### Suppliers' Human Rights

Ardentec invests mainly in equipment and software. The main suppliers of Ardentec are from the US and Japan. Both are developed countries with complete and well protected human rights laws and regulations. Therefore, the Company does not need to include human rights laws and regulations as a term when screening for suppliers. Except for the procurement of equipment, Ardentec's other procurements required for business operations are made locally. Ardentec did not incorporate new significant suppliers in 2017.

### Supplier/Contractor Management

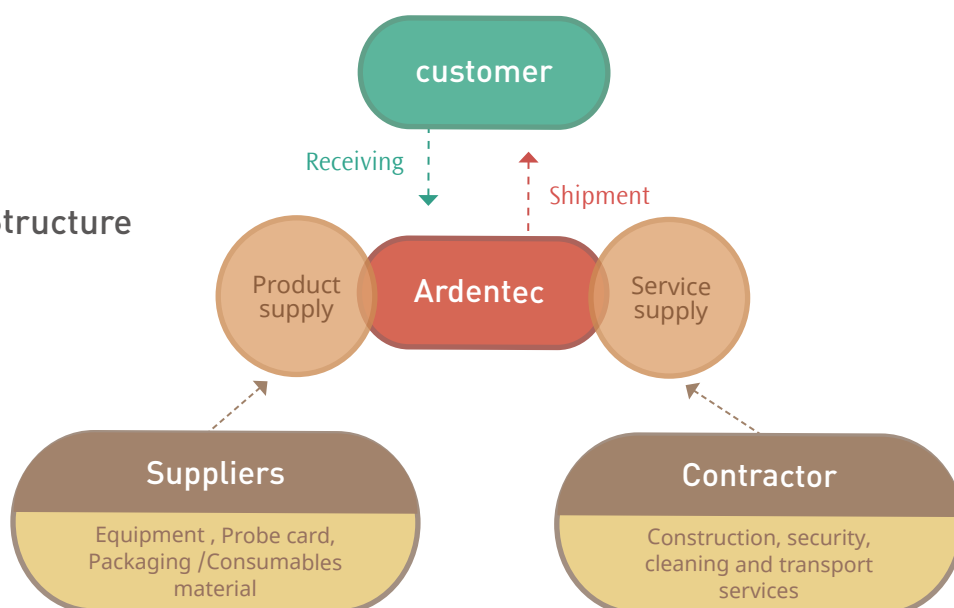
Due to the fact that suppliers and contractors are key business partners of Ardentec, the Company has implemented a business model that ensures sustainable growth of the common business. Except that the semiconductor testing equipment must rely on the manufacturing country or if clients designate their suppliers, Ardentec maximizes the use of local suppliers so that the best efficiency of various resource services can be achieved while supporting the local job and economic stability. Except in countries that do not produce testing equipment and in situations where the customer has demanded specific suppliers,

the Taiwan headquarters and its subsidiaries would and have purchased 100% of its supplies from local sources.

In addition, we scrutinize every supplier and contractor to make sure that they have been legally registered and that their activities comply with local regulations and human rights principles.

In addition to making CSR commitments to customers, Ardentec also requires its major suppliers and contractors to do the same, by complying with Ardentec's "Supplier CSR and Business Ethics Guidelines." Doing so would ensure CSR compliance throughout the entire supply chain.

Supply Chain Structure





## Supplier CSR and Business Ethics Guidelines

To the suppliers of Ardentec:

We appreciate your long-time support to Ardentec's businesses. Ardentec has long-dedicated in maintaining business reputation in a world of rising awareness towards corporate social responsibilities (CSR). As workers' rights, health and safety, and the company's working environment, management and ethics become an increasing part of our image, you - being one of our key suppliers - play a critical role in Ardentec's pursuit for CSR.

To give you an idea of what Ardentec and its key suppliers must do to meet customers' expectations, we have created a set of "Supplier CSR and Business Ethics Guidelines" and would like you - a key supplier of Ardentec - to comply accordingly.

Should you encounter any situation that contradicts the "Supplier CSR and Business Ethics Guidelines" while dealing with Ardentec, please report such incidents to Ardentec's HR & Service Division. We will maintain confidentiality for all suppliers and employees who report inappropriate conducts. Contact method is as follows:

Tel: +886-3-597-6688 Extension 1206 Division Director Rhiannon Chen

Fax: +886-3-597-1396

E-mail: [rhiannon.chen@ardentec.com](mailto:rhiannon.chen@ardentec.com); [grievance@ardentec.com](mailto:grievance@ardentec.com)

Ardentec

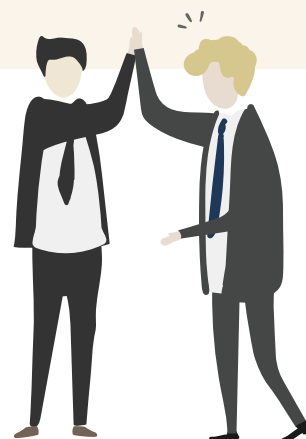
Resource Division \_\_\_\_\_





## Supplier CSR and Business Ethics Guidelines

1. All Ardentec's suppliers must operate and employ based on standards that are equivalent to or more stringent than those set forth by the Responsible Business Alliance (RBA) and those of the Labor Standards Act of the Republic of China. This includes but is not limited to: Refraining from the use of slave, child or illegal labor or forcing employees to work under inhumane conditions and in the meantime ensuring that employees' work hours and remuneration do comply with laws. Respecting employees' freedom of association and apply no restraints on their communication. Avoiding discrimination of employees based on race, skin color, age, gender, sexual orientation, ethnicity, disability, pregnancy, religion, political affiliation, union membership or marital status.
2. Providing employees with a safe and healthy work environment that complies with the relevant health and safety regulations.
3. Complying with environmental protection laws.
4. Avoiding gifts to Ardentec employees or their relatives in the form of gifts, tours, discounts, loans, commissions, kick-backs, complimentary services or remunerations of any kind.
5. Conducting business in the utmost good faith, and refrain from making fictitious quotations or forging transaction data.
6. Refraining from the use of bribery, corruption, extortion, monopoly, conspired price-fixing or any inappropriate methods to compete, negotiate or deliver business deals.
7. Refraining from making non-business purchases with business entities established by Ardentec employees or their relatives.
8. Refraining from hiring Ardentec employees or their relatives as consultants within the supplier.
9. Not asking Ardentec employees to lobby within Ardentec.



## 6.6 Supplier Audits

Apart from demanding compliance with Supplier CSR and Business Ethics Guidelines, the Company also conducts annual field audits on major suppliers (※) according to the Supplier Management Policy, to determine whether they have fulfilled CSR in all aspects.

In 2017, the Company completed its field audit for all major suppliers on a number of aspects such as human rights, employment condition, environment, health, and safety. All audited suppliers were found to have complied with the Labor Standards Act; no use of child

labor or forced labor was found, and they all respected employees' freedom of association to the Company's expectation.

※ Refers to suppliers from which the company makes 10 purchases or more in a quarter

## 6.7 Suppliers/Contractors' Workplace Safety

The contractors must sign the Contractor Safety and Health Environmental Protection Regulation to confirm that the service content meets the requirements of safety, health and environmental protection. Before operating, the employee must accept "orientation training for contractors", including :

- ◆ Notification of hazards before commencing work to ensure

the protection of the safety and health of contractors

- ◆ Informing suppliers and contractors of the expectations and requirements in corporate social responsibility and business ethics for suppliers

In 2017, the headquarters, Singapore Subsidiary, Korea Subsidiary and Giga Solution have held a total of 154 sessions of Contractor Pre-Service Education

and Training, attended by 1,291 participants, representing 160 suppliers.

Before entering the site, the employer of the contractor must hold an engineering meeting with contractors to explicitly inform them of the working environment where the contracted job will take place, the risk factors, and relevant risk prevention measures.





# COMMUNITY INVOLVEMENT

7.1 Educational Support

7.2 Caring for the Disadvantaged

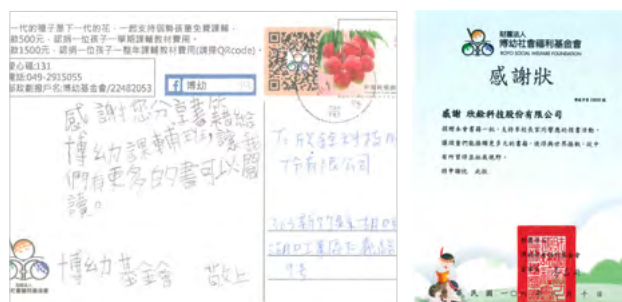
7.3 Sustainability of the Environment and Ecosystem

Ardentec's Taiwan headquarters joins together with the subsidiaries in showing our care for our communities, both at home and around the world, with real actions. We gradually expand the scope of our care and the communities involved. In addition to the feelings we hold toward the industrial parks where we are located, our neighborhoods, non-profit organizations, and local government agencies, we also owe them a responsibility. As a result we take the initiative to take part in activities that will help us to grow with the local communities and make better cities to live in.

## 7.1 Educational Support

### Good Second-hand Book Sharing; Educational Travel in Remote Areas

In 2017, we launched the 4th year of sharing good books with children in distant neighborhoods. We collected and donated 2,409 second-hand books to the Hengshan and Jianshih former centers of the Boyo Foundation in 2017. Among those, 1,276 books were donated by Ardentec employees; and 1,133 were donated by employees of Giga Solution Tech. Co., Ltd.



### Have a Bright Future — Blessings to the Graduates

We offer the Ardentec Award to encourage the graduates from Zhongzheng Junior High School, Shanchi, Huaxing, and Zhongxing Elementary Schools in Hsinchu Industrial Park to study hard and have a bright future!



Bestowing the Ardentec Award at the graduation ceremonies of Huaxing Elementary School and Zhongzheng Junior High School





## Supporting Traditional arts: Lion Dance Troupe of Zhongzheng Junior High School

At Zhongzheng Junior High School, Hsinchu Industrial Park, there is a group of children tirelessly dedicated to learning traditions of Chinese culture—the lion dance and drumming. Since 2015, Ardentec has continued to donate funds to support the passing on of diminishing traditional arts! In 2017, they won first place in the South Lion, Four Lions, and Joint Forces of Two Lions at the junior high school level Hsinchu County Magistrate Cup Dragon and Lion Championship. The traditional arts shine once again.



## An Enriching Musical Performance by a Mini Recorder Group

In the mini Jianshih Elementary School by the mountains of Hsinchu, all students in the 4-6 grade have formed a mini recorder group, which allows students in the mountain areas to focus on learning even after school. Lacking financial support, the teacher also acts as the conductor. The mini recorder group uses simple instruments, but their original and natural music has still gained high praise in competition and when playing against groups with rich resources in and out of the county!

Ardentec has donated a number of books and dictionaries to Jianshih Elementary School since 2015. From 2016, Ardentec has donated equipment to the mini recorder group on a yearly basis. In addition to the electric piano for accompaniment donated in previous years, we provided a moisture-proof instrument cabinet for the mini recorder group in 2017, and also provided new costumes for the group to make the music performance more interesting.



## After-school Tutorials for Students

Immigrants or low-income families with foreign spouses living near Hsinchu Industrial Park are generally unable to afford their children's education due to language barriers, cultural difference, or the need to support the family. Sitting next to Ardentec in Hsinchu is a village called Fengshan Village headed by Chief Wu who organizes free after-school tutorials and free meals for children of economically-disadvantaged families; she tutors them after school, protects them, and cares for them, reducing the learning gap in children of Taiwan. Ardentec

stands by Chief Wu's good thoughts. Since 2013, we have continued to donate children's books, school supplies, and food for after-school tutorials.



## Industry-academia Linkage

Since 2012, Ardentec has been providing undergraduates the chance to experience working in an industry so that they can apply knowledge in practice and make seamless transitions into their careers. In the 2017 academic year, Ardentec provided 29 students from Feng Chia University, Yuan Ze University, Fu Jen Catholic University, National Quemoy University, and Minghsin University of Science and Technology with internship opportunities. Since 2012, a total of 116 students from 9 universities have been offered internships and academia cooperation in Ardentec. In addition, one student has received support in a cross-school internship in Germany. We invited our interns to join Ardentec straight after graduation to accumulate their professional values in depth and breadth. In August 2017, we signed a letter of intent with Minghsin University of Science and Technology to establish a good cooperative relationship for the promotion of semiconductor packaging and testing industry technology and joint research and development, and to cultivate engineering and technical professionals.



Letter of intent signing ceremony picture





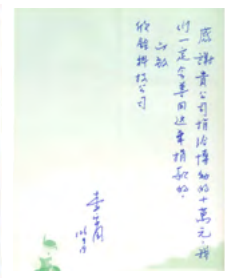
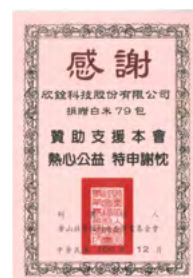
## 7.2 Caring for the Disadvantaged

### Build a Career Stage for the Disadvantaged Minority

Ardentec has actively hired people with physical disabilities who make a living on their own. Depending on the categories of their disability, these people are given a stage on which they can apply their skills, learn to rely on themselves, and build their confidence. For many years, Ardentec has hired more people with disabilities than the amount required by the People with Disabilities Rights Protection Act. In 2017, the employment of people with disabilities was 136% of that required by law.

### A Diverse and Friendly Society

In 2017, Ardentec supported the Boyo Social Welfare Foundation, the Catholic Hua-Kuang Center for the Development of the Disabled, St. Joseph Home, the Genesis Social Welfare Foundation, the St. Joseph Social Welfare Foundation, and the Maria Social Welfare Foundation, by donating goods to support professional social welfare institutions and provide more health care resources and assistance to people with disabilities and disadvantaged groups. We hope to support society through diverse means.



The founder of the Boyo Social Welfare Foundation, Richard Chia-Tung Lee, wrote a note to thank Ardentec for its support.

### Charity Run

The employees of the Singapore subsidiary enthusiastically participated in charity runs, such as the 2017 Singapore Straits Times and the Pink Ribbon Tour, to help raise funds for difficult groups.



### Simple Happiness for Elders to Be Full

The Ardentec volunteer club and Huashan Social Welfare Foundation visited elderly people who were living solitary, had dementia, or who were disabled in the Hukou area of Hsinchu and donated rice, giving them the simple happiness having enough food.



## Cherish Goods and Materials; Making Good Use of What One Has

In 2017, the Ardentec headquarters provided 74 computer desks for the Huaguang Intelligent Development Center, which made the learning space of the mentally disabled residents of the center more functional.



## Warm Companionship; Having Fun Together

Every month, members of the Ardentec volunteer club go to the St. Joseph Home to accompany the elderly in singing, exercising, dancing, and join activities to adapt to the community, etc. They provide haircuts for the elderly and interact with them to create a lively atmosphere for the aged elders.



## Thousands of Companies Accompanying Children in Growing Up

In 2017, the Singapore subsidiary participated in the Fund Raising Program for the Needs of Underprivileged Children of the thousands of companies in Singapore Children's Association. Employees of the subsidiary accompany children at the movies bubble soccer games to bring them joy and laughter.



## Saving Lives with Blood Donation

Every year, employees of Ardentec headquarters and the Singapore subsidiary passionately donate blood to save lives and maintain the health of strangers.



## 7.3 Sustainability of the Environment and Ecosystem

### Guarding the Ocean and Loving the Earth Beach Cleanups at Home and Abroad

#### Loving the Earth Beach Cleanup Campaign

In 2017, the staff of the Ardentec headquarters and their family members joined the coastal cleanup for the fifth time. It was also the second time cooperating with more than 500 teachers and students of Zhongzheng Junior High School in the Hsinchu Industrial Park in the Guarding the Ocean and The General Manager of Singapore subsidiary was in participating volunteers in this local portion of the international coastal cleanup activity.

With love for the oceans and the earth, Ardentec employees both at home and abroad and students and teachers of Zhongzheng Junior High School devoted their utmost efforts to restoring the beauty of the ocean and sustaining marine life! Through hands-on participation, everyone was able to learn how to improve their lifestyles, classify and recycle wastes, and protect marine life, thereby further beautifying the earth and making it more spotless! Coastal cleanup is the most practical kind of active education.

Ardentec's domestic and overseas employees not only cleaned up the coast occupied by the garbage, but also recorded the type and quantity of the collected garbage. All the data was returned to the Ocean Conservancy, which initiated the International Coastal Cleanup (ICC) activity, to compile an annual worldwide ocean waste observation report. This process is a testament to our commitment toward protecting the earth!





Employees and  
Their Relatives and  
Friends of Ardentec  
Headquarters  
During the Beach  
Cleanup



Beach Cleanup Volunteers  
-Singapore Subsidiary





## Ardentec's Paddy - Respect Ecology

Ardentec employees have participated in the Changhua Ecology Wetland Rehabilitation Project, working together to manage Ardentec's Paddy with the most primitive farming methods that help plants and animals form balanced ecological diversity. Regularly visiting farmlands, employees and their spouses engage in farm work, bending down to harvest and thresh with sickles while enjoying the fragrance of rice. After the harvest, the natural rice is entirely purchased by colleagues. Through friendly, healthy consumption behavior, Ardentec is committed to building a friendly environment and friendly ecology.







Photographer | Leo Pei

# ANNEXES

Annex 1 Independent Assurance Opinion Statement

Annex 2 GRI Standards Reference Table

Annex 3 ISO26000 Reference Table

Annex 4 UN Sustainable Development Goals  
Reference Table

Annex 5 The UN Global Compact Reference Table

Annex 6 Corporate Social Responsibility Best  
Practice Principles for TWSE/GTSM Listed  
Companies Reference Table



## Annex 1 Independent Assurance Opinion Statement

### INDEPENDENT ASSURANCE OPINION STATEMENT

#### Ardentec Corporation 2017 Corporate Social Responsibility Report

The British Standards Institution is independent to Ardentec Corporation (hereafter referred to as Ardentec in this statement) and has no financial interest in the operation of Ardentec other than for the assessment and assurance of this report.

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

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of information presented to it by Ardentec. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and accurate.

Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to Ardentec only.

#### Scope

The scope of engagement agreed upon with Ardentec includes the followings:

1. The assurance scope is consistent with the description of Ardentec Corporation 2017 Corporate Social Responsibility Report.
2. The evaluation of the nature and extent of the Ardentec's adherence to all three AA1000 AccountAbility Principles in this report as conducted in accordance with type 1 of AA1000AS (2008) assurance engagement and therefore, the information/data disclosed in the report is not verified through the verification process.

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

#### Opinion Statement

We conclude that the Ardentec Corporation 2017 Corporate Social Responsibility Report provides a fair view of the Ardentec CSR programmes and performances during 2017. The CSR report subject to assurance is free from material misstatement based upon testing within the limitations of the scope of the assurance, the information and data provided by the Ardentec and the sample taken. We believe that the 2017 economic, social and environmental performance information are fairly represented. The CSR performance information disclosed in the report demonstrate Ardentec's efforts recognized by its stakeholders.

Our work was carried out by a team of CSR report assurers in accordance with the AA1000 Assurance Standard (2008). We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that Ardentec's description of their approach to AA1000 Assurance Standard and their self-declaration of 'in accordance' with the GRI Standards (2016): the Core option were fairly stated.

#### Methodology

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

- review of topics raised by external parties that could be relevant to Ardentec's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers and staffs on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 10 interviews with staffs involved in sustainability management, report preparation and provision of report information were carried out.
- review of key organizational developments.
- review of the findings of internal audits.
- review of supporting evidence for claims made in the reports.
- an assessment of the organization's reporting and management processes concerning this reporting against the principles of Inclusivity, materiality and responsiveness as described in the AA1000 AccountAbility Principles Standard (2008).

## Conclusions

A detailed review against the AA1000 AccountAbility Principles of Inclusivity, Materiality and Responsiveness and the GRI Standards(2016) is set out below:

### Inclusivity

This report has reflected a fact that Ardentec has continually made a commitment to its stakeholders, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. The reporting systems are being developed to deliver the required information. There are fair reporting and disclosures for economic, social and environmental information in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the Ardentec's inclusivity issues.

### Materiality

Ardentec has established relative procedure in organization level, as the issues which were identified by all departments have been prioritized according to the extent of impact and applicable criterion for sustainable development of organization. Therefore, material issues were completely analyzed and the relative information of sustainable development was disclosed to enable its stakeholders to make informed judgments about the organization's management and performance. In our professional opinion the report covers the Ardentec's material issues.

### Responsiveness

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

### GRI Sustainability Reporting Standards (GRI Standards)

Ardentec provided us with their self-declaration of 'in accordance' with the GRI Standards(2016): the Core option (For each material topic covered by a topic-specific GRI Standard, comply with at least one topic-specific disclosure). Based on our review, we confirm that social responsibility and sustainable development disclosures with reference to the GRI Standards' disclosures are reported, partially reported or omitted. In our professional opinion the self-declaration covers the Ardentec's social responsibility and sustainability topics.

### Assurance level

The moderate level assurance provided is in accordance with AA1000 Assurance Standard (2008) in our review, as defined by the scope and methodology described in this statement.

### Responsibility

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

### Competency and Independence

The assurance team was composed of Lead Auditors experienced in industrial sector, and trained in a range of sustainability, environmental and social standards including AA1000 AS, ISO14001, OHSAS18001, ISO14064 and ISO 9001. BSI is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

For and on behalf of BSI:



Peter Pu  
Managing Director BSI Taiwan  
2018-06-01

bsi.



AA1000  
Licensed Assurance Provider  
000-4

Taiwan Headquarters: 5th Floor, No. 39, Ji-Hu Rd., Nei-Hu Dist., Taipei 114, Taiwan, R.O.C.

BSI Taiwan is a subsidiary of British Standards Institution.

## Annex 2 GRI Standards Reference Table

Verify result is as Annex 1 Independent Assurance Opinion Statement

GRI Standards Item		Corresponding chapter	Page	Remarks
GRI 102: General Disclosures 2016				
Organizational Profile				
102-1	Name of the organization	CSR Report cover		
102-2	Activities, brands, products, and services	1.1 Company Introduction 1.4 Professional Services	2 5-6	
102-3	Location of headquarters	About the Report	I	
102-4	Location of operations	About the Report	I	
102-5	Ownership and legal form	1.1 Company Introduction	2	
102-6	Markets served	1.5 Market Size and Performance	6-7	
102-7	Scale of the organization	1.2 Corporate Values	3	
102-8	Information on employees and other workers	5.7 Workforce Structure	72	
102-9	Supply chain	6.5 Supplier/Contractor Management	76-78	
102-10	Significant changes to the organization and its supply	3.7 Major Investment	39	
102-11	Precautionary Principle or approach	3.5 Internal Controls 3.6 Risk Management	34-35 35-38	
102-12	External initiatives	1.8 Honors and Accolades	10-12	
102-13	Membership of associations	1.8 Honors and Accolades	10-12	
Strategy				
102-14	Statement from senior decision-maker	Letter from Chairman and President 3.1 Governance Principles	IV-VI 29-30	
102-15	Key impacts, risks, and opportunities	1.5 Market Size and Performance	6-7	
Ethics and Integrity				
102-16	Values, principles, standards, and norms of behavior	3.4 Ethical Guideliness	34	
Governance				
102-18	Governance structure	1.3 The Organization 2.1 CSR Policy 3.2 Board of Director	4-5 14 30-32	
102-19	Delegating authority	2.2 The CSR Organization	14-15	
102-20	Executive-level responsibility for economic, environmental, and social topics	2.2 The CSR Organization	14-15	
102-21	Consulting stakeholders on economic, environmental, and social topics	2.3 Stakeholders and analysis of Topics of Concern	15-19	

	GRI Standards Item	Corresponding chapter	Page	Remarks
102-22	Composition of the highest governance body and its committees	3.2 Board of Directors	30-32	
102-23	Chair of the highest governance body	3.2 Board of Directors	30-32	
102-24	Nominating and selecting the highest governance body	3.2 Board of Directors	30-32	
102-25	Conflicts of interest	3.2 Board of Directors 3.3 Executive Compensation Policy	30-32 33	
102-26	Role of highest governance body in setting purpose, values, and strategy	1.2 Corporate Values	3	
102-27	Collective knowledge of highest governance body	3.1 Governance Principles	29-30	
102-30	Effectiveness of risk management processes	3.6 Risk Management	35-38	
102-31	Review of economic, environmental, and social topics	3.1 Governance Principles 3.6 Risk Management	29-30 35-38	
102-32	Highest governance body's role in sustainability reporting	About the Report	I	
102-36	Process for determining remuneration	3.3 Executive Compensation Policy	33	
Communicate with stakeholders				
102-37	Stakeholders' involvement in remuneration	2.5 Key Topics and the Identification of Boundaries	21-25	
102-40	List of stakeholder groups	2.3 Stakeholders and analysis of Topics of Concern	15-19	
102-41	Collective bargaining agreements	5.6 Labor-Management Harmony	69-71	
102-42	Identifying and selecting stakeholders	2.3 Stakeholders and analysis of Topics of Concern	15-19	
102-43	Approach to stakeholder engagement	2.3 Stakeholders and analysis of Topics of Concern	15-19	
102-44	Key topics and concerns raised	2.4 Topic Materiality Matrix	20	
Report overview				
102-45	Entities included in the consolidated financial statements	1.5 Market Size and Performance	2	
102-46	Defining report content and topic Boundaries	About the Report	I	
102-47	List of material topics	2.4 Topic Materiality Matrix	16	
102-48	Restatements of information	GRI Standards Reference Table	92-96	
102-49	Changes in reporting	1.1 Company Introduction	2	Refer to each chapter
102-50	Reporting period	About the Report	I	
102-51	About the Report	About the Report	I	
102-52	Reporting cycle	About the Report	I	
102-53	Contact point for questions regarding the report	About the Report	I	

	GRI Standards Item	Corresponding chapter	Page	Remarks
102-54	Claims of reporting in accordance with the GRI Standards	About the Report	I	
102-55	GRI content index	Annex 2	92-96	
102-56	External assurance	About the Report Annex 1	I 90-91	
GRI 103 : Disclosure of Management Approach 2016				
103-1	Explanation of the material topic and its Boundary	2.5 Key Topics and the Identification of Boundaries	21-25	
Disclosure of Specific Topic				
GRI 103 : Economic Performance 2016				
201-1	Direct economic value generated and distributed	1.6 Surplus Allocation 3.3 Executive Compensation Policy 5.3 Compensation and Benefits	8 33 59-62	
201-3	Defined benefit plan obligations and other retirement plans	5.3 Compensation and Benefits	59-62	
201-4	Financial assistance received from government	4.5 Greenhouse Gas Management	45-49	
GRI 202 : Market Presence 2016				
202-2	Proportion of senior management hired from the local community	5.2 Right People for Right Job	57-59	
GRI 203 : Indirect Economic Impacts 2016				
203-2	Significant indirect economic impacts	3.6 Risk Management	35-38	
GRI 204 : Procurement Practices 2016				
204-1	Proportion of spending on local suppliers	6.5 Supplier/Contractor Management	76-78	
GRI 205 : Anti corruption 2016				
205-1	Operations assessed for risks related to corruption	33.4 Ethical Guidelines	34	
205-2	Communication and training about anti-corruption policies and procedures	3.4 Ethical Guidelines	34	
205-3	Confirmed incidents of corruption and actions taken	3.4 Ethical Guidelines	34	
GRI 301 : Materials 2016				
301-1	Materials used by weight or volume	4.4 Disclosure of Environmental Information	44	
301-2	Recycled input materials used	4.7 Waste Management	51-55	
301-3	Reclaimed products and their packaging materials	4.7 Waste Management	51-55	
GRI 302 : Energy 2016				
302-1	Energy consumption within the organization	4.4 Disclosure of Environmental Information	44	
302-3	Energy intensity	4.3 Green Management System	42-43	
302-4	Reduction of energy consumption	4.5 Greenhouse Gas Management	45-49	

	GRI Standards Item	Corresponding chapter	Page	Remarks
302-5	Reductions in energy requirements of products and services	4.3 Green Management System	42-43	
GRI 303 : Water 2016				
303-1	Water withdrawal by source	4.6 Water Resource Management	50	
303-2	Water sources significantly affected by withdrawal of water	4.6 Water Resource Management	50	
303-3	Water recycled and reused	4.6 Water Resource Management	50	
GRI 304 : Biodiversity 2016				
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	4.1 Environmental Policy	41	
304-2	Significant impacts of activities, products, and services on biodiversity	4.7 Waste Management	51-55	
GRI 305 : Emissions 2016				
305-1	Direct (Scope 1) GHG emissions	4.5 Greenhouse Gas Management	45-49	The direct GHG emissions in Taiwan headquarters and Singapore Site has been verified by BSI
305-2	Energy indirect (Scope 2) GHG emissions	4.5 Greenhouse Gas Management	45-49	The direct GHG emissions in Taiwan headquarters and Singapore Site has been verified by BSI
305-4	GHG emissions intensity	4.3 Green Management System	42-43	
305-5	Reduction of GHG emissions	4.5 Greenhouse Gas Management	45-49	
305-6	Emissions of ozone-depleting substances (ODS)	4.5 Greenhouse Gas Management	45-49	Partial disclosure
GRI 306 : Effluents and Waste 2016				
306-1	Water discharge by quality and destination	4.7 Waste Management	51-55	
306-2	Waste by type and disposal method	4.7 Waste Management	51-55	
306-3	Significant spills	4.3 Green Management System	42-43	
306-4	Transport of hazardous waste	4.7 Waste Management	51-55	No import or export hazardous waste
306-5	Water bodies affected by water discharges and/or runoff	4.7 Waste Management	51-55	
GRI 307 : Environmental Compliance 2016				
307-1	Non-compliance with environmental laws and regulations	4.3 Green Management System	42-43	There were no violations in the year of report
GRI 401 : Employment 2016				
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	5.3 Compensation and Benefits	59-62	



GRI Standards Item		Corresponding chapter	Page	Remarks
GRI 402 : Labor Management Relations 2016				
402-1	Minimum notice periods regarding operational changes	5.6 Labor-Management Harmony	69-71	
GRI 403 : Occupational Health and Safety 2016				
403-1	Workers representation in formal joint management-worker health and safety committees	5.5 Workplace Health and Safety	64-68	
403-4	Health and safety topics covered in formal agreements with trade unions	5.5 Workplace Health and Safety	64-68	There is no union in the Company, but there is an occupational safety and health management committee dedicated to this function
GRI 404 : Training and Education 2016				
404-1	Average hours of training per year per employee	5.4 Career Development	62-64	
404-2	Programs for upgrading employee skills and transition assistance programs	5.4 Career Development	62-64	
404-3	Percentage of employees receiving regular performance and career development reviews	5.4 Career Development	62-64	
GRI 405 : Diversity and Equal Opportunity 2016				
405-1	Diversity of governance bodies and employees	3.2 Board of Directors 5.7 Workforce Structure	30-32 72	
GRI 406 : Non discrimination 2016				
406-1	Incidents of discrimination and corrective actions taken	GRI Standards Reference Table	92-96	There were no discriminations in 2017
GRI 408 : Child Labor 2016				
408-1	Operations and suppliers at significant risk for incidents of child labor	5.2 Right People for Right Job	57-59	
GRI 410 : Security Practices 2016				
410-1	Security personnel trained in human rights policies or procedures	5.4 Career Development	62-64	
GRI 412 : Human Rights Assessment 2016				
412-2	Employee training on human rights policies or procedures	5.4 Career Development	62-64	
GRI 414 : Supplier Social Assessment 2016				
414-1	New suppliers that were screened using social criteria	6.5 Supplier/Contractor Management	76-78	
GRI 418 : Customer Privacy 2016				
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.6 Risk Management 6.2 Customer Secrecy Protection	35-38 74-75	Complaints of violation of customer privacy or data leakage in 2017

## Annex 3 ISO 26000 Reference Table

ISO 26000 indicators		Corresponding chapter	Note
Organizational governance	Decision-making processes and structures that help fulfill social responsibilities and enable applications of core CSR principles	2. Sustainable Business Framework 3. Corporate Governance	
	Checks for regulatory compliance and avoidance of human rights risks	5. Employees as Partners 6.5 Supplier/Contractor Management	The Taiwan headquarters, Singapore Site and Korea Site are located in countries with sound human rights review. All business operations are located in the industrial zones supervised by the governments. All human rights related matters meet the regulations.
Civil and political rights	Human rights risk situations	5. Employees as Partners	
	Avoidance of complicity	5.6 Labor-Management Harmony	Employees are provided with a multiple means through which to communicate and file complaints
	Resolving grievances	5.6 Labor-Management Harmony	
	Discrimination and vulnerable groups	7.2 Caring for the Disadvantaged	
	Civil and political rights	5.6 Labor-Management Harmony	Ardentec cares for all aspects of national development but remains politically neutral; We encourage employees to exercise civil rights, but fully respect the political orientation of individual employees
	Economic, social and cultural rights	5. Employees as Partners	
	Fundamental principles and rights at work	5.2 Right People for Right Job 5.3 Compensation and Benefits	
	Employment and employment relations	5.2 Right People for the Right Job	
Labor practices	Conditions of work and social protection	5.2 Right People for Right Job 5.3 Compensation and Benefits 5.5 Workplace Health and Safety 5.6 Labor-Management Harmony	
	Social dialogue	2.6 Communication with stakeholders	
	Health and safety at work	5.5 Workplace Health and Safety	
	Human development and training in the workplace	5.4 Career Development 5.5 Workplace Health and Safety	

The environment	Prevention of pollution	4.3 Green Management System 4.7 Waste Management	
	Sustainable resource use	4.7 Waste Management	
	Climate change mitigation and adaptation	4.1 Environmental Policy 4.3 Green Management System	
	Protection of the environment, biodiversity and restoration of natural habitats	4.1 Environmental Policy 7.3 Sustainability of the Environment and Ecosystem	
Fair operating practices	Anti-corruption	3.4 Ethical Guidelines 5.4 Career Growth	
	Responsible political involvement		Ardentec cares for all aspects of national development but remains politically neutral; We encourage employees to exercise civil rights, but fully respect the political orientation of individual employees
	Fair competition	3.4 Ethical Guidelines	The Company serves corporate customers and is not involved in the mass market. Ardentec complies with regulations that govern intellectual property rights and fair trading. It maintains sound and legal business interactions with customers as well as upstream and downstream partners.
	Promoting social responsibility in the value chain	6.1 Customer Service 6.5 Supplier/Contractor Management	
	Respect for property rights	3.6 Risk Management	The Company complies with regulations that govern intellectual property rights. It maintains sound and legal business interactions with customers as well as upstream and downstream partners.

Consumer Topics	Fair marketing, factual and unbiased information and fair contractual practices	3.4 Ethical Guidelines	The Company complies with regulations that govern fair trade. It maintains sound and legal business interactions with customers as well as upstream and downstream partners.
	Protecting consumers' health and safety		The Company's business activities were primarily semiconductor testing with no tangible products produced. The testing procedures pose no health or safety concerns to the customers.
	Sustainable consumption		The Company maintains long-term business relationships with its corporate customers
	Consumer service, support, and complaint and dispute resolution	6.1 Customer Service 6.4 Customer Satisfaction Surveys	The primary operation does not contain any tangible products. Therefore, there is no concern about customer services, support, complaints and disputes.
	Consumer data protection and privacy	6.2 Customer Secrecy Protection	The primary operation does not contain any tangible products. Therefore, it does not involve customer data and privacy.
	Access to essential services	6.1 Customer Service	
	Education and awareness		The Company's services are not targeted at individual consumers
Community involvement and development	Community involvement	7. Community involvement	
	Education and culture	7.1 Educational Support	
	Employment creation and skills development	1.7 Development strategies and innovations 5.2 Right People for the Right Job	
	Technology development and access	1.7 Development Strategies and Innovations	
	Wealth and income creation	1.5 Market Size and Performance 5.3 Compensation and Benefits	
	Health	5.5 Workplace Health and Safety	
	Social investment	7. Community involvement	

## Annex 4 UN Sustainable Development Goals Reference Table

	Sustainable Development Goals	Goal Item	Corresponding chapter	Page
3	Ensure healthy lives and promote well-being for all at all ages	3.8 3.9	5.5 Workplace Health and Safety	64
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.4 4.5 4.7	5.4 Career Growth 7.1 Educational Support	62 81
5	Achieve gender equality and empower all women and girls	5.1 5.2 5.b	5.2 Right People for Right Job 5.3 Compensation and Benefits 5.4 Career Growth	57 59 62
6	Ensure availability and sustainable management of water and sanitation for all	6.3 6.4	4.6 Water Resource Management 4.7 Waste Management	50 51
7	Ensure access to affordable, reliable, sustainable and modern energy for all	7.2 7.3	4.3 Green Management System 4.5 Greenhouse Gas Management	42 45
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.2 8.7 8.8	1.7 Development Strategies and Innovations 5.2 Right People for Right Job 5.4 Career Growth	9 57 62
12	Ensure sustainable consumption and production patterns	12.5	4.3 Green Management System 4.5 Greenhouse Gas Management 4.7 Waste Management	42 45 51
13	Take urgent action to combat climate change and its impacts	13.3	4.5 Greenhouse Gas Management 5.4 Career Growth	45 62
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	16.5	3.1 Governance Principles	29



## Annex 5 The UN Global Compact Reference Table

Classification and principles of The UN Global Compact		Corresponding Chapter	Note
Human rights	Businesses should support and respect the protection of internationally proclaimed human rights	5. Employees as Partners 6.5 Supplier/contractor management	5. Employees as Partners 6.5 Supplier/contractor management The Taiwan headquarters, Singapore, Korea, and Giga Solution subsidiaries are located in countries with sound human rights review. All business operations are located in the industrial zones supervised by the governments. All human rights related matters meet the regulations.
	Business should make sure that they are not complicit in human rights abuses		
Labor	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	5.6 Labor-Management Harmony	
	Elimination of all forms of forced and compulsory labor	5.2 Right People for Right Job 6.5 Supplier/contractor management	
	Effective abolition of child labor	5.2 Right People for the Right Job 6.5 Supplier/Contractor Management	
	Elimination of discrimination in respect of employment and occupation	5.2 Right People for Right Job 5.3 Compensation and Benefits	

Environment	Business should support a precautionary approach to environmental challenges	<p>4.3 Green Management System</p> <p>4.5 Greenhouse Gas Management</p> <p>4.6 Water Resource Management</p> <p>4.7 Waste Management</p> <p>7.3 Sustainability of the Environment and Ecosystem</p>	
	Undertake initiatives to promote greater environmental responsibility	<p>4.3 Green Management System</p> <p>4.5 Greenhouse Gas Management</p> <p>4.6 Water Resource Management</p> <p>4.7 Waste Management</p> <p>7.3 Sustainability of the Environment and Ecosystem</p>	
	Encourage the development and diffusion of environmentally friendly technologies	7.3 Sustainability of the Environment and Ecosystem	Ardentec primarily offers testing services and technologies, and does not produce tangible products.
Anti-corruption	Businesses should work against corruption in all its forms, including extortion and bribery	<p>3.1 Governance Principles</p> <p>3.4 Ethical Guidelines</p> <p>3.5 Internal Controls</p> <p>6.5 Supplier/Contractor Management</p>	

## Annex 6 Corporate Social Responsibility Best Practice Principles for TWSE/GTSM Listed Companies Reference Table

Chapters		Corresponding chapter
Article 1	In order to assist companies listed on the Taiwan Stock Exchange Corporation ("TWSE") and GreTai Securities Market ("GTSM") (collectively referred to as "TWSE/GTSM listed companies") to fulfill their corporate social responsibility initiatives and to promote economic, environmental, and social advancement for purposes of sustainable development, the TWSE and GTSM hereby jointly adopt the Principles to be followed by TWSE/GTSM listed companies. TWSE/GTSM listed companies are advised to promulgate their own corporate social responsibility principles in accordance with the Principles to manage their economic, environmental and social risks and impact	About the Report Letter from Chairman and President 2.2 The CSR Organization
Article 2	The Principles applies to TWSE/GTSM listed companies, including the entire operations of each such company and its business group. The Principles encourages TWSE/GTSM listed companies to actively fulfill their corporate social responsibility in the course of their business operations so as to follow international development trends and to contribute to the economic development of the country, to improve the quality of life of employees, the community and society by acting as responsible corporate citizens, and to enhance competitive edges built on corporate social responsibility.	Letter from Chairman and President 2.Sustainable Business Framework 3.Corporate Governance
Article 3	In fulfilling corporate social responsibility initiatives, TWSE/GTSM listed companies shall, in its corporate management guidelines and business operations, give due consideration to the rights and interests of stakeholders and, while pursuing sustainable operations and profits, also give due consideration to the environment, society and corporate governance.	2.Sustainable Business Framework 4.Environmental Protection 7. Community Engagement
Article 4	To implement corporate social responsibility initiatives, TWSE/GTSM listed companies are advised to follow the principles below: 1.Exercise corporate governance. 2.Foster a sustainable environment. 3.Preserve public welfare. 4.Enhance disclosure of corporate social responsibility information	About the Report Letter from Chairman and President 3.1 Governance Principles
Article 5	TWSE/GTSM listed companies shall take into consideration the correlation between the development of domestic and international corporate social responsibility principles and corporate core business operations, and the effect of the operation of individual companies and of their respective business groups as a whole on stakeholders, in establishing their policies, systems or relevant management guidelines, and concrete promotion plans for corporate social responsibility programs, which shall be approved by the board of directors and then reported to the shareholders meeting. When a shareholder proposes a motion involving corporate social responsibility, the company's board of directors is advised to review and consider including it in the shareholders meeting agenda.	2.1 CSR Policy
Article 6	TWSE/GTSM listed companies are advised to follow the Corporate Governance Best Practice Principles for TWSE/GTSM Listed Companies, the Ethical Corporate Management Best Practice Principles for TWSE/GTSM Listed Companies, and the Code of Ethical Conduct for TWSE/GTSM Listed Companies to establish effective corporate governance frameworks and relevant ethical standards so as to enhance corporate governance.	3.4 Ethical Guidelines

Article 7	<p>The directors of a TWSE/GTSM listed company shall exercise the due care of good administrators to urge the company to perform its corporate social responsibility initiatives, examine the results of the implementation thereof from time to time and continually make adjustments so as to ensure the thorough implementation of its corporate social responsibility policies.</p> <p>The board of directors of a TWSE/GTSM listed company is advised to give full consideration to the interests of stakeholders, including the following matters, in the company's performance of its corporate social responsibility initiatives:</p> <ol style="list-style-type: none"> <li>1. Identifying the company's corporate social responsibility mission or vision, and declaring its corporate social responsibility policy, systems or relevant management guidelines;</li> <li>2. Making corporate social responsibility the guiding principle of the company's operations and development, and ratifying concrete promotional plans for corporate social responsibility initiatives; and</li> <li>3. Enhancing the timeliness and accuracy of the disclosure of corporate social responsibility information.</li> </ol> <p>The board of directors shall appoint executive-level positions with responsibility for economic, environmental, and social issues resulting from the business operations of a TWSE/GTSM listed company, and to report the status of the handling to the board of directors. The handling procedures and the responsible person for each relevant issue shall be concrete and clear.</p>	<p>Letter from Chairman and President</p> <p>2.1 CSR Policies</p> <p>3.1 Governance Principles</p>
Article 8	<p>TWSE/GTSM listed companies are advised to, on a regular basis, organize education and training on the implementation of corporate social responsibility initiatives, including promotion of the matters prescribed in paragraph 2 of the preceding article.</p>	3.4 Ethical Guidelines
Article 9	<p>For the purpose of managing corporate social responsibility initiatives, TWSE/GTSM listed companies are advised to establish an exclusively (or concurrently) dedicated unit to be in charge of proposing and enforcing the corporate social responsibility policies, systems, or relevant management guidelines, and concrete promotional plans and to report on the same to the board of directors on a periodic basis.</p> <p>TWSE/GTSM listed companies are advised to adopt reasonable remuneration policies, to ensure that remuneration arrangements support the strategic aims of the organization, and align with the interests of stakeholders.</p> <p>It is advised that the employee performance evaluation system be combined with corporate social responsibility policies, and that a clear and effective incentive and discipline system be established.</p>	2.2 The CSR Organization
Article 10	<p>TWSE/GTSM listed companies shall, based on respect for the rights and interests of stakeholders, identify stakeholders of the company, and establish a designated section for stakeholders on the company website; understand the reasonable expectations and demands of stakeholders through proper communication with them, and adequately respond to the important corporate social responsibility Topics which they are concerned about.</p>	<p>2.3 Stakeholders and Analysis to Topics of Concern</p> <p>2.6 Communication with stakeholders</p>
Article 11	<p>TWSE/GTSM listed companies shall follow relevant environmental laws, regulations and international standards to properly protect the environment and shall endeavor to promote a sustainable environment when engaging in business operations and internal management.</p>	4.1 Environmental Policy
Article 12	<p>TWSE/GTSM listed companies are advised to endeavor to utilize all resources more efficiently and use renewable materials which have a low impact on the environment to improve sustainability of natural resources.</p>	4.3 Green Management System

Article 13	<p>TWSE/GTSM listed companies are advised to establish proper environment management systems based on the characteristics of their industries. Such systems shall include the following tasks:</p> <ol style="list-style-type: none"> <li>1. Collecting sufficient and up-to-date information to evaluate the impact of the company's business operations on the natural environment.</li> <li>2. Establishing measurable goals for environmental sustainability, and examining whether the development of such goals should be maintained and whether it is still relevant on a regular basis.</li> <li>3. Adopting enforcement measures such as concrete plans or action plans, and examining the results of their operation on a regular basis.</li> </ol>	44.3 Green Management System
Article 14	<p>TWSE/GTSM listed companies are advised to establish a dedicated unit or assign dedicated personnel for drafting, promoting, and maintaining relevant environment management systems and concrete action plans, and should hold environment education courses for their managerial officers and other employees on a periodic basis.</p>	4.3 Green Management System
Article 15	<p>TWSE/GTSM listed companies are advised to take into account the effect of business operations on ecological efficiency, promote and advocate the concept of sustainable consumption, and conduct research and development, procurement, production, operations, and services in accordance with the following principles to reduce the impact on the natural environment and human beings from their business operations:</p> <ol style="list-style-type: none"> <li>1. Reduce resource and energy consumption of their products and services.</li> <li>2. Reduce emission of pollutants, toxins and waste, and dispose of waste properly.</li> <li>3. Improve recyclability and reusability of raw materials or products.</li> <li>4. Maximize the sustainability of renewable resources.</li> <li>5. Enhance the durability of products.</li> <li>6. Improve efficiency of products and services.</li> </ol>	<p>4.5 Greenhouse Gas Management</p> <p>4.6 Water Resource Management</p> <p>4.7 Waste Management</p>
Article 16	<p>To improve water use efficiency, TWSE/GTSM listed companies shall properly and sustainably use water resources and establish relevant management measures.</p> <p>TWSE/GTSM listed companies shall construct and improve environmental protection treatment facilities to avoid polluting water, air and land, and use their best efforts to reduce adverse impact on human health and the environment by adopting the best practical pollution prevention and control measures.</p>	4.6 Water Resource Management
Article 17	<p>TWSE/GTSM listed companies are advised to adopt standards or guidelines generally used in Taiwan and abroad to enforce corporate greenhouse gas inventory and to make disclosures thereof, the scope of which shall include the following:</p> <ol style="list-style-type: none"> <li>1. Direct greenhouse gas emissions: emissions from operations that are owned or controlled by the company.</li> <li>2. Indirect greenhouse gas emissions: emissions resulting from the generation of externally purchased or acquired electricity, heating, or steam.</li> </ol> <p>TWSE/GTSM listed companies are advised to monitor the impact of climate change on their operations and should establish company strategies for energy conservation and carbon and greenhouse gas reduction based upon their operations and the result of a greenhouse gas inventory. Such strategies should include obtaining carbon credits to promote and minimize the impact of their business operations on climate change.</p>	4.3 Green Management System



Article 18	<p>TWSE/GTSM listed companies shall comply with relevant laws and regulations, and the International Bill of Human Rights, with respect to rights such as gender equality, the right to work, and prohibition of discrimination.</p> <p>A TWSE/GTSM listed company, to fulfill its responsibility to protect human rights, shall adopt relevant management policies and processes, including:</p> <ol style="list-style-type: none"> <li>1. Presenting a corporate policy or statement on human rights.</li> <li>2. Evaluating the impact of the company's business operations and internal management on human rights, and adopting corresponding handling processes.</li> <li>3. Reviewing on a regular basis the effectiveness of the corporate policy or statement on human rights.</li> <li>4. In the event of any infringement of human rights, the company shall disclose the processes for handling of the matter with respect to the stakeholders involved.</li> </ol> <p>TWSE/GTSM listed companies shall comply with the internationally recognized human rights of labor, including the freedom of association, the right of collective bargaining, caring for vulnerable groups, prohibiting the use of child labor, eliminating all forms of forced labor, eliminating recruitment and employment discrimination, and shall ensure that their human resource policies do not contain differential treatments based on gender, race, socioeconomic status, age, or marital and family status, so as to achieve equality and fairness in employment, hiring conditions, remuneration, benefits, training, evaluation, and promotion opportunities.</p> <p>TWSE/GTSM listed companies shall provide an effective and appropriate grievance mechanism with respect to matters adversely impacting the rights and interests of the labor force, in order to ensure equality and transparency of the grievance process. Channels through which a grievance may be raised shall be clear, convenient, and unobstructed. A company shall respond to any employee's grievance in an appropriate manner.</p>	5.1 Employee Partnership Policy
Article 19	<p>TWSE/GTSM listed companies shall provide information for their employees so that the employees have knowledge of the labor laws and the rights they enjoy in the countries where the companies have business operations.</p>	5.2 Right People for Right Job
Article 20	<p>TWSE/GTSM listed companies are advised to provide safe and healthful work environments for their employees, including necessary health and first-aid facilities and shall endeavor to curb dangers to employees' safety and health and to prevent occupational accidents.</p> <p>TWSE/GTSM listed companies are advised to organize training on safety and health for their employees on a regular basis.</p>	5.5 Workplace Health and Safety
Article 21	<p>TWSE/GTSM listed companies are advised to create an environment conducive to the development of their employees' careers and establish effective training programs to foster career skills.</p> <p>TWSE/GTSM listed companies shall appropriately reflect the corporate business performance or achievements in the employee remuneration policy, to ensure the recruitment, retention, and motivation of human resources, and achieve the objective of sustainable operations.</p>	5.4 Career Growth

Article 22	<p>TWSE/GTSM listed companies shall establish a platform to facilitate regular two-way communication between the management and the employees for the employees to obtain relevant information on and express their opinions on the company's operations, management and decisions.</p> <p>TWSE/GTSM listed companies shall respect the employee representatives' rights to bargain for the working conditions, and shall provide the employees with necessary information and hardware equipment, in order to improve the negotiation and cooperation among employers, employees and employee representatives. TWSE/GTSM listed companies shall, by reasonable means, inform employees of operation changes that might have material impacts.</p>	5.6 Labor-Management Harmony
Article 22-1	<p>A TWSE/GTSM listed company is advised to treat customers or consumers of its products or services in a fair and reasonable manner, including according to the following principles: fairness and good faith in contracting, duty of care and fiduciary duty, truthfulness in advertising and soliciting, fitness of products or services, notification and disclosure, commensuration between compensation and performance, protection of the right to complain, professionalism of salespersons etc. Said company shall also develop the relevant strategies and specific measures for implementation.</p>	
Article 23	<p>TWSE/GTSM listed companies shall ensure the quality of their products and services by following the laws and regulations of the government and relevant standards of their industries. TWSE/GTSM listed companies shall follow relevant laws, regulations and international guidelines when marketing or labeling their products and services and shall not deceive, mislead, commit fraud or engage in any other acts which would betray consumers' trust or damage consumers' rights or interests.</p>	6.1 Customer Service
Article 24	<p>TWSE/GTSM listed companies shall ensure the quality of their products and services by following the laws and regulations of the government and relevant standards of their industries. TWSE/GTSM listed companies shall follow relevant laws, regulations and international guidelines when marketing or labeling their products and services and shall not deceive, mislead, commit fraud or engage in any other acts which would betray consumers' trust or damage consumers' rights or interests.</p>	Major business is semiconductor testing service for business customer, no physical product to consumers, thus no need of labelling for product nor advertisement for consumers.
Article 25	<p>TWSE/GTSM listed companies are advised to evaluate and manage all types of risks that could cause interruptions in operations, so as to reduce the impact on consumers and society. TWSE/GTSM listed companies are advised to provide a clear and effective procedure for accepting consumer complaints to fairly and timely handle consumer complaints, shall comply with laws and regulations related to the Personal Information Protection Act for respecting consumers' rights of privacy and shall protect personal data provided by consumers.</p>	Major business is semiconductor testing service for business customer, no physical product to consumers, thus no need of labelling for product nor advertisement for consumers.
Article 26	<p>TWSE/GTSM listed companies are advised to assess the impact their procurement has on society as well as the environment of the community that they are procuring from, and shall cooperate with their suppliers to jointly implement the corporate social responsibility initiative. Prior to engaging in commercial dealings, TWSE/GTSM listed companies are advised to assess whether there is any record of a supplier's impact on the environment and society, and avoid conducting transactions with those against corporate social responsibility policy. When TWSE/GTSM listed companies enter into a contract with any of their major suppliers, the content should include terms stipulating mutual compliance with corporate social responsibility policy, and that the contract may be terminated or rescinded any time if the supplier has violated such policy and has caused significant negative impact on the environment and society of the community of the supply source.</p>	6.5 Supplier/Contractor Management

Article 27	<p>TWSE/GTSM listed companies shall evaluate the impact of their business operations on the community, and adequately employ personnel from the location of the business operations, to enhance community acceptance.</p> <p>TWSE/GTSM listed companies are advised to, through equity investment, commercial activities, endowments, volunteering service or other charitable professional services etc., dedicate resources to organizations that commercially resolve social or environmental Topics, participate in events held by citizen organizations, charities and local government agencies relating to community development and community education to promote community development.</p>	<p>5.2 Right People for Right Job</p> <p>7. Community Involvement</p>
Article 28	<p>TWSE/GTSM listed companies shall disclose information according to relevant laws, regulations and the Corporate Governance Best Practice Principles for TWSE/GTSM listed Companies and shall fully disclose relevant and reliable information relating to their corporate social responsibility initiatives to improve information transparency.</p> <p>Relevant information relating to corporate social responsibility which TWSE/GTSM listed companies shall disclose includes:</p> <ol style="list-style-type: none"> <li>1.The policy, systems or relevant management guidelines, and concrete promotion plans for corporate social responsibility initiatives, as resolved by the board of directors.</li> <li>2.The risks and the impact on the corporate operations and financial condition arising from exercising corporate governance, fostering a sustainable environment and preserving social public welfare.</li> <li>3.Goals and measures for realizing the corporate social responsibility initiatives established by the companies, and performance in implementation.</li> <li>4.Major stakeholders and their concerns.</li> <li>5.Disclosure of information on major suppliers' management and performance with respect to major environmental and social Topics.</li> <li>6.Other information relating to corporate social responsibility initiatives.</li> </ol>	<p>5. Employees as Partners</p> <p>7. Community Involvement</p>
Article 29	<p>TWSE/GTSM listed companies shall adopt internationally widely recognized standards or guidelines when producing corporate social responsibility reports, to disclose the status of their implementation of the corporate social responsibility policy. It also is advisable to obtain a third-party assurance or verification for reports to enhance the reliability of the information in the reports. The reports are advised to include:</p> <ol style="list-style-type: none"> <li>1.The policy, system, or relevant management guidelines and concrete promotion plans for implementing corporate social responsibility initiatives.</li> <li>2.Major stakeholders and their concerns.</li> <li>3.Results and a review of the exercising of corporate governance, fostering of a sustainable environment, preservation of public welfare and promotion of economic development.</li> <li>4.Future improvements and goals.</li> </ol>	<p>About the Report</p> <p>2.Sustainable Business Framework</p>
Article 30	<p>TWSE/GTSM listed companies shall at all times monitor the development of domestic and foreign corporate social responsibility standards and the change of business environment so as to examine and improve their established corporate social responsibility framework and to obtain better results from the implementation of the corporate social responsibility policy.</p>	<p>2.2 The CSR Organization</p>





[www.ardentec.com](http://www.ardentec.com)

### Taiwan Headquarters

---

No.3, Gongye 3rd Rd., Hukou Township,  
Hsinchu County 30351, Taiwan, R.O.C.  
Telephone +886 3-5976688  
Fax +886 3-5971396

### Giga Solution

---

7F., No.6, Keji 5th Rd., East Dist.,  
Hsinchu City 300, Taiwan, R.O.C.  
Telephone +886 3-6116168  
Fax +886 3-5630100  
<http://www.giga-solution.com>

### Singapore Subsidiary

---

12 Woodlands Loop, #02-00  
Singapore 738283  
Telephone +65-64821000  
Fax +65-62573201

### Korea Subsidiary

---

61, Cheongbuksandan-ro,  
Cheongbuk-myeon, Pyeongtaek-si,  
Gyeonggi-do 451-833, Korea  
Telephone +82-31-681-9168  
Fax +82-31-684-6653