

# **Ardentec**

## Corporate Social Responsibility Report

2019

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



## About the Report

102-3 102-4 102-32 102-46 102-50

102-51 102-52 102-53 102-54 102-56

### Report Period and Publishing

This report is the eighth corporate social responsibility report published by Ardentec Corporation which discloses the performance of corporate social responsibility (CSR) from January 1, 2019 to December 31, 2019. 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 2019, and we expect to publish the next report in June 2021.

### Scope of Report

This report discloses the economic, environmental, and social aspects of Ardentec's performance, including its headquarters, its Singapore, Korea, Nanjing (China) subsidiaries, and also GIGA Solution subsidiary.

### 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 AP (2018) 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.

### 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.

#### CSR Contact

Ardentec Corporation

Secretariat of Corporate Social Responsibility (CSR) Committee

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

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

E-mail: [csr@ardentec.com](mailto:csr@ardentec.com)

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



## About the Report



## Letter from the Management

# A



### About Ardentec

1.1	Company Introduction	07
1.2	Corporate Values	08
1.3	The Organization	08
1.4	Professional Services	09
1.5	Market Size and Performance	10
1.6	Surplus Allocation	11
1.7	Development Strategies and Innovations	11
1.8	Honors and Accolades	12



### Corporate Governance

3.1	Governance Principles	29
3.2	Board of Directors	29
3.3	Executive Compensation Policy	31
3.4	Ethical Guidelines	31
3.5	Internal Controls	32
3.6	Risk Management	32
3.7	Major Investment	35



### Sustainable Business Framework

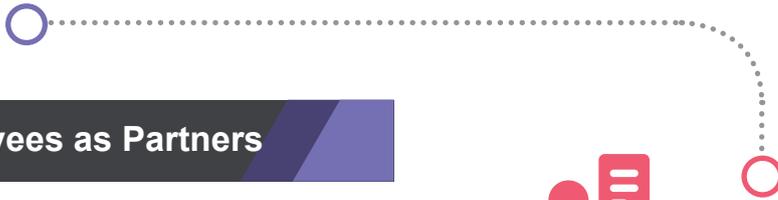
2.1	CSR Policy	16
2.2	The CSR Organization	16
2.3	Corporate Socail Responsibility Performance	17
2.4	Analysis of Stakeholders and Topics of Concern	18
2.5	Topic Materility Matrix	22
2.6	Material Topics Value Chain and Managemant Strategy	23
2.7	Communication with Stakeholders	27



### Environmental Protection

4.1	Environmental Policy	37
4.2	Environmental Protection Expenses and Investment	37
4.3	Climate Change and Energy Management	38
4.4	Disclosure of Environmental Information	45
4.5	Water Resource Management	47
4.6	Pollution Prevention	48





## Employees as Partners

5.1	Employee Partnership Policy	51
5.2	Right People for Right Job	51
5.3	Compensation and Benefits	52
5.4	Career Growth	56
5.5	Workplace Health and Safety	58
5.6	Labor-Management Harmony	61
5.7	Workforce Structure	63



## Community Involvement

7.1	Educational Support	70
7.2	Caring for the Disadvantaged	72
7.3	Sustainability of the Environment and Ecosystem	75



## Customer Service and Supplier Management

6.1	Customer Service	65
6.2	Customer Secrecy Protection	65
6.3	Quality Optimization of Customer Service	66
6.4	Customer Satisfaction Surveys	66
6.5	Supplier/Contractor Management	66
6.6	Supplier Audits	68
6.7	Supplier/Contractor Workplace Safety	68



## Annexes

Annex 1	Independent Assurance Opinion Statement	80
Annex 2	GRI Standards Reference Table	82
Annex 3	ISO26000 Reference Table	87
Annex 4	UN Sustainable Development Goals (SDGs) Reference Table	89
Annex 5	The UN Global Compact Reference Table	90
Annex 6	Corporate Social Responsibility Best Practice Principles for TWSE/GTSM Listed Companies Reference Table	91



# LETTER FROM THE

## Dear friends interested in the sustainable development of Ardentec:

How time flies! Ardentec was founded in 1999 and 2019 marked our 20th year in the business! Throughout this time, Ardentec continued to engage in the innovation and improvement of semiconductor testing technologies. We also instilled the "Ardent" DNA in our headquarters and subsidiaries throughout Asia. The mission of social justice and environmental sustainability has been embraced by everyone at Ardentec as their innate responsibility. The fulfillment of economic performance and corporate social responsibility (CSR) has served to take us to new heights every year. It is my pleasure to share with all friends of Ardentec our performance in corporate social responsibility in the 20th year.

It is the good fortune of Ardentec to have customers that value the practice of CSR. Thanks to our shared philosophy, Ardentec and our suppliers were able to adopt the Responsible Business Alliance Code of Conduct (RBA CoC) and development philosophy as a common guide for realizing the long-term goal of extending the economic aspect into social justice and environmental sustainability throughout the supply chain.

Ardentec headquarters took part in the Validated Audit Program (VAP) of Responsible Business Alliance in January 2019 to audit the outcomes of our CSR practices and achieved a full score of 200. The RBA also presented the headquarters' 4 sites with the Factory of Choice Award in recognition of Ardentec's accomplishments in CSR fulfillment in January 2020. These were serve as the foundation for further CSR improvements by all group subsidiaries and supply chain partners.

Forward-looking sustainability goals are important to Ardentec as well as a corporate citizen. In 2019, the Ardentec Group began rolling out Very Early Smoke Detection Apparatus at domestic and overseas sites. The new system exceeds regulatory requirements and the roll-out should be completed in 2020. Fire prevention and safety will now be taken to a new level and enhance the management of business continuity. The ISO 50001 energy management system was implemented at headquarters in 2019 to serve as a stepping stone for

continued reductions in greenhouse gas (GHG) emissions. The Group as a whole sets annual energy conservation and emission reduction targets. Regular management reviews ensure that GHG reduction targets are met. Ardentec is not in a water-intensive industry but our employee partners still strive to reduce the consumption of water resources in the belief that every drop matters. In 2019, water resource management at Ardentec was subsequently recognized with a High-Distinction Award in the Industry category of Ministry of Economic Affairs Implementation of Water Conservation Consulting and Improvement Awards. Carbon footprint verification operations will be introduced in 2020 to do what we can in every aspect to mitigate climate change.

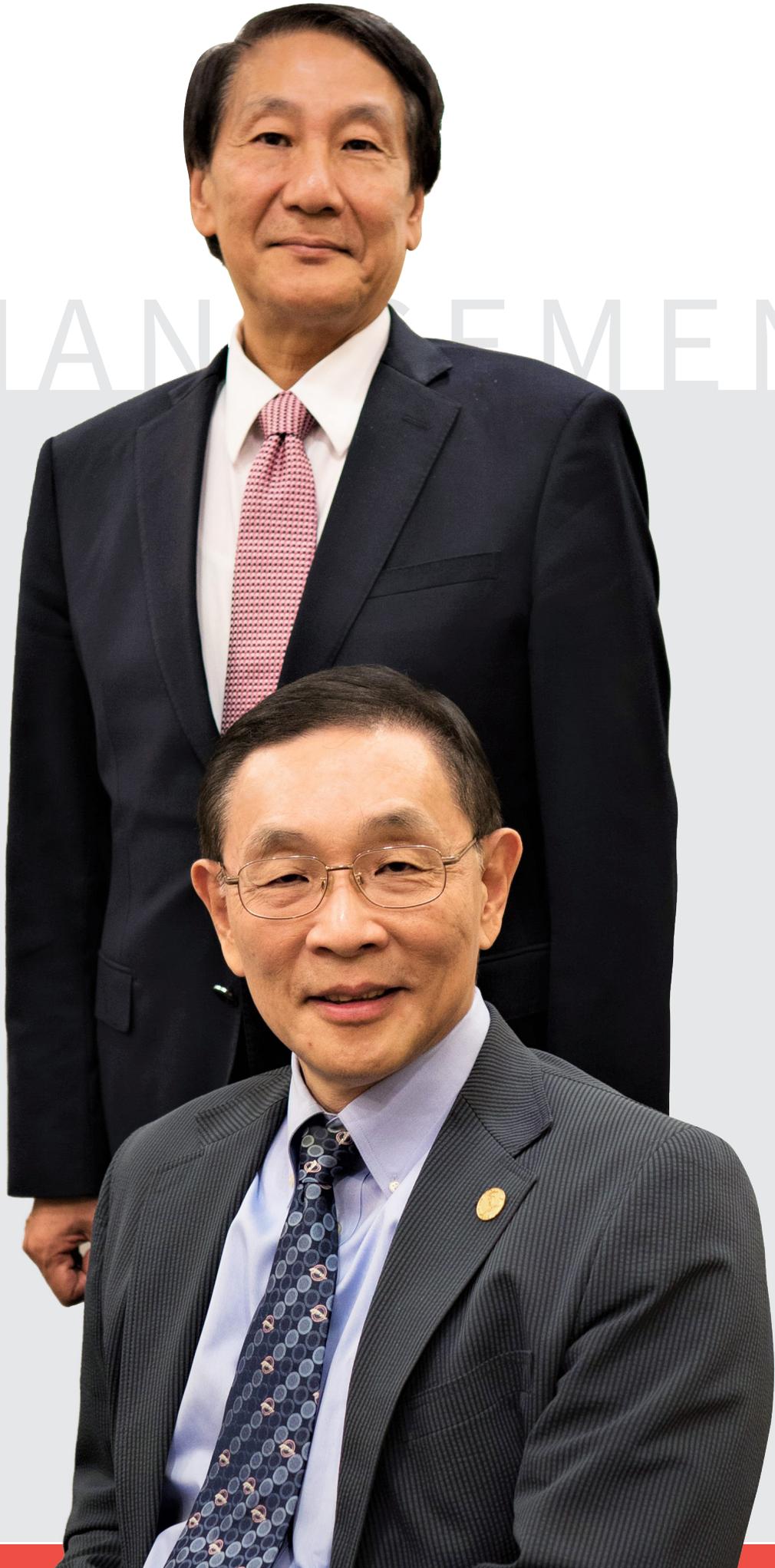
"Take joy in your work" is what Ardentec expects of our employees. The progressive introduction of new rosters, encouraging people to take leave and other measures help employee partners reduce their working time so that they can have more time outside of work for self-enrichment and family life. We believe that happy employees only make the Ardent DNA all the stronger. Ardentec donates and supports a variety of educational or charity initiatives organized charity groups every year. When local and overseas employees make a donation, run for love, or make compassionate visits to support these causes, they are always filled with smiles and take great joy in what they do! Employee partners have continued to maintain their enthusiasm for environmental protection. The Internatioal Coastal Cleanup saw local and overseas employees mobilize their friends and bring out their families to engage in direct environmental education underneath the blazing sun blown by the sea wind.

CSR provides path to greater social justice and environmental sustainability through the fusion of people, business and the environment. In the future, Ardentec will continue to uphold the same philosophy from 20 years ago in adhering to the relevant international principles, caring about society, push for progress, and continue to guide our employees and supply chain partners along a path to a better future!

Chairman 

Vice Chairman/President 

# THE MANAGEMENT



A photograph of a modern office hallway. The ceiling is white with recessed circular lights. The wall is covered in vertical blue slats. Large, 3D red letters spell out 'Ardentec' and Chinese characters '欣然科技' are mounted on the wall. The hallway recedes into the distance.

**Ardentec** 欣然科技

# A

## 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 Innovation
- 1.8** Honors and Accolades

## 1.1 Company Introduction 102-2 102-3 102-5

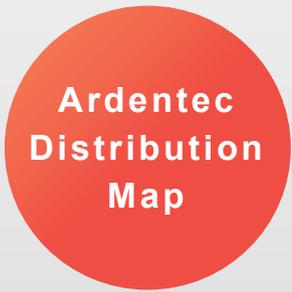
Ardentec Corporation is a specialized semiconductor testing company. The total capital 2019 is NT\$4.9 billion. The company's service includes testing engineering development and product testing of various semiconductors.

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 (China) 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.



### Taiwan

#### Headquarters

Ardentec Corporation

#### Subsidiary

GIGA Solution Tech. Co., Ltd.

### Singapore Subsidiary

Ardentec Singapore Pte. Ltd.

### Korea Subsidiary

Ardentec Korea Co., Ltd.

### Nanjing Subsidiary

Ardentec Nanjing Co., Ltd.



## 1.2 Corporate Values 102-26

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.

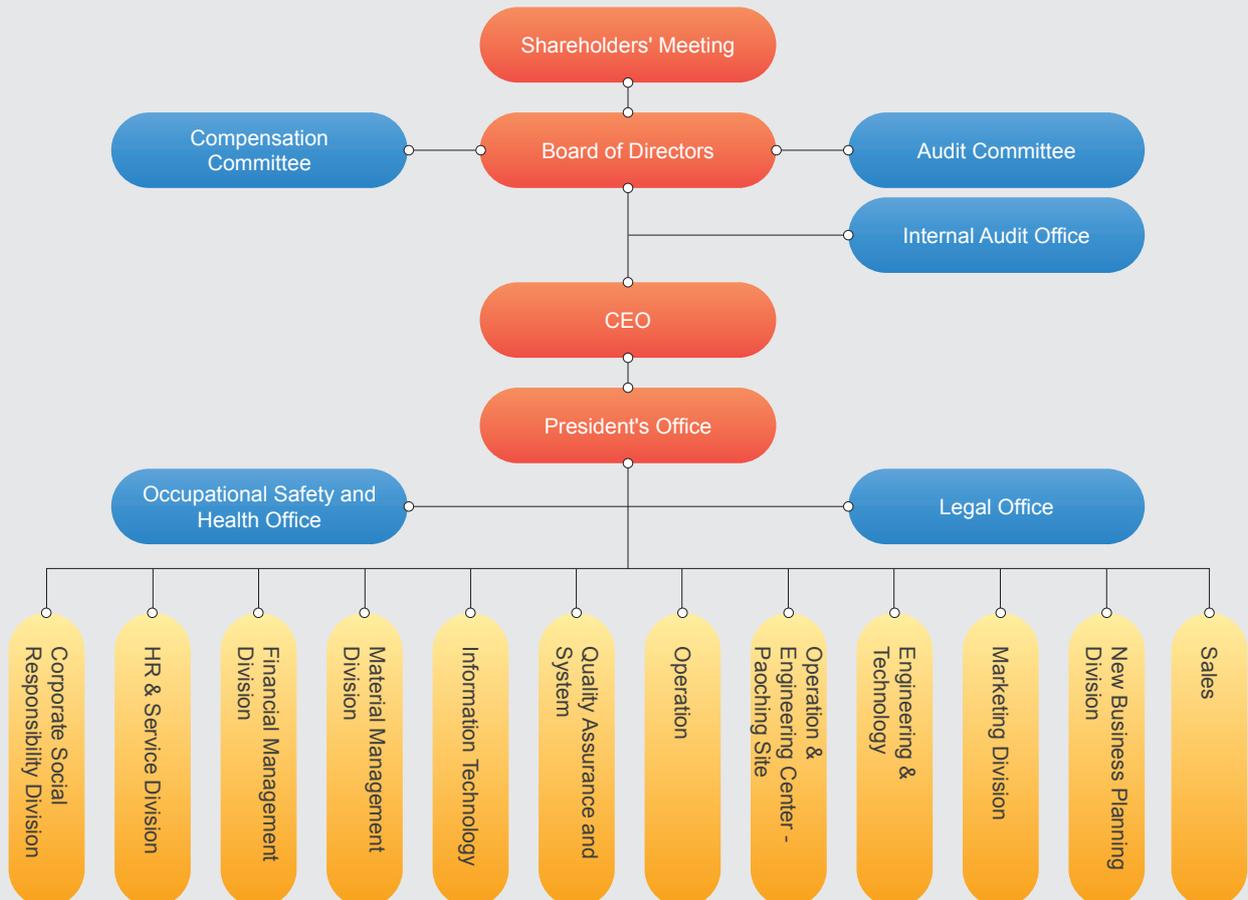
In addition, Ardentec has incorporated topics of environmental protection, employee care, and society feedback into its corporate governance, and thereby ensure sustainable growth for the Company, the employees, the environment, and society alike.

# A

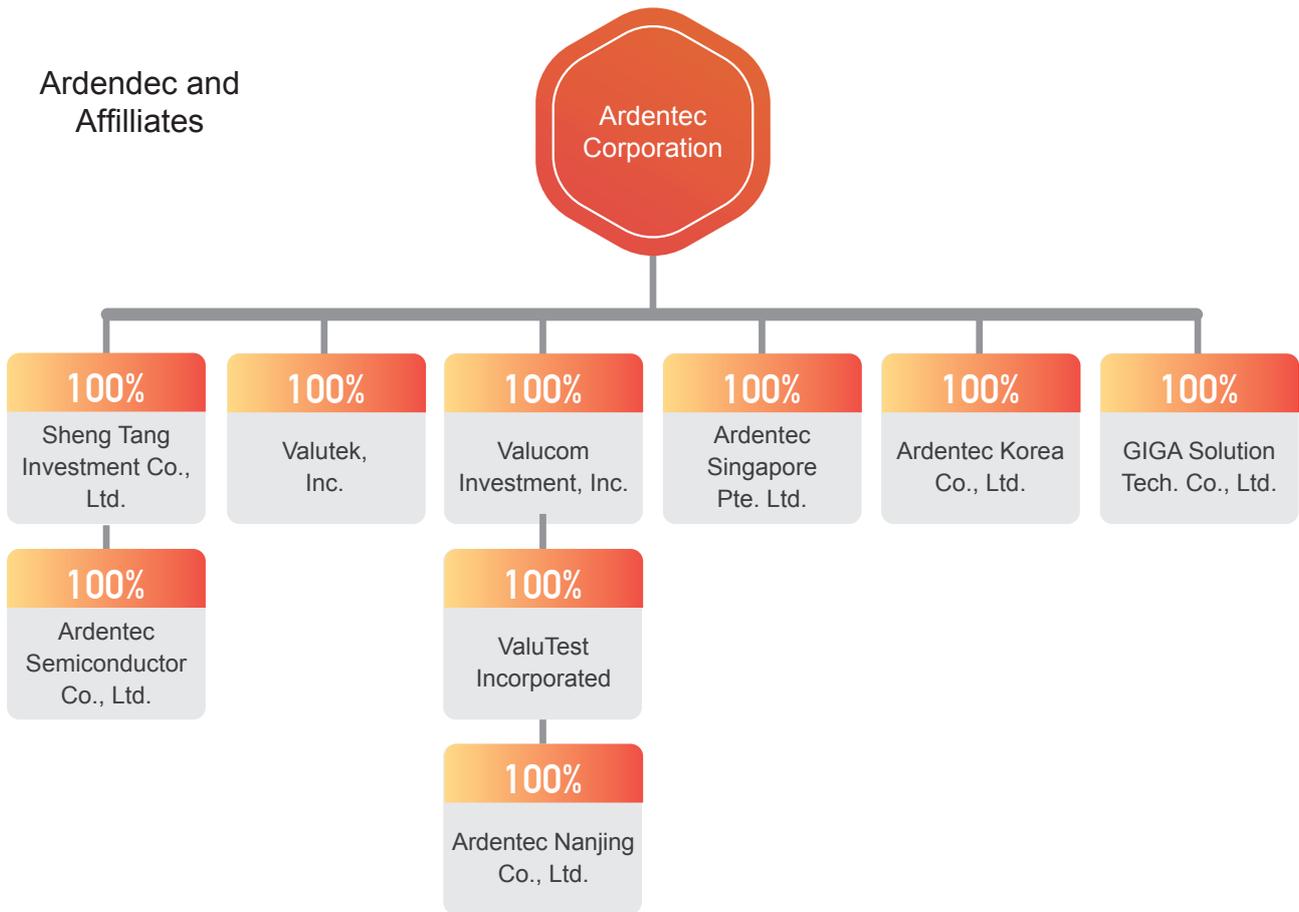
## Corporate Values

- ◆ Seeking excellence in continuous improvement to provide customers with total solutions
- ◆ Embracing passion and innovation to grow with global semiconductor industry
- ◆ Adopting people-oriented policies to care for the life of others
- ◆ Insisting on honest operation and caring for the sustainable development of society and environment

## 1.3 The organization 102-7 102-18



Ardentec and Affiliates



1.4 Professional Services 102-2

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, wafers thinning, Backside Grinding/Backside Metallization/Front Side Metallization (BGBM/FSM) 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.

Ardentec passed various quality management systems certifications, lean engineering capabilities as well as advanced automated information platform ensure that we provide the best quality in the industry, and made us a leader in automotive IC and security control IC.





## 1.5 Market Size and Performance 102-6 102-15 102-45 201-1

Global uncertainties due to the US-China trade war as well as the poor overall economic climate in 2019 meant that the semiconductor industry saw its global sales slump by 10 - 15%. The main factors were a drop in memory prices and excessive inventories. Market researchers nevertheless forecast a 4 - 5% growth in global semiconductor sales in 2020 driven mainly by an increase in demand from Internet-of-Things, smart phones, artificial intelligence, electric and autonomous vehicles, smart manufacturing, 5G and sensor applications. The continued spread of the novel coronavirus (COVID-19) epidemic is putting heavy pressure on the electronic and semiconductor industries' supply chain. Both supply and demand have been impacted and this has sown seeds of doubt on a recovery in 2020. 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 manufactur-

ers (IDMs) in Europe and the United States are outsourcing work to semiconductor manufacturers in Taiwan and seeking local packaging and testing partners. Ardentec has garnered the attention of multiple international clients due to our extensive testing experience and customization services, making it possible for the company to secure a foothold in the semiconductor testing market. At the same time, Ardentec is staying in touch with market trends and generating business growth by continuing develop customers among IC design houses.

Automotive and industrial control demand was affected by the slowdown in the global automotive market in 2019. On the other hand, there was a growth in testing demand from RF IC, communications, memory and consumer electronic applications. The Nanjing subsidiary of Ardentec also obtained a number of customer certifications and commenced mass production in 2019. It is well-positioned to provide customer services, and participate in the business opportunities offered by China's growing semiconductor market. The completion of our regional strategy and alignment with customers' global strategy improved customer relations and benefited all parties involved.

### 2019 Product Sales Proportion

Product	Revenues	Weight %
Wafer Test	6,360,916	79.02
Final Test	1,663,732	20.67
Others (equipment rental)	25,491	0.31
<b>Total</b>	<b>8,050,139</b>	<b>100.00</b>

Others: machine rental income

(Unit: NT\$1,000)

### 2018 and 2019 Testing Service Sales Region

Year	2018	2019
Taiwan	1,546,359	1,884,252
USA	3,438,561	2,521,172
Singapore	650,689	597,265
Mainland China	182,150	324,608
Others	2,626,045	2,722,842
<b>Total</b>	<b>8,443,804</b>	<b>8,050,139</b>

Others: primarily consists of European customers

(Unit: NT\$1,000)

## 2018 and 2019 Financial Performance(Consolidated)

Year	2018	2019
Operating revenues	8,443,804	8,050,139
Operating costs and expenses	6,605,873	6,475,788
Operating net profit	1,837,931	1,574,351
Non-operating revenues and expenses	143,303	(83,163)
Pre-tax profit	1,981,234	1,491,188
Income tax expense	432,692	381,592
Current period net profit	1,548,542	1,109,596

Above includes the revenues of Taiwan Headquarter, GIGA Solution, Korea subsidiary, Singapore subsidiary, and Nanjing subsidiary.

(Unit: NT\$1,000)

## 1.6 Surplus Allocation 201-1

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 2019 net profit after tax is NT\$1,109,596,000. The Board of Directors approved on February 20, 2020 the distribution of cash dividends at NT\$1.3 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.

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. Radio Frequency Identification (RFID) system was introduced by Ardentec for batch management and automated production on the production lines. We have also developed an image recognition system that can be used for recognizing product packaging and preventing human error. 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 102-12 102-13

### 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	Singapore Business Federation (SBF)
	Singapore Semiconductor Industry Association (SSIA)
	E2PO_National Environment Agency
Korea	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	Headquarters	Subsidiaries			
		Singapore	Korea	Nanjing	GIGA Solution
2000	ISO 9002				ISO 9002
2001					ISO 9001
2002	QS 9000				
2003	ISO 9001				
2004	ISO 14001				
	ISO/TS 16949				
2007	OHSAS 18001	ISO 9001			
2008	ISO /IEC 27001				
2009	TOSHMS	ISO 14001			
		OHSAS 18001			
2010	ISO 14064	ISO /IEC 27001			
	IECQ QC080000				
	Authorized Economic Operator, AEO				
2011		ISO/TS 16949	ISO 9001		ISO 14001
2012	Internal Compliance Program (ICP)	ISO 14064	ISO/TS 16949		
2013	CNS 15506 (1)	Strategic 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 (ACMT)	ISO /IEC 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 (2)	ISO 22301			
	Healthy Workplace Certification Health Promotion Mark				
2016	ISO 22301				
2017					ANSI/ESD S20.20
2018	ISO 45001		IATF 16949	ISO 9001	IATF 16949
	ISO 26262			IATF 16949	
	IATF 16949			ISO/IEC 27001	
2019	ISO 50001	ISO50001 SA IATF 16949	ISO 26262	ISO 14001 ISO 45001	

(1) : Not renew from 2015 (2) : includes Gaosheng Site data center and Paoching Site data center

## 2019 Awards

### Headquarters

- Chairman Dr. Chih-Yuan Lu elected as new Academician of 2020 of "THE World Academy of Sciences, TWAS"
- Ardentec presented with Sustainable Management Practice Award by the British Standards Institution (BSI) in 2019 (for the 3rd consecutive year)
- Named one of the top 5% TWSE/GTSM-listed companies during the 5th Corporate Governance Evaluation (for the 2nd consecutive year)
- Received a High-Distinction Award in the Industry category of the Ministry of Economic Affairs Implementation of Water Conservation Consulting and Improvement Awards.
- Presented with the Factory of Choice (FOC) Award by the Responsible Business Alliance (RBA) (2020/1/22)

### Singapore Subsidiary

- Asia 30 Best Tech Companies (The Silicon Review)
- SBR International Business Award (SBR)
- Singapore Health Award - Certificate of recognition (Singapore Health Promotion Board)

Ardentec Headquarters



Singapore Subsidiary



# Sustainable Business Framework

---

- 2.1** CSR Policy
- 2.2** The CSR Organization
- 2.3** Corporate Social Responsibility Performance
- 2.4** Analysis of Stakeholders and Topics of Concern
- 2.5** Topic Materiality Matrix
- 2.6** Material Topics Value Chain and Management Strategy
- 2.7** Communication with Stakeholders

## 2.1 CSR Policy 102-18

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.

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).

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

Uphold business ethics and corporate governance

Comply with laws and international standards

Well disclose corporate governance and CSR information

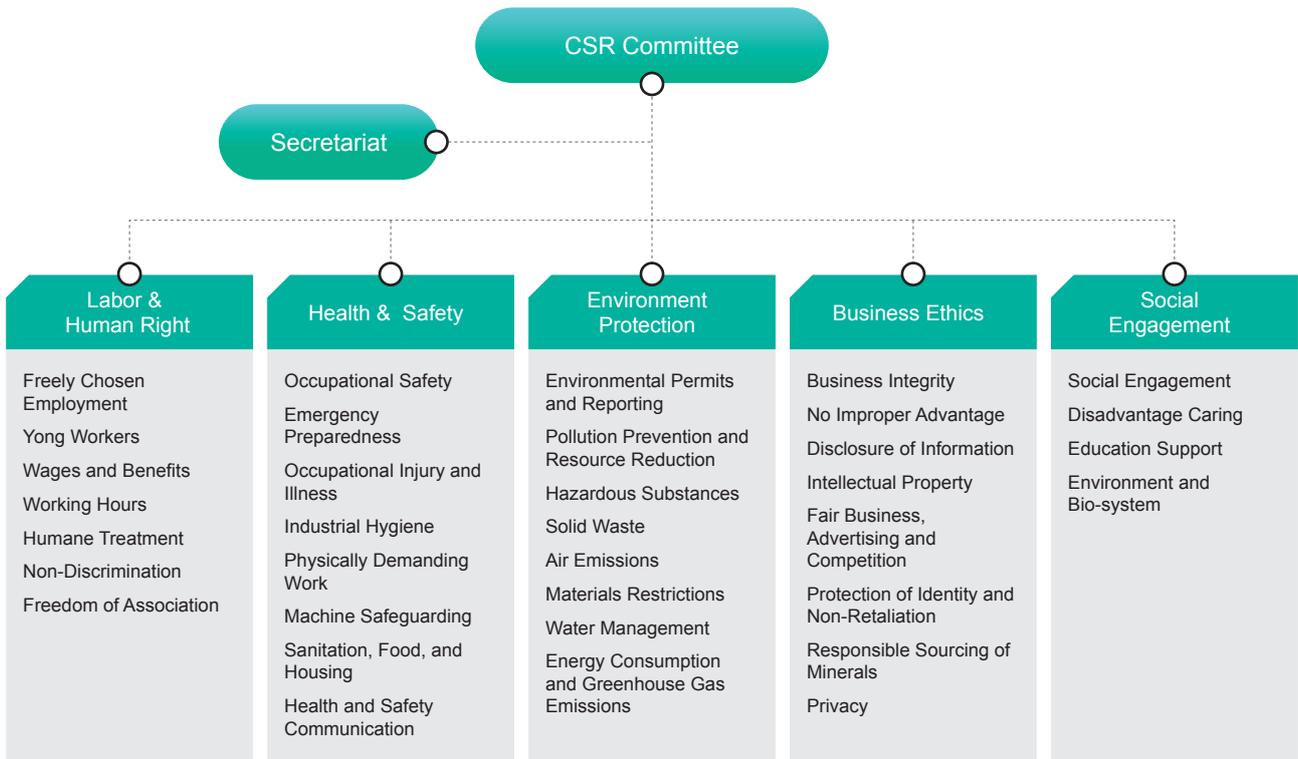
Develop a sustainable environment

## 2.2 CSR Organization 102-18 102-19 102-20

CSR Committees have been set up at Ardentec and all of its subsidiaries. The President serves as the chair of the CSR Committee at corporate headquarters while members of the committee are made up of senior executives from different functions and the General Manager of each subsidiary. At each subsidiary, the General Manager and executives serve as members of the CSR Committee. All committee adhere to the categories defined by the RBA. Each committee sets up four tasks groups focusing on "Labor and Human Rights", "Health and Safety", "Environmental Protection" and "Business Ethics." Ardentec Corporate has a "Social Engagement" group to actively engage, support and give back to society. Ardentec head-

quarters lead all subsidiaries in promoting the development and introduction of CSR. Every effort is made to realize the Ardentec Corporate's sustainability goals in each phase and for the long-term. The President briefs the Board of Directors on the Corporate's performance each year.

The CSR committee is responsible for the implementation of the sustainable management goals, monitoring the development of domestic and international CSR systems and changes in the corporate environment, developing measures for the implementation of CSR and sustainability goals, continuing to strengthen the CSR management system established by Ardentec and ensuring continuous enhancements to the effectiveness of CSR implementation.



### 2.3 Corporate Social Responsibility Performance

Ardentec headquarters adopted the RBA management standard to set a direction for upstream customers and downstream suppliers.

Ardentec headquarters's 4 sites underwent the RBA Validated Audit Program (VAP) in January 2019 and achieved the platinum rating with a full score of 200. This was followed by the presentation of the RBA's

FOC Award in January 2020. CSR Division Project Senior Director Rhiannon Chen is responsible for CSR performance and was certified through the RBA Factory Lead Program in January 2020. Her name and that of Ardentec will now be listed on RBA's members-only SharePoint.



RBA VAP certificate of 200/200



RBA Factory of Choice Award

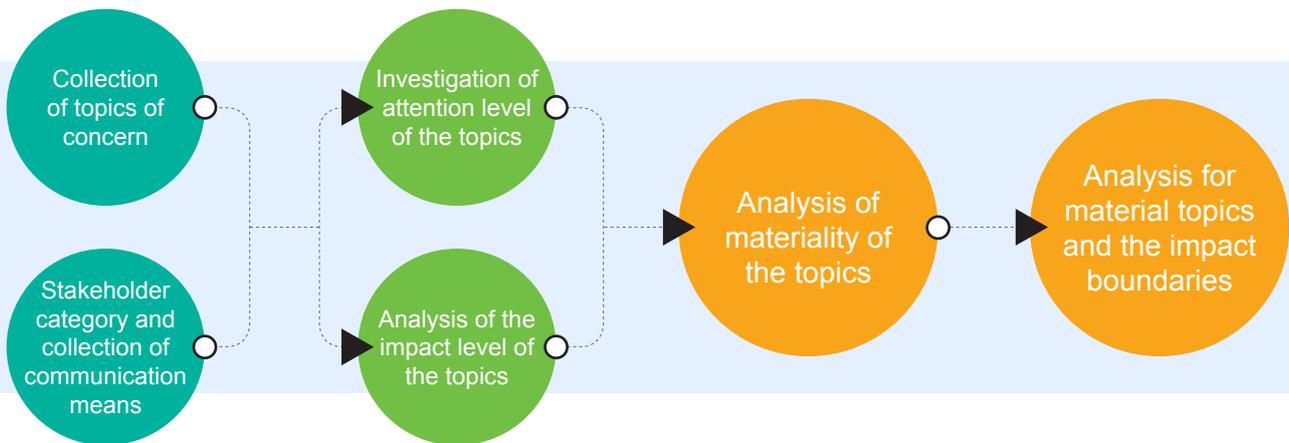


Factory Lead certificate (Rhiannon Chen)

## 2.4 Analysis of Stakeholders and Topics of Concern 102-21 102-40 102-42 102-43

Every year, Ardentec adopts the following processes to identify stakeholders and topics collection, monitor level of topics concern and impact, and identify material topics. Ardentec has established diverse, transparent, and responsive communication channels with stakeholders

in the hope 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.

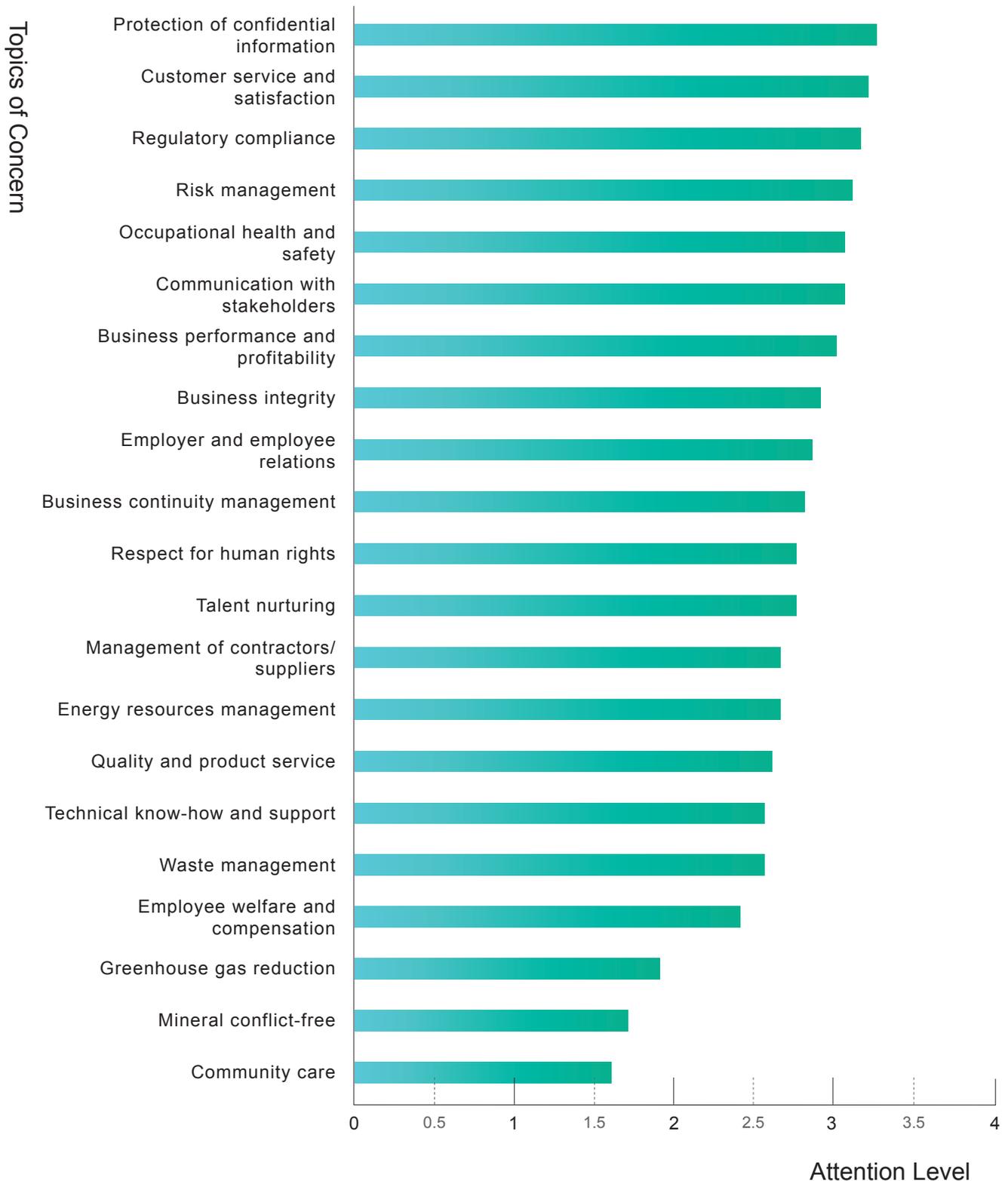
## Stakeholders Category and Topics of Concern

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

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

## Analysis of attention level of the topics

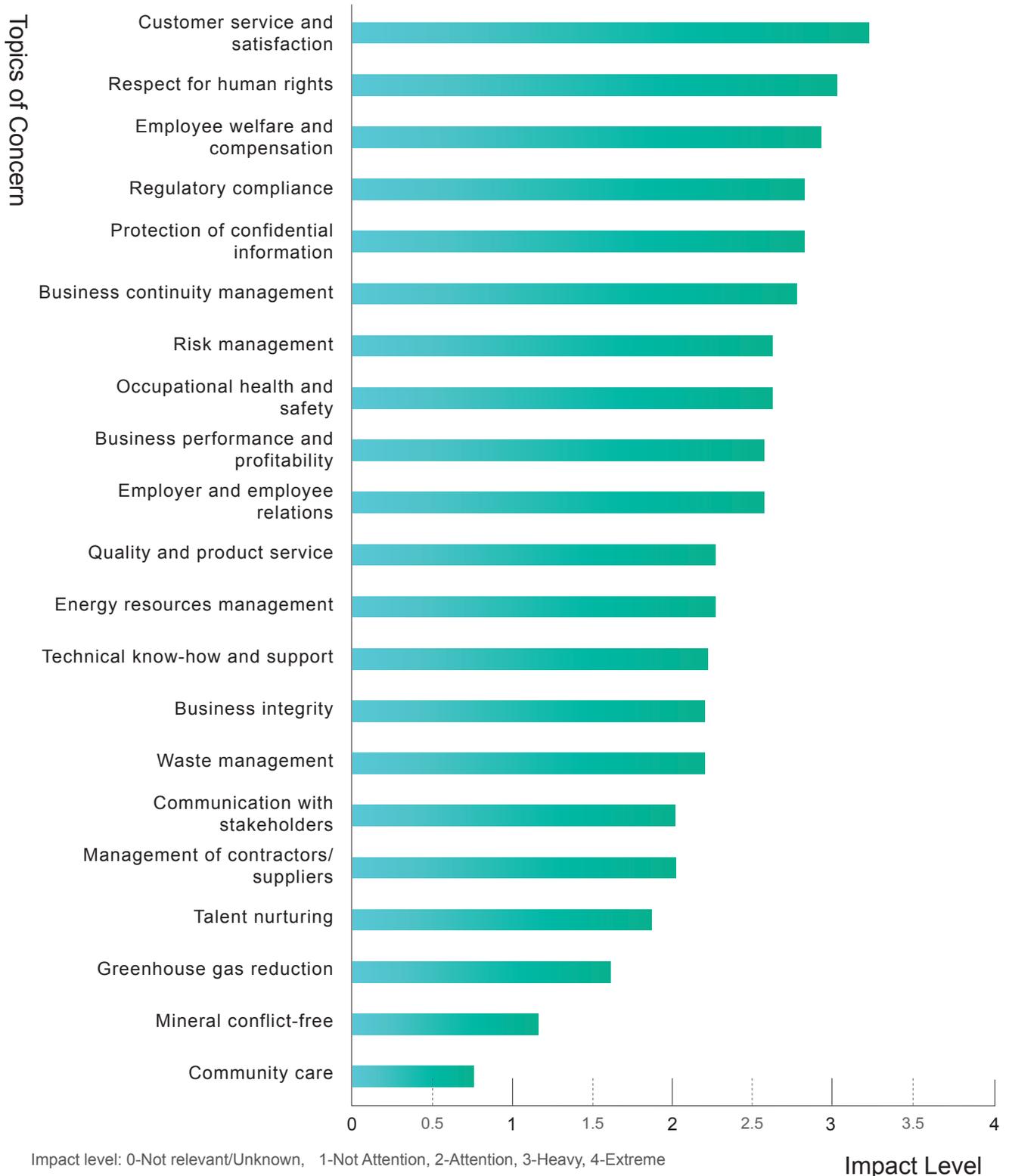
After identifying stakeholders and surveying communication methods and channels, the attention level relating to stakeholders within and outside of the organization is investigated by questionnaire survey. This is to provide the management with an overview of the stakeholders and the materiality of topics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

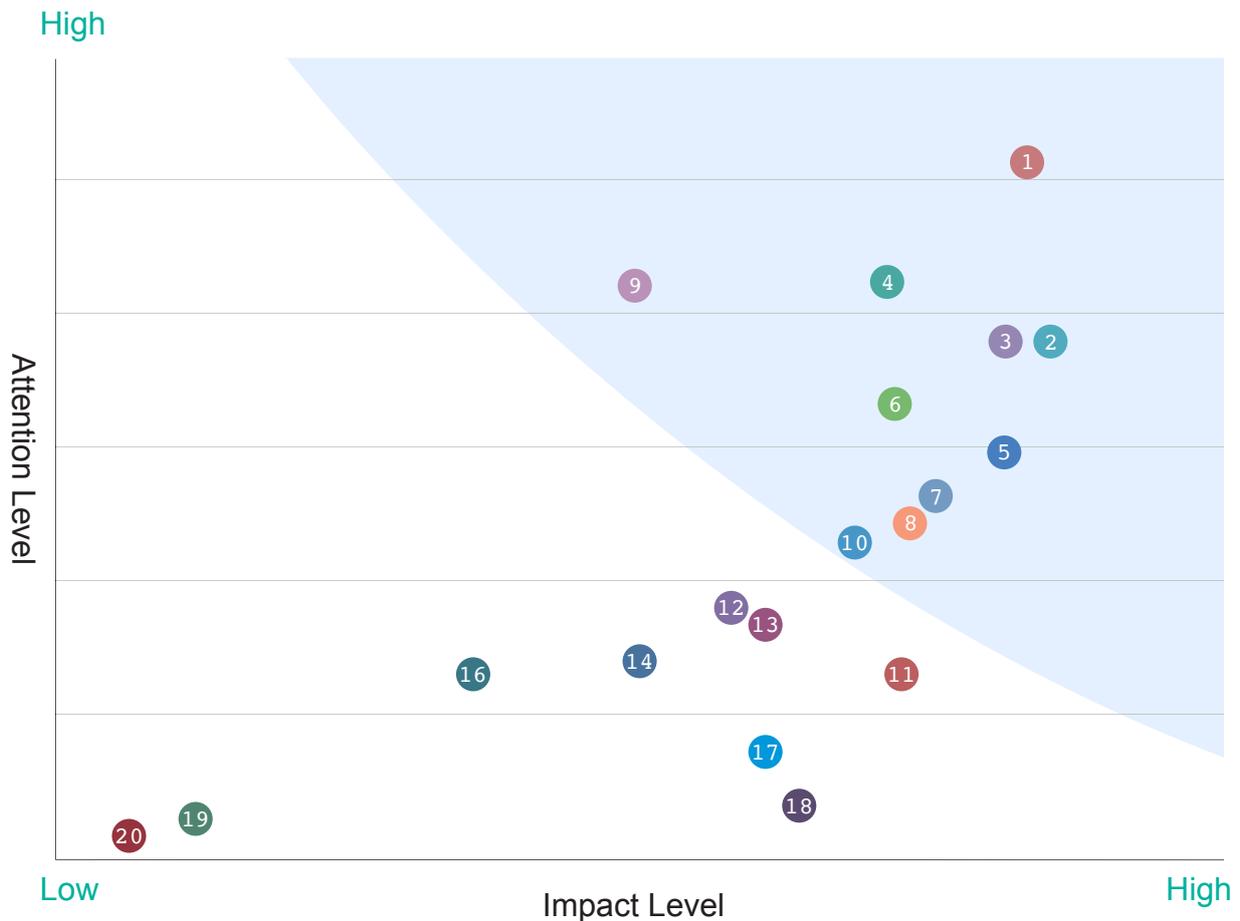
### Analysis of impact level of topics

After their collection and organization, the topics of concern will be analyzed by each function supervisor with respect to the impact of each topics on the Company's business activities. After the assessment of impact of topics from each function being collected and organized, the Corporate Social Responsibility Committee will examine the impact of each topic 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 topics on operation will be collected and organized.



## 2.5 Topics Materiality Matrix 102-44 102-47 103-1

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



### Material topics

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

### Other topics

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

## 2.6 Material Topics Value Chain and Management Strategy

102-48 102-49 103-1 103-2 103-3 419-1

Material topics are analyzed and assessed on their level of attention and impact. Their relevance is then determined through actual operations. An analysis of the considerations and borders on material topics is tabled below.

Material topics	GRI Standards (2016)		Corresponding chapter of management approach	Value chain of the identification of boundaries							
				Head-quarters	Subsidiaries				Custo-mers	Suppliers and contractor	Creditors
					Singapore	Korea	Nanjing	GIGA Solution			
Customer service and satisfaction	Material topics identified by stakeholders' feedback		6.4	V	V	V	V	V	V		
Protection of confidential information	Customer privacy	418-1	3.6	V	V	V	V	V	V	V	
			6.2								
Regulatory compliance	Socioeconomic compliance	419-1	3.6	V	V	V	V	V			
		307-1	4.3								
Respect for human rights	Non-discrimination	406-1	5.3	V	V	V	V	V		V	
	Child labor	408-1									
Occupational health and safety	Occupational health and safety	403-1	5.5	V	V	V	V	V		V	
		403-4									
Employee welfare and compensation	Economic performance	201-1	5.3	V	V	V	V	V		V	
		201-3									
	Employment	401-2									
Risk management	General disclosures	102-30	3.6	V	V	V	V	V	V		V
	Indirect economic impacts	203-2									
	Customer privacy	418-1									
Business continuity management	General disclosures	102-11	3.6	V	V	V	V	V	V		V
		102-30									
		102-31									
	Indirect economic impacts	203-2									
Employer and employee relations	Employment	401-2	5.3	V	V	V	V	V		V	
	Labor/management relations	402-1									
Business performance and profitability	General disclosures	102-15	1.5	V	V	V	V	V		V	V
	Economic performance	201-1	1.6								

Chapters relating to material topics.



Management of material topics

Material topics	Policies	Management measures/projects	Goals	Evaluation mechanism
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 85% customer satisfaction	Annual implementation of customer satisfaction survey
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.	<ol style="list-style-type: none"> <li>1. An Information Security Committee was established to promote information security management. ISO 27001 (ISMS) and ISO 15408 (Common Criteria) certification have now been completed to ensure the security of customer and company trade secrets.</li> <li>2. Reasonable protective measures for confidential information have been put into place through (1) information management (document confidentiality classification, prevention of unauthorized access, and establishment of document management records); (2) behavior control (confidentiality measures, restricting access to confidential data, authorization management); (3) education control (education &amp; training, guarantees, confidentiality agreements, separate procedure and waiver forms).</li> <li>3. All employees undergo information security training and are made ware of the information security policies every year to ensure proper protection of confidential information.</li> </ol>	<ol style="list-style-type: none"> <li>1. Leak of company or customer information due to information security incident</li> <li>2. Production equipment and capacity impacted by large-scale infection/damage due to malicious software</li> </ol>	<ol style="list-style-type: none"> <li>1. Continuous improvement of the information security management system through annual audits and information security management reviews</li> <li>2. Strengthen the network architecture and information security defenses through vulnerability scanning and penetration tests</li> </ol>
Regulatory compliance	Overall business activities must comply with relevant laws and regulations	Adopting the relevant laws from the Regulatory Identification Procedures to serve as the reason for checking the surgery as required by law.	Legal compliance: 100%	Quarterly implementation of legal compliance audit Convening management review meeting every six months
Respect for human rights	Headquarters and all subsidiaries comply completed with local labor laws and international human rights conditions.	Adhere to the national labor laws on RBA principles and RBA Responsible Labor Initiative (RLA) as the basis for labor protection and self-inspection. Each site is provided with signed and anonymous reporting channels and whistle-blower protection. Appeals can be made for incorrect information.	100% compliance on human rights	Audits based on labor laws and international principles are conducted on a quarterly basis. Management reviews and notification of any complaints relating to human rights must be conducted every six months. A full-scale audit of each subsidiary is conducted by headquarters every year.

Material topics	Policies	Management measures/projects	Goals	Evaluation mechanism
Risk management	Formulate risk assessment and operating procedures for each type of business-related risk to protect the interests of the Company and stakeholders through sound risk and crisis management.	<ol style="list-style-type: none"> <li>1. Internal control systems were set up and implemented in accordance with the Regulations Governing Establishment of Internal Control Systems by Public Companies issued by the Financial Supervisory Commission.</li> <li>2. Various management committees were set up for routine risk management in accordance with the risk management system and operating guidelines.</li> <li>3. Management audits conducted for internal controls to help carry out routine risk management at the relevant committees</li> </ol>	Zero incidents of major risk	Each risk management committee meets regularly to review actual performance and conduct internal audits that ensure that risk management procedures are being effectively enforced
Business continuity management	The business continuity management system was used by Ardentec to identify potential threats to business operations and establish an emergency response capability for protecting stakeholders, business reputation and brand image. Continuous improvements to the business continuity management system are also being made in accordance with applicable laws and regulations.	A Business Continuity Management Committee was set up, and certification obtained for the ISO 22301 business continuity management system (BCMS) international standard.	Zero disruptions to business continuity due to major disasters	<p>Conducted annually</p> <ol style="list-style-type: none"> <li>1. Risk Assessment (RA)</li> <li>2. Business Impact Analysis (BIA)</li> <li>3. Internal system audit</li> <li>4. Management review meeting</li> </ol>
Occupational health and safety	Complying with regulations and international standards, as well as eliminate and reduce occupational safety and health risks to establish a safe and healthy working environment, promote labor participation and consultation, and make continuous improvements to safety and health performance.	<ol style="list-style-type: none"> <li>1. Established a Occupational Safety and Health Management Committee to coordinate, make recommendations and review OHS-related initiatives and compliance.</li> <li>2. Verify and continue to promote the ISO 45001 occupational safety and health management system while continuing to ensure compliance with international laws.</li> <li>3. Promotion of healthy workplace projects</li> </ol>	<ol style="list-style-type: none"> <li>1. Eliminate serious occupational injuries (including both employees and engineers).</li> <li>2. Total injury index &lt; 0.04</li> </ol>	Management review meetings are conducted by the Occupational Safety and Health Management Committee on a quarterly basis.



Material topics	Policies	Management measures/projects	Goals	Evaluation mechanism
Business performance and profitability	Embrace the Ardentec philosophy of on sustainability by being prudent with investments, maintaining robust management practices, continuing to refine our customer services and enhance our competitiveness. Maximize profits for customers, shareholders and employees through continuous improvements in quality.	<ol style="list-style-type: none"> <li>1. Focus on our core business by improving testing technologies and the automation of production systems.</li> <li>2. Expand carefully into strategic markets and actively expand our business from integrated device manufacturers while continuing to build up our customer base among professional IC design houses.</li> <li>3. Monitor the latest market trends and satisfy customer needs in a timely manner in pursuit of profit growth.</li> <li>4. Closely track changes in the overall international economic environment and review the impact on existing customers every month so that the necessary response can be taken to reduce potential business impacts.</li> </ol>	Carry out the Company's annual business plan and achieve revenue growth by meeting the monthly, quarterly and annual business targets.	Host production and sales meetings every week to review actual operating conditions; conduct 3-month business forecasts, check monthly revenues and hold review meetings every month to ensure that business targets can be accomplished.
Employee welfare and compensation	<ol style="list-style-type: none"> <li>1. Workers' Compensation Comply with Labor Laws</li> <li>2. Employee remuneration is highly competitive in the industry</li> <li>3. Employees are rewarded through profit-sharing when the company is profitable for the year.</li> </ol>	<ol style="list-style-type: none"> <li>1. 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</li> <li>2. Regularly review average salaries in the job market and industry, check the company's business performance, carry out project evaluations and make salary adjustments.</li> <li>3. The Articles of Incorporation explicitly set out how employee compensation should be shared if the Company turned a profit for the year.</li> </ol>	100% compliance in employee compensation Employee compensation maintained in the top 25 percentile of the industry	<ol style="list-style-type: none"> <li>1. Compliance audits are conducted every quarter</li> <li>2. Industry compensation surveys and salary adjustments are conducted every year</li> <li>3. Employee profit-sharing proposal is submitted to the Board of Directors for approval after annual settlement.</li> </ol>
Employer and employee relations	<ol style="list-style-type: none"> <li>1. Employee Partnership Policy and maintenance of harmonious employer and employee relations.</li> <li>2. Ardentec headquarters and subsidiaries all comply with local labor laws and international standards on employer and employee relations.</li> </ol>	<ol style="list-style-type: none"> <li>1. Employer-employee meetings are held at each site each quarter to engage in communication.</li> <li>2. Employees are provided with open channels for making signed and anonymous complaints to promote employer and employee relation.</li> </ol>	No labor-management disputes	CSR Committee conducts its performance reviews on a half-yearly basis.

## 2.7 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		V		
	Safety window meetings		V		
	Occupational safety and health committee meetings		V		
	Intranet e-platform				V
	Suggestion (on-line or box)/telephone/Email				V
	Announcements				V
	Department meetings				V
Customers	Meeting/audit				V
	Customer satisfaction management or survey			V	
	Customer visit				V
	Company website				V
Suppliers and contractors	Contractor training	V			
	Supplier CSR and Business Ethics Guidelines			V	
	Protocol meeting				V
	Supplier/contractor audit			V	
	Meetings or communications				V
Government and regulatory agencies	Regulation seminars or public hearings				V
	Financial statements		V	V	
	Reports or responses on demand				V
	Official correspondences				V
	Industrial development conference				V
	Report and reply of each business				V
Investors	Shareholder meetings			V	
	Investor meeting				V
	Financial statemen or annual report			V	
	Market Observation Post System				V
	Company website				V
	Meetings or communications				V
Cooperation institutions	Audit				V
	Meetings or communications				V
	Enterprise-academy collaboration program				V
Creditors	Relevant information providing or reply as required				V
	Meetings or communications				V
	Financial statements				V
Community	Company website, e-mail				V
	Social welfare activities				V



# 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 102-14 102-27 102-28 102-31



At Ardentec, we request all employees to value 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 does due diligence to corporate governance, sustainability development, and social justice for CSR implementation. The Board of Directors annually reviews CSR implementation performance and also direct improvement suggestion to enhance CSR performance.

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 EICC 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.

Ardentec took part in the 5th Corporate Governance Evaluation of Publicly Listed/Trade Companies conducted by the Taiwan Stock Exchange and Taipei Exchange. The results published in May 2019 ranked Ardentec among the top 5% of public companies in Taiwan for the 2nd consecutive year and represented recognition of our governance performance in every aspect by a third-party assessment.

Corporate Governance Best Practice Principles: <https://web.ardentec.com/?m=119>

Ethical Corporate Management Best Practice Principles: <https://web.ardentec.com/?m=105>

Corporate Social Responsibility Best Practice Principles: <https://web.ardentec.com/?m=87>

### 3.2 Board of Directors 102-18 102-22 102-23 102-24 102-25 102-28 405-1

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. 2 is female which accounts for 15.4%. Directors serve for 3-year terms and the current Board will serve from June

28, 2017, through to June 27, 2020. Board members are chosen through the candidate nomination system. Board functions are strengthened and realized through a rigorous selection and review process that takes into full account the diversity and independence of Board members to enhance the effectiveness of corporate governance.

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.

## 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.

**Corporate Director**  
**Sheng Tang**  
**Investment:**  
**Chien-Mai**  
**Sung**

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.

**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**  
**Valutek, Inc.**  
**Dahc-hieh**  
**Otto Cheng**

**Now:** Legal representative of TSRC Corporation  
President of China General Plastics Corporation  
President of Taita Chemical Company, Ltd.  
Ph.D. in Chemistry, Michigan State University, U.S.A.

**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

**Independent**  
**Director**  
**Ta-Hsiung**  
**Chen**

**Now:** Special Advisor of Shanghai Baosteel Gases Co., Ltd.  
General manager of Asia, Praxair, Inc.  
General manager, Praxair Chemax Semiconductor Materials Co. Ltd  
Ph.D. in Chemical Engineering, University of Houston

**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

**Independent**  
**Director**  
**Wei-Shan**  
**Hu**

**Now:** Professor of Chung Yuan Christian University  
Vice President of Chung Yuan Christian University  
Ph.D. in Financial Management, University of Oklahoma, U.S.A.

**Corporate Director**  
**Representative**  
**of Hong Ming**  
**Consulting:**  
**Ching-Yun Li**

**Now:** Chairman of Hong Ming Consulting Co., Ltd.  
Department of Public Relations, Shih Hsin College of Journalism

**Independent**  
**Director**  
**Chen-I Chia**

**Now:** President of Retail Banking Business Group, Bank SinoPac  
President of Retail Banking Business Group, Chien Hua Bank  
MBA, University of Wisconsin, U.S.A.

**Corporate Director**  
**Representative**  
**of Chiu Chiang**  
**Investment:**  
**Amy Chao**

**Now:** Director of DerMauShin Capital Co., Ltd.  
Vice President of General Administration, China Times  
Master in Economics, California State University, U.S.A.

**Independent**  
**Director**  
**Lai-Juh**  
**Chen**

**Now:** Chairman of TEN LIFE Corporation  
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 2019, a total of five 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 cor-

porate governance.

The Rules Governing the Evaluation of Board Performance was also approved by the Board of Directors in 2018 for evaluating the overall performance of the Board. Self-assessments were also conducted by each committee member and individual directors to strengthen Board function and operations.

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

102-25 102-36 201-1

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 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 3 meetings have been held in 2019, 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 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 and managers 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.

Managers refer to those who are Senior Director or above and the Chief Finance Officer.

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 2019, the remuneration for directors and supervisors is NT\$49,537,337 and the compensation for employees is NT\$198,149,348.

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

### 3.4 Ethical Guidelines

102-16 102-17 205-1 205-2 205-3

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.

Each year, all business personnel and managers graded department head and above had completed their "Conflict of Interest Reports." No corruption has occurred in 2019.

All employees are required to accept moral standards and anti-corruption training. As of December 31, 2019, all employees of Ardentec have completed the anti-corruption training.

### Handling violations of ethical guidelines

A business ethics grievance hotline and a grievance email 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. Ardentec has stipulated Employee Reward and Disciplinary Regulation. Reporting will be handled by following in charge management. If reported person is appointed

manager or higher management, the handling level will be assigned by President or Chairman. If grievance or report confirmed true by investigation, violating employee will be handled according to "Employee Reward and Disciplinary Regulation", for violating supplier, Ardentec 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.

	Report source	Employee	External party
	In charge	HR and Service Division	CSR Division
	Grievance hotline	03-5976688	
	Extension	1201	1206
	Grievance email	grievance@ardentec.com	

## 3.5 Internal Controls 102-11

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.

Ardentec and its subsidiaries judge the design and operating effectiveness of its internal control system based on the criteria provided in the Regulations Governing the Establishment of Internal Control Systems by Public Companies.

The "Ethical Corporate Management Best Practice Principles" formulated by Ardentec prohibits unethical behavior. It also defines the disciplinary and appeals process for any violations. All employees receive training on code of ethics and anti-corruption every year.

## 3.6 Risk Management 102-11 102-30 102-31 203-2 418-1

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. The performance of risk management is included in "Execution of CSR and Ethical Management" and report to the Board of Directors annually.

**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 4 sites of headquarters and Singapore subsidiary. 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 topics 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 risk**

▶ 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. Ardentec headquarters as well as its subsidiaries in Singapore, Korea and Nanjing have completed ISO 45001 or OHSAS 18001 audits to effectively manage safety-related risks through an international management system.



**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 2019, 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. To make continuous improvements to legal compliance as well as the protection of trade secrets and intellectual property rights, a "Trade Secrets Committee" was established in 2019 to conduct routine audits and regular views of management performance. Automatic checks on protection of trade secrets and IP were also incorporated into routine business processes to eliminate the risk of abuse or leaks.

**Risk category**

**Risk management strategies**



**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.

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 2019, 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 2019.



**Labor and human rights risks**

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 Recruiting & Talent Developing Department to check the recruitment process of all labor recruited abroad; each year, the Recruiting & Talent Developing Department audits domestic and foreign agencies to confirm that employees do not have any human rights risks in the recruitment process.



**Business ethics risks**

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.

Each department conducts annual business ethical risk identification and assessment. According to the results of the 2019 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.

### 3.7 Major Investments 102-10

To extend the leading position of Taiwan's semiconductor supply chain, deepen cooperation with international semiconductor vendors and expand the global market, the Company established Ardentec Nanjing Co., Ltd. as a wholly-owned subsidiary in Nanjing, Jiangsu Province, China. Total investment amount was 45,000,000 USD; Factory construction was completed at the end of 2017, pilot production was started in 2018 and mass production commenced in May 2018.

To prepare for the trend towards data-driven innovations in the semiconductor industry and open the door to continued business growth, the Ardentec Board of Directors approved the Phase 2 expansion of the Dingxing in August 2018. The new factory's ground-breaking ceremony was held on June 5, 2019. The 8250 m<sup>2</sup>

Dingxing Phase 2 site will include a 6-story office building and a 5-story production facility to optimize the business benefits of expanded capacity. Total construction will cost approximately NT\$1 billion and will be completed by the end of 2020. Once complete, the new factory should help Ardentec maintain its momentum in the development of innovative applications for the semiconductor industry.

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.





# Environmental Protection

---

- 4.1** Environmental Policy
- 4.2** Environmental Protection Expenses and Investment
- 4.3** Climate Change and Energy Management
- 4.4** Disclosure of Environmental Information
- 4.5** Water Resource Management
- 4.6** Pollution Prevention

## 4.1 Environmental Protection 304-1

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.



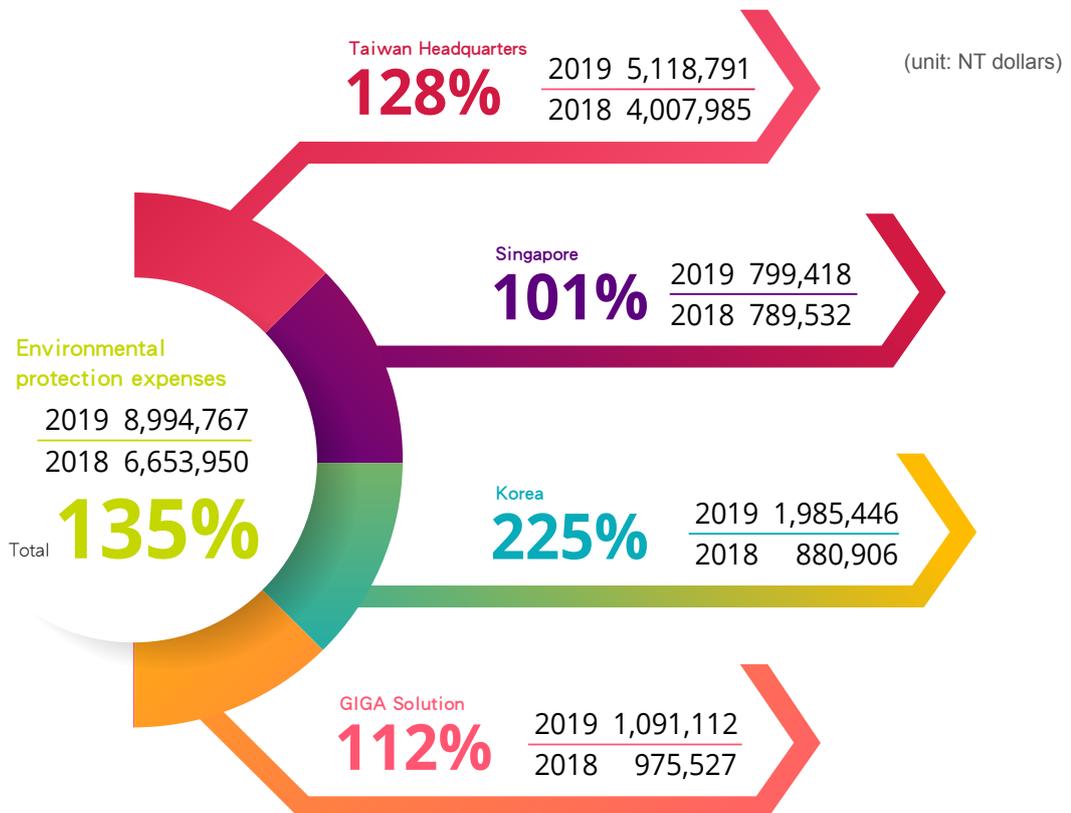
### Environmental sustainable development policy

Devoted to environmental protection in compliance with international regulations and standards. Support procurement and design improving the energy performance.

Promote energy saving, greenhouse gas emissions reduction, and resources recycling. Regularly review the corporation objectives to promote environment sustainability.

## 4.2 Environmental Protection Expenses

Major expenses in environmental protection include professional waste removal, pollution prevention and environmental monitoring. Raw materials are not needed by the testing industry so materials consist of packaging.



Headquarters: Unit price of general industrial waste treatment increase in 2019 compared to 2018.

Korean subsidiary: had rain and sewage pipeline restructure and improvement in 2019.

GIGA Solution: Fees for disposal of sewage treatment are adjusted by the landlord each year and split on a proportional basis among tenants. The company therefore has no control over the cost.

Nanjing subsidiary: environmental protection expenses of 2019 was NT\$579,855, for 2018 mass production commenced from May 1, the amount of the expenses was not for full year, thus excluded from above 2-year comparison table.

## 4.3 Climate Change and Energy Management

102-12 302-4 305-1 305-2 305-4 305-5 307-1

With the exacerbation of global warming, energy crisis and climate change, the requirement of relevant environmental protection regulations will become stricter. The gradual increase in energy and environmental protection costs caused by climate change is an inevitable trend.

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 Ardentec Group is committed to doing its part to mitigating climate change by reducing GHG emissions through energy conservation.

### 4.3.1 Climate change management

Business Continuity Management (ISO 22301) has been introduced by Ardentec to identify analyze the potential damage, risks and opportunities in terms of regulations, production activities, business reputation due

to climate change. Response strategies and action plans can then be developed to reduce the business continuity risks from climate change.

Aspect identification	Risks and opportunities	Strategies or action plans
Regulations	Greenhouse gas emission control	<ol style="list-style-type: none"> <li>1. Regular GHG inventories are conducted to provide a baseline for emission reduction plans. Third-party verification is commissioned by headquarters and Singapore subsidiary.</li> <li>2. Continued to execute of GHG reduction plan.</li> </ol>
Production activities	Damage to plant and facilities/Interruption of energy supply	Introduced business continuity management system (ISO 22301) for continuous review and improvement to ensure the continuity and restoration of operations when a disaster occurs.
Business reputation	Stakeholders' assessment of the company's non-financial performance	<ol style="list-style-type: none"> <li>1. Regular management reviews are conducted by CSR Committee to ensure performance targets are met</li> <li>2. An independent verified CSR report is published every year to disclose CSR performance to stakeholders.</li> </ol>

### 4.3.2 Green management system

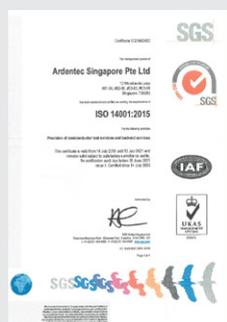
Ardentec follows the government's relevant environmental protection regulations in its establishment of an integrated management system, introducing environmental protection personnel, formulating, promoting, and maintaining environmental management systems and action plans. Ardentec reviews the overall operational processes to perform greenhouse gas inventory and reduction, water resources inven-

tory 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, all subsidiaries have all been verified by the ISO14001:2015 Environmental Management System.



Headquarters



Singapore Subsidiary



Korea Subsidiary



Nanjing Subsidiary

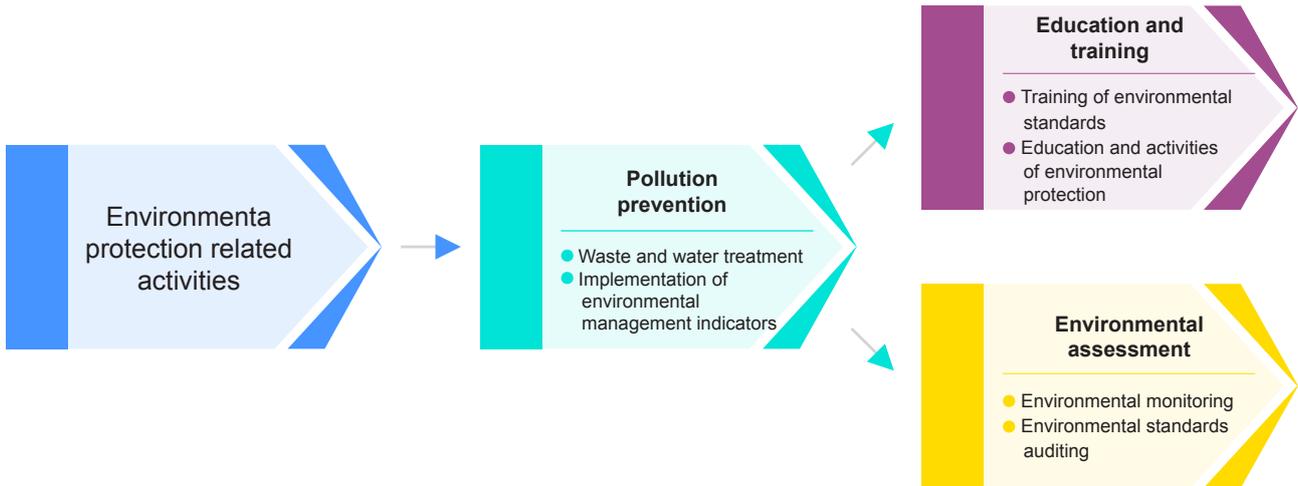


GIGA Solution

Ardentec headquarters and the Singapore subsidiary have obtained ISO 50001:2018 and ISO 50001:2011 energy management system verification to ensure effective management of energy consumption. PDCA techniques were employed to incorporate energy management into the existing organization and improve energy performance.



In 2019, there were no incidents of major leakage or pollution related fines, lawsuits or environmental damage costs incurred by Ardentec headquarters and its all subsidiaries.



### 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.

### 4.3.3 Management of energy

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, Ardentec corporate had implemented measures such as upgrade facilities, optimize operation, and set energy-saving controls in 2019. Ardentec has set an energy management target of reducing average energy consumption by no less than 1% between 2018 ~ 2019.

#### Effectiveness of Energy Management

	Headquarters	Subsidiary				Total
		Singapore	Korea	GIGA Solution	Nanijing	
Power used(kWh)	116,094,194	9,918,570	5,569,884	23,434,522	5,866,814	160,883,984
Power saving(kWh)	1,241,519	248,695	330,880	470,393	70,697	2,362,184
Power saving rate	1.06%	2.45%	5.61%	1.97%	1.19%	1.45%

Power saving rate = Power saving / ( Power used+ Power saving)



### 4.3.4 Greenhouse gas inventory and reduction

ISO 14064 GHGs are categorized into three categories of emission, as shown in the table below.

	Emission scope		Inventory item		coverage	Source
	2006	2018	2006	2018		
Direct	I	I	Production process emissions, emergency and move emissions sources, including CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFC <sub>s</sub> , PFC <sub>s</sub> and SF <sub>6</sub>		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 SF <sub>6</sub> used by electric switches
					GHG emissions from biological, physical or chemical processes.	Chemical reactions
Indirect	II	II	From externally purchased electricity, including CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O		Emission of GHG from purchased supply of electricity, heat, steam, or outsourced combustion of fossil fuel.	Purchased electricity
Other indirect	III	III	Other emission not belonging to self-owned or self-controllable	Indirect GHG emissions from transportation	GHG emissions occur from sources located outside the organizational boundaries. Those sources are mobile and are mostly due to fuel burnt in transport equipment.	Upstream/downstream transport and distribution for goods, employee commuting, clients and visitor transport, business travel
				Indirect GHG emissions from products used by an organization	GHG emissions occur from sources located outside the organizational boundaries associated with goods used by the organization.	Purchased goods, capital goods, waste disposal, the use of assets ,etc.
				Indirect GHG emissions associated with the use of products from the organization	GHG emissions or removals associated with the use of products from the organization result from products sold by the organization during life stages occurring after the organization's production process.	The use stage of the product, downstream leased assets, end of life stage of the product, investments
				Indirect GHG emissions from other sources	The purpose of this category is to capture any organization specific emission that cannot be reported in any other category.	Other

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. An annual inventory of greenhouse gas (GHG) emissions is conducted by Ardentec corporate for the period running from January 1 through 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.

### 2019 GHG Emissions (unit: Ton CO<sub>2</sub>e)

Scope		Taiwan Headquarters	Subsidiary				Total
2006	2018		Singapore	Korea	GIGA Solution	Nanjing	
I	I	1,187	8	70	323	146	1,734
II	II	61,878	4,154	2,544	12,419	4,731	85,726
III	III	Not Sig.	According to ISO 14064 2006, not inventory Scope III				Not Sig.
	IV	19,358					19,358
	V	Not Sig.					Not Sig.
	VI	Not Sig.					Not Sig.
Total		82,423	4,162	2,614	12,742	4,877	106,818
Emissions intensity (Ton / Revenue million NT\$)		14.2	7.2	32.4	8.3	60.5	13.2

- Scope I and Scope II emission include CO<sub>2</sub>、CH<sub>4</sub>、N<sub>2</sub>O、HFC<sub>s</sub>、PFC<sub>s</sub> categories.
- 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 2018.
- Discharge Coefficient Refer to:
  - HQ and Giga Solution: Bureau of Energy announced 2018 power Discharge coefficient of 0.533 kgCO<sub>2</sub>e/kWh, GWP value adopted the coefficient of IPCC announced 5th evaluation report in 2013; GWP value adopted the coefficient of IPCC announced 4th evaluation report in 2007 by Giga Solution.
  - Singapore subsidiary: Singapore Ministry of the Environment and Water Resources announced power Discharge coefficient of 0.4188 kgCO<sub>2</sub>e/kWh
  - Korea subsidiary: Korea Ministry of the Environment announced power Discharge coefficient of 0.4567 kgCO<sub>2</sub>e/kWh
  - Nanjing subsidiary: China Ministry of Ecology and Environment announcement coefficient 0.8064 kgCO<sub>2</sub>e/kWh
- The statistic of greenhouse gas adapted by operation control.
- Based on the ISO 14064-1:2018 inventory standard by Headquarters and the ISO 14064-1:2006 inventory standard by its all subsidiaries; third-party inventory conducted by Headquarters and GIGA Solution; internal inventory conducted at other subsidiary.
- Based on the ISO 14064-1:2006 inventory standard; internal inventory conducted at GIGA Solution, Korea subsidiary and Nanjing subsidiary.



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.

### 2019 ISO 14064 GHG Emission Opinion Statement

**bsi.**  
Opinion Statement

**Greenhouse Gas Emissions**  
Verification Opinion Statement

This is to verify that: **Ardenex Corporation**  
No. 5, Changin Street,  
Singapore 487071,  
Republic of Singapore

Public Statement No: **GHGV 1462**

As a result of carrying out verification procedures in accordance with ISO 14064:2018, it is the opinion of BSI that the information provided is:

- The Greenhouse Gas Emissions with the Ardenex Corporation for the period from 2019-01-01 to 2019-12-31 are correct, including the three greenhouse gas emissions, i.e. CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O and indirect greenhouse gas emissions, i.e. Scope 2 GHG Emissions, and the other relevant information related to the different scopes (1 to 3) are correct.
- No material misstatements for the period from 2019-01-01 to 2019-12-31 Greenhouse Gas Emissions of CO<sub>2</sub>e were revealed.
- BSI quality was considered acceptable in meeting the principles set out in ISO 14064:2018.
- The emission factor for electricity for the year 2019 is not published by Taiwan government as the emission factor used for electricity is 0.515 kilograms of Carbon Dioxide equivalent per kWh issued which may potentially result in different Greenhouse Gas Emission estimation.

For and on behalf of BSI:  
Originally issued: 2020-03-27 Label Issue: 2020-03-27 Page: 1 of 3

*...making excellence a habit.*

Headquarters

**bsi.**  
Carbon Footprint Verification  
Verification Opinion Statement

This is to verify that: **Ardenex Singapore Pte Ltd**  
55, Woodlands Road,  
Singapore 730335

Public Statement No: **GHGV 73687**

Verification opinion statement

As a result of carrying out the carbon footprint verification procedures, it is the opinion of BSI with reasonable assurance that:

- The Greenhouse Gas Emissions for Ardenex Singapore Pte Ltd at the period from 2019-01-01 to 31-12-2019 is 4238.54 tonnes of CO<sub>2</sub> equivalent.
- Main operational activities covered in the defined operational boundary include provision of Wafer Testing Services and Backend Services.
- No material misstatements in the selected base year Greenhouse Gas Emissions calculation for were revealed.
- Data quality was considered acceptable in meeting the principles as set out in ISO 14064:2018.

For and on behalf of BSI:

Originally issued: 2020-03-20 Label Issue: 2020-03-20

*...making excellence a habit.*

ASGP

### 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.

### 2019 Energy Conservation Projects

Ardentec is striving to response to climate change by conserving energy. In 2019, the execution of 31 energy conservation projects reduced power consumption by

2,362,184kWh (8,503,768 MJ) and GHG emissions by 1,238 tons CO<sub>2</sub>e.

## 2019 Energy Conservation Projects and Outcomes

Site	Energy conservation projects	Project description	Electricity savings (kWh) <sup>(1)</sup>	Electricity savings (Megajoule (MJ)) <sup>(2)</sup>	CO <sub>2</sub> emissions reduction (t)	Electricity savings (NT\$)
Headquarters	Facility update	Replacement of vacuumizer	149,498	538,187	80	358,796
		Modification of split AC for IT	36,326	130,772	20	87,183
		Replacement of cooling fins on cooling tower	264,660	952,765	142	635,184
		Upgrading to high-efficiency chilled water and cooling pumps	42,756	153,920	23	102,615
	Operational optimization	CWP load management	54,070	194,650	29	129,768
		Optimization of chiller operation	75,258	270,926	41	180,620
	Energy conservation settings	Energy-saving lighting in public areas and offices	56,794	204,456	31	136,306
		Energy-saving control of 2F, 3F and 4F CR fan	317,581	1,143,279	170	762,195
		Adjustment to running-time of B1F extraction fan	1,800	6,480	1	4,320
		Control of flow through secondary chilled water pump	98,976	356,310	53	237,543
		Replacement of ventilation fan thermostat to save energy	3,457	12,445	2	8,297
		Timer control of cafeteria F/C for energy conservation	5,096	18,345	3	12,231
		Addition of inverters to 7F general ventilation blowers to save energy	11,872	42,739	7	28,493
		Addition of inverters control to air-conditioning	23,847	85,848	13	57,233
Addition of Backdraft Damper to 6F air-conditioning to save energy	99,528	358,297	54	238,868		
Singapore subsidiary	Facility update	Chiller system improvement	67,160	241,773	29	192,040
		Replacement of traditional lighting in the plant and offices with LED lighting	125,356	451,277	53	358,447
		Air-condition system replacement	56,179	202,241	24	160,639



Site	Energy conservation projects	Project description	Electricity savings (kWh) <sup>(1)</sup>	Electricity savings (Megajoule (MJ)) <sup>(2)</sup>	CO <sub>2</sub> emissions reduction (t)	Electricity savings (NT\$)
Korean subsidiary	Operational optimization	MAU TCV-1 for energy conservation	15191	54,687	7	45,289
		DCP for energy conservation	4,192.00	15,091	2	12,498
		Optimization of regional AHU system for energy conservation	68,766	247,555	32	205,009
		Replacement of traditional lighting with LED lighting	34,290	123,443	16	102,228
		Setting of energy-saving lighting in the plant	20,534	73,922	10	61,217
		RCU for energy conservation	187,907	676,458	86	560,198
GIGA Solution subsidiary	Facility update	Replacement of traditional lighting with LED lighting	38,656	139,160	21	90,842
	Operational optimization	Increasing the PCW supply temperature	34,920	125,711	19	82,062
		Adjustment to compressor operation mode	200,617	722,213	107	471,450
		Adjustment to vacuumizer operation mode	196,200	706,312	105	461,070
Nanjing subsidiary	Operational optimization	Chiller load management	43,800	157,678	36	146,774
		FFU slowdown	8,321	29,955	7	27,884
	Energy conservation settings	Lighting controls for office and site lighting	18,576	66,873	15	62,249
Total			2,362,184	8,503,768	1,238	6,019,548

(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.

### Calculation basis

Unit of electricity: kWh		Headquarters	Subsidiary			
			GIGA Solution	Singapore	Korea	Nanjing
CO <sub>2</sub> emission	kgCO <sub>2</sub> e	1kW hour x 0.533	1kW hour x 0.4188	1kW hour x 0.4567	1kW hour	
Price/kWh		NT\$2.4	NT\$2.35	SGD 0.1263	KRW 108	RMB 0.75

### 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<sub>2</sub> emission.

### Mitigating global warming

#### “Meat-free Monday”

2019 is the 12th 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.

## 4.4 Disclosure of Environmental Information

301-1 301-2 302-1 302-3

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 op-

erations, cooling, transportation and personnel activities. Nanjing subsidiary commenced mass production on May 1, 2018 so the data was not for the whole year. Nanjing subsidiary was therefore not included in the disclosure for 2018.

Use			Operational activities	Emission/Discharge		
 <b>Energy</b>				 <b>GHG inventory (t CO<sub>2</sub>e)</b>		
	2018	2019			2018	2019
<b>1 Diesel</b> <small>(Million Joule)</small>	153,723	289,246		Direct emission	605	1,606
<b>2 Electricity</b> <small>(Million Joule)</small>	576,536,254	579,329,590		Indirect emission <b>3</b>	71,937	85,693
<b>Electricity intensity</b> <small>(Million Joule/Revenue million NT\$)</small>	68,490	71,560		Other indirect emission <b>4</b> Not inventory	19,358	
<small>※ Heating value refer to Energy Statistics Manual of 2016, ROC</small>				 <b>Waste water (t)</b>		
 <b>Water(t)</b>					2018	2019
Water use	293,766	293,055		Waste water	142,655	180,610
 <b>Packing materials (kg)</b>				 <b>Waste (t)</b>		
	2018	2019			2018	2019
Carton <small>(recyclable)</small>	196,566	177,771		General industrial waste <b>6</b>	335	385
Cushioning material <small>(recyclable)</small>	46,038	34,877		Hazardous Industrial Waste <b>7</b>	8	7
Foil bags <small>(no recyclable)</small>	33,966	30,967				
Recycle and reuse%	87.7%	87.3%				

Testing industry does not need to use materials, above calculation is for packaging material.

### Notes

- Generator is for annual maintenance, routine operation testing or power outage use
- Electricity for testing and office
- Indirect emissions: In 2018, scope 2 consisted of externally purchased electricity. In 2019, scope 2 consisted of externally purchased electricity as well as the electricity input and energy from type 4 product usage. Direct emissions: Headquarters' refrigerant consumption coefficient was increased from low to medium in 2019 so there was an increase in direct emissions.
- Other indirect emissions: In 2019, headquarters conducted an inventory using ISO 14064-1:2018 while the subsidiaries using ISO 14064-1:2006 did not conduct an inventory.
- The 2018 report did not include the wastewater generated by the Giga Solution subsidiary. This report was amended to include the wastewater generated by the Giga Solution subsidiary in 2018.
- The statistics for packaging materials, confidential documents, domestic waste and sludge from 2018 did not take recycling into account. This has not been amended and the data included in the statistics.
- Customer's scrap IC or wafers, probe card cleaning solutions, etc.

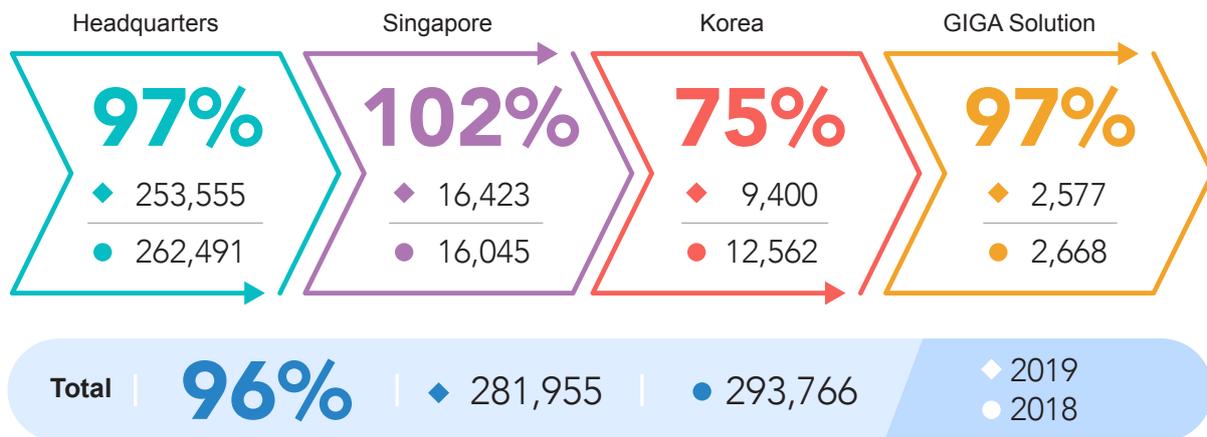
## 4.5 Water Resource Management 303-1 303-2 303-3

### 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 2019, Ardentec used 293,055 metric tons of water in total.

### Water Resources Consumption in 2018 and 2019

(unit: t)



The water costs of GIGA Solution are adjusted annually by the landlord based on the number of tenants and is not controlled by the company.

In 2019, Nanjing subsidiary used a total of 11,100 metric tons of water. Nanjing subsidiary commenced mass production from May 1, 2018 so the amount of water was not for a whole year, thus excluded from above complete annual comparison.

### Water sources

Water sources are all approved by the government for business purposes, to there is no risk of impact on the environment or species.

Headquarters	Subsidiary			
	Singapore	Korea	Nanjing	GIGA Solution
Tou Cian Stream and Shimen Reservoir	Source of industrial water is reclaimed water treated by government-approved procedures; source of domestic water is rainwater and desalinated sea water	Jinwi River and Lake Paldang	Yangtze River	Baoshan No. 2 Reservoir Hsinchu County

### 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 2019, a total of 19,758 metric tons of water were recycled from the Headquarters and Singapore subsidiary, and the amount recycled accounted for 6% of the water consumed.

The optimization of the purified water system was completed by Ardentec headquarters' Kaiyuan site in 2019 as part of Water Resource Agency's central Taiwan water-saving consulting program for major water users. Concentrated RO discharge was recycled for use by the cooling towers to save water and the project received a High Distinction from the Water Resource Agency of Ministry of Economic Affairs.

## 4.6 Pollution Prevention 304-2 306-1 306-2 306-5

### 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 2019, Ardentec removed a total of 385 metric tons of general industrial waste; About 7 metric tons of hazardous industrial waste from Ardentec headquarters, the Korea and GIGA Solution; The Singapore subsidiary and the Nanjing subsidiary do not produce hazardous industrial waste. Headquarters set a waste recycling target of over 40% for 2019 and 52% was achieved in practice.

### Waste Items and Treatment

(Unit: t)

Category	Type	2018					2019				
		Headquarters	Subsidiary				Headquarters	Subsidiary			
			Singapore	Korea	GIGA Solution	Nanjing		Singapore	Korea	GIGA Solution	Nanjing
General industrial waste	Reusable (1)	33	0	0	0	0	62	0	0	0	0
	Recyclable(2)	81	1	2	49	2	81	4	5	51	6
	Incineration	139	3	12	4	9	135	6	5	14	16
Hazardous industrial waste	Reusable (3)	6	0	0	1	0	4	0	0	1	0
	Incineration	1	0	0	0	0	1	0	1	0	0

(1) Reusable general industrial waste includes mixture of waste wood, sludge.

(2) Recyclable general industrial includes recyclable plastic, waste paper, mixture of iron, computers, etc.

(3) Reusable hazardous industrial waste includes empty barrels, waste electronic components, offal products, defective product, etc.

## 4.6.1 Waste reduction initiatives

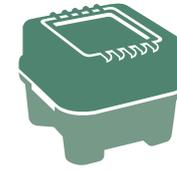
### Reuse and reduction of packaging materials

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 reuse, Ardentec cooperates with customers to reuse 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 reused for shipments, and the cardboard boxes are reused.

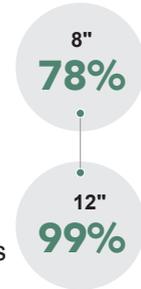
#### Reuse resources



Carton



Wafer cassettes



Greater than 100% including two or more reuses

### 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 2019, and reduce the amount of carbon they emit and the level of pollution they could have done to the environment.

## 4.6.2 Waste or polluted water discharge

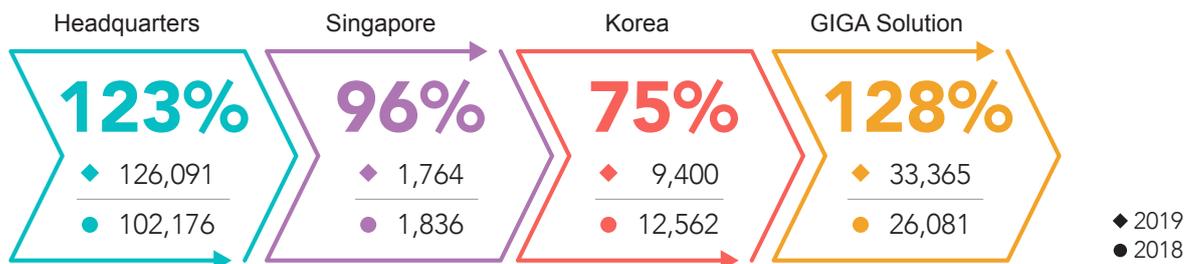
The polluted water is mainly discharged from the wastewater of the cooling water tank operated for the plant's air-conditioning and general domestic water. The Ardentec headquarters has monitoring facilities in place to manage and control the polluted water to be in compliance with the discharge standards 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. Wastewater (sewage) from the Korean and Nanjing subsidiaries are processed by the sewage treatment plant of their industrial park. Once the wastewater complies with the discharge water quality standards they are discharged into the Hwanggujicheon River and Gaowon River; 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.

### 2018 and 2019 Sewage Discharge

(Unit: t)



- Headquarters newly installed water equipment and cassette cleaning operations in 2019, which increased the amount of waste water.
- The amount of effluent produced by GIGA Solution is adjusted annually by the landlord and split among the building tenants so is not controlled by the company.
- Nanjing subsidiary produced 9,990 metric tons of wastewater in 2019. Nanjing subsidiary commenced mass production from May 1, 2018 so the amount of wastewater was not for a whole year, thus excluded from above complete annual comparison.



## 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.



## 5.2 Right People for Right Job 202-2 408-1

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, 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 luggage 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. New employees numbered 363 in 2019. There were no violations of human rights or incidents of discrimination in the employment process.

**Ardentec**

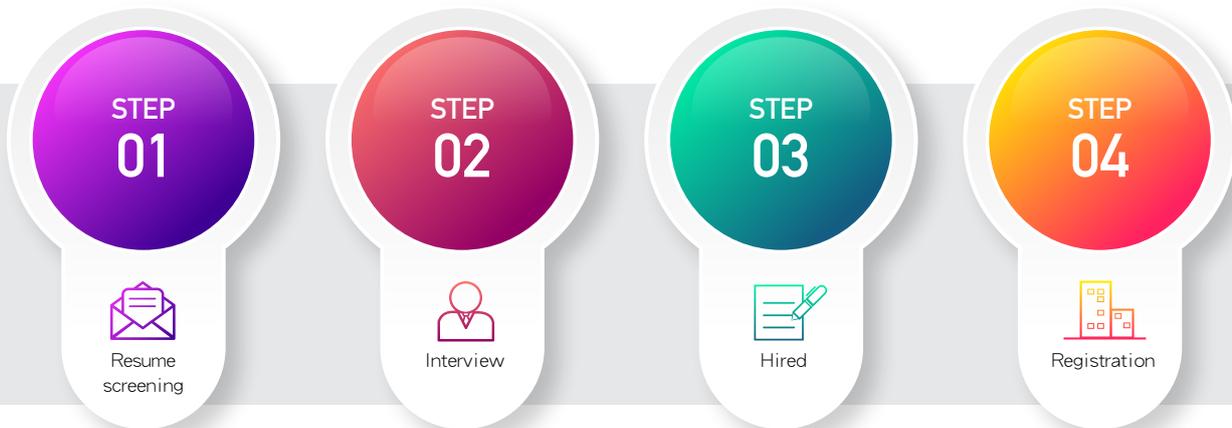
**Non-Retaliation channels for grievance or reporting**

Thank you for joining Ardentec's interview!

If you have been treated or charged unfairly while applying Ardentec jobs with the agent in Philippines, please email to [grievance@ardentec.com](mailto:grievance@ardentec.com).

We will have the designated person at your service. Don't worry about retaliation for using this channel to raise your points.

## Hire Process



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. is recruited locally; except for the two senior executives assigned by the headquarters, 71% of the Korea subsidiary employees are recruited locally. The construction of Nanjing subsidiary was completed in early 2018. In order to effectively train the local recruited employees and foster the operation of Nanjing subsidiary, ten managers (80%) are expatriated from headquarters in 2019 to build and ramp up the Ardentec operation 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.

## 5.3 Compensation and Benefits 201-1 201-3 401-2

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.

The new Corporate Governance Roadmap (2018 - 2020) issued by the Financial Supervisory Commission included measures for improving the quality of disclosure on corporate governance information and increased em-

phasis on social responsibility.

Statistics on 1,360 full-time employees in non-management positions in 2018 were compiled by Ardentec Headquarters in accordance with the Salary Information for Full-time Employees in Non-management Positions reporting process. Average salary was found to be NT\$882 thousand, which is No.1 among all TWSE/GTSM-listed packaging and testing companies (Source: Market Observation Post System/ Salary information for full-time employees in non-management positions. <https://mops.twse.com.tw/mops/web/t100sb15>), 1,373 full-time employees in non-management positions in 2019, with an average salary of NT\$811 thousand a median salary of NT\$677 thousand. Average salary in 2019 was NT\$71 thousand lower than 2018 mainly due to the industry climate. The

decrease in operating revenue and earnings in 2019 resulted less employee remuneration being available for distribution.

In 2019, the salaries, welfare Expenses and training investment of employees of Ardentec headquarter and its subsidiary totaled NT\$ 2,364,166,044. 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 2019 surplus of Taiwan Headquarters allocable to the employee is NT\$ 198,149,348.

## Welfares

Welfares	Headquarters	Subsidiary			
		Singapore	Korea	Nanjing	GIGA Solution
Pension contribution	V	V	V	V	V
Health insurance & occupational insurance	V	V	V	V	V
Year-end party	V	V	V	V	V
Comfortable dormitory	V		V	V	V
Medical consultation by stationed physicians	V		V		V
Wedding/funeral subsidies and festive gifts	V	V	V	V	V
Profit sharing	V	V			V
Group medical insurance, life insurance, and travel insurance	V	V			V
Regular health exam	V		V		V
Long-term service trophy and bonus	V	V			V
Free night meal	V		V		
Lunch and dinner subsidies	V		V	V	V
Commute shuttle service		V	V	V	
Annual employee travel	V	V			V
Vision allowances		V			
Multi-functional health center	V				
Housing Central Provident Fund				V	
Zero MO birthday leave		V			
Welcome luncheon and weekly tea party		V			
Fitness class	V	V			
Dental allowances		V			

Headquarters contract employees are not not applicable to profit sharing.

## Pension compensation

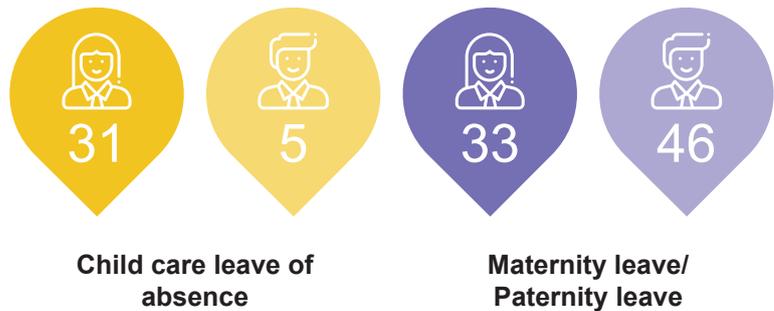
The Headquarters and GIGA Solution subsidiary transfers the pension contribution to the employees' personal bank accounts every month in accordance with the new retirement policy. Pension contribution following the old retirement contribution is also deposited to the specific accounts every month in 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. Retirement benefits - The Nanjing subsidiary makes contributions to pension insurance in accordance with the pension insurance regulations of China.

The Headquarters and its subsidiaries made pension contributions totaling 3.9% of employees' salaries in 2019.

## 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 2019, there were 31 females and 5 males applied for child care leave of absence in 2019, a total of 33 females applied for maternity leave and a total of 46 males applied for paternity leave.



## Community welfare

The welfare committee organizes employee trips on an annual basis. In 2019, 1,318 employees and their families joined the trips to explore the beauty of Taiwan and to bring up the interaction and friendship among families.

The headquarters'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!

GIGA Solution clubs include the AKGS Softball Club, GS Cafe, GS Tabletop Gaming Club, GS Billiard Club and 17 RUN Jogging Club. Social or physically challenging events are organized by the clubs at various times to enrich the lives of employees in their spare time!

The Singapore subsidiary has for 4 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.

### Clubs in Ardentec

- ◆ Softball
- ◆ Cycling
- ◆ Volunteering
- ◆ Mountain climbing
- ◆ Basketball
- ◆ Water activities
- ◆ Badminton
- ◆ Table tennis
- ◆ Triathlon
- ◆ Yoga
- ◆ Belly dancing
- ◆ Snooker
- ◆ Photography



Singapore subsidiary "Family Day"



Singapore subsidiary team building activity



Headquarters Cycling Club explores the beauty of Hsinchu's bike routes



Headquarters / Swimming across Sun Moon Lake



Headquarters Badminton Club / 2019 Ardentec Cup



Headquarters Basketball Club/ Street basketball competition



GIGA Solution subsidiary / Mayor's Cup table tennis competition



GIGA Solution subsidiary / Fun contest in year-end party



Headquarters / Softball Club training



Nanjing subsidiary / Jiangbei New Area Half Marathon



Nanjing subsidiary / GM presented mooncakes to employee for Moon Festival



Nanjing subsidiary / 2019 year-end party

## 5.4 Career Growth 401-1 402-2 403-3 410-1 412-1

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.

Ardentec offers five different types of training:

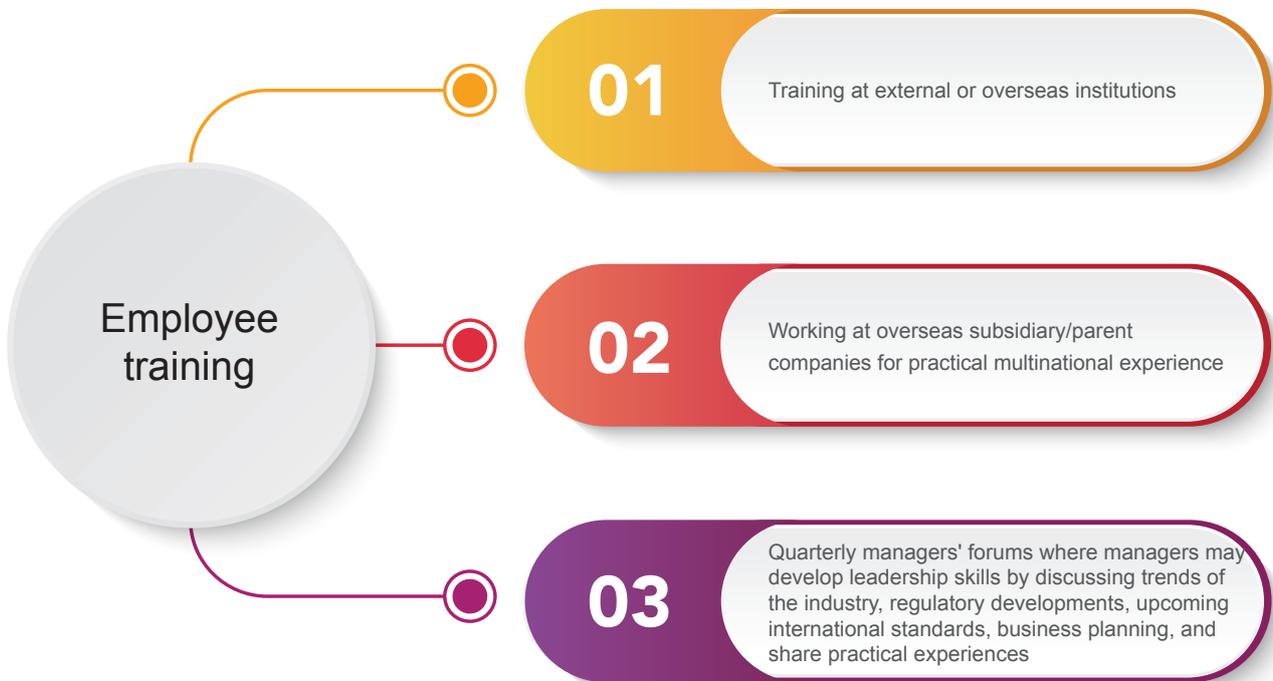
### 5 Training System



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 stan-

dard 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 2019, accumulated total of 13,647 hours of "Human Rights and Ethics" and "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 2019, Ardentec's headquarters and subsidiaries or-

## 2019 Training Hours by Job Role and Gender

ganized 77,747.5 hours of training in total. On average, every male employee had 30 hours of training. Every female employee had 35 hours of training. 100% of employees received training.

Job Role	Male	Female
Management *	19.6	13.2
Engineering	29.8	33.0
Administrative	19.1	16.7
Technical	44.2	40.4

\* refers to managerial roles of section grade and above

## 5.5 Workplace Health and Safety

403-1 403-2 403-4

### 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 18001:2007 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 System Verification



Headquarters



Singapore Subsidiary



Korea Subsidiary



Nanjing Subsidiary

### 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.

	Headquarters		Subsidiary							
			Singapore		Korea		Nanjing		GIGA Solution	
The number of committee members	25		14		8		10		18	
Labor representative	13	52%	13	93%	4	50%	8	80%	13	72%
Management representative	12	48%	1	7%	4	50%	2	20%	5	28%

## Safe workplace

### Inspection

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

Working environment measurement is conducted on a biannual basis to ensure the intensity of CO<sub>2</sub> in air, the

exposure intensity of chemical, and illuminance are complying with the regulatory requirements.

### Very Early Smoke Detection Apparatus

To increase our internal safety standards to a high level and uphold our commitment to customers on business continuity, in 2019 Ardentec headquarters required all clean rooms and high/low-voltage switching rooms to complete the installation of Very Early Smoke Detection Apparatus (VESDA) whether it is mandated by the rele-

vant regulations or not. The higher sensitivity of VESDA allows alarm configuration to be optimized for different environments. Potential fires can then be detected early to prevent fire risk. Prevents disruption to operations and losses from stoppages. Headquarters is planning to expand the program to include the server room as well.

### Low-oxygen environment monitoring

To prevent accidents from low-oxygen environments caused by accidental leakage of nitrogen gas in the work area, low-oxygen detection and alarm systems have been

installed in all areas where nitrogen gas is used to ensure work safety.

## 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 4 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

Employee health checkups are conducted every two years to collect information such as employee age, work, and life schedule, and working conditions. The correlation between health risks and work are analyzed to identify high-risk employees for proactive health management. Resident physicians provide consultations for employees identified as being in the high-risk group while regular follow-ups and support are provided by nursing personnel

to reduce the risk of serious illness among employees.

For employees with anomalies in the results of their health checks, individual health instruction and education by the resident physician is organized. Assistance with seeking medical treatment is provided if necessary.

Resident physicians and nursing personnel regularly visit each site to help treat/prevent general/occupational diseases/injuries, offer health advice and provide first-aid.



### 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

Occupational injury and absenc information will be composed according to the definition of GRI 403-2 annually, to review the performance of health and safety management, and as s reference for continuous improvement.

In 2019, there were 22 cases of occupational accidents

with 6 cases in the workplace such as falling on the stairs or while walking, and eyes getting hit by air sprays are all considered minor injuries;16 cases were traffic accidents while commuting but are not included in the statistics for occupational injuries.

### Occupational Injury and Absentee Statistics

Items	Headquarters		Subsidiary								Total
			Singapore		Korea		Nanjing		GIGA Solution		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
No. of occupational injury	7	6	0	0	1	0	0	1	4	3	22
Disabling injuries	0	2	0	0	1	0	0	0	2	1	6
Lost days	0.00	5.00	0.00	0.00	3.75	0.00	0.00	0.00	9.00	2.00	19.75
Injury rate (IR)	0.00	0.03	0.00	0.00	2.39	0.00	0.00	0.00	0.75	0.44	0.07
Lost days rate (LDR)	0.00	0.07	0.00	0.00	8.95	0.00	0.00	0.00	3.38	0.88	0.22
Absentee days	467	1,428	381	438	70	23	104	11	373	812	4,107
Absentee rate(%)	0.27	0.91	2.13	2.98	0.65	0.23	0.74	0.13	0.97	1.07	0.80

Lost days: Lost working day count begins 2nd working day after the accident

Injury Rate (IR) = (total disabling injuries / total work hours elapsed) x200,000

Lost days rate(LDR) = (total lost work days / total work hours elapsed) x200,000

Absentee days include sick leave, menstrual leave, occupational injury leave, and disease control leave.

Absentee rate (AR) = (total absentee days in reporting period / total working days in reporting period) x 100%

**No occupational disease(ODR=0%), occupational death incident occurred in 2019, including headuarters, its subsidiaries and their contractors.**

## 5.6 Labor-Management Harmony 102-17 102-41 402-1 407-1

### 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 issues, 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 2019, we received 164 mails from the suggestion box, including 43 suggestions or grievances from the internal on-line platform and 121 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.

### Suggestion box

Suggestion boxes have been set up by Ardentec headquarters and all subsidiaries. Once a matter has been processed by a dedicated unit a reply is sent to the employee or issued as a company announcement.



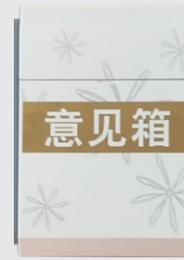
Headquarters



Singapore subsidiary



Korea subsidiary



Nanjing subsidiary



GIGA Solution subsidiary

## Work-life balance

We admire employees who enjoy their work or are self-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.

## 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 107-1 102-8 405-1

As of December 31, 2019, Ardentec had 2,280 employees worldwide with a gender distribution of 1.15:1 (male:female). Details of which are as follows:

### Job Role/Gender Distribution

Job role	Headquarters		Subsidiary							
			Singapore		Korea		Nanjing		GIGA Solution	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Manager *	122	29	15	6	10	1	11	1	54	17
Engineering	466	147	42	17	18	5	33	15	204	22
Administrative	48	61	6	8	2	3	3	9	6	40
Technical	119	440	14	28	7	26	20	11	20	174

\*Manager: section head or higher management

Headquarters: includes 1 part-time consultants (male), 1 contract employee (female) and 8 interns (male 5, female 7); Nanjing subsidiary includes 2 contract employees (female); GIGA Solution subsidiary includes 1 contract employee (male)

### Academic Distribution

Education background	Headquarters		Subsidiary							
			Singapore		Korea		Nanjing		GIGA Solution	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
High school and below	67	179	2	4	10	23	0	1	42	41
College/university	538	434	29	13	26	10	40	26	197	170
Postgraduate and above	150	64	46	42	1	2	27	9	45	42

### Nationality Distribution

Nationality	Headquarters		Subsidiary							
			Singapore		Korea		Nanjing		GIGA Solution	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Domestic	691	468	26	10	35	32	53	34	283	168
Foreign	64	209	51	49	2	3	14	2	1	85

### Age Distribution

Age	Headquarters		Subsidiary								%
			Singapore		Korea		Nanjing		GIGA Solution		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
<30	165	160	13	15	5	20	45	23	51	41	24%
30~50	534	469	59	43	30	15	17	12	217	205	70%
>50	56	48	5	1	2	0	5	1	16	7	6%



# Customer Service and Supplier Management

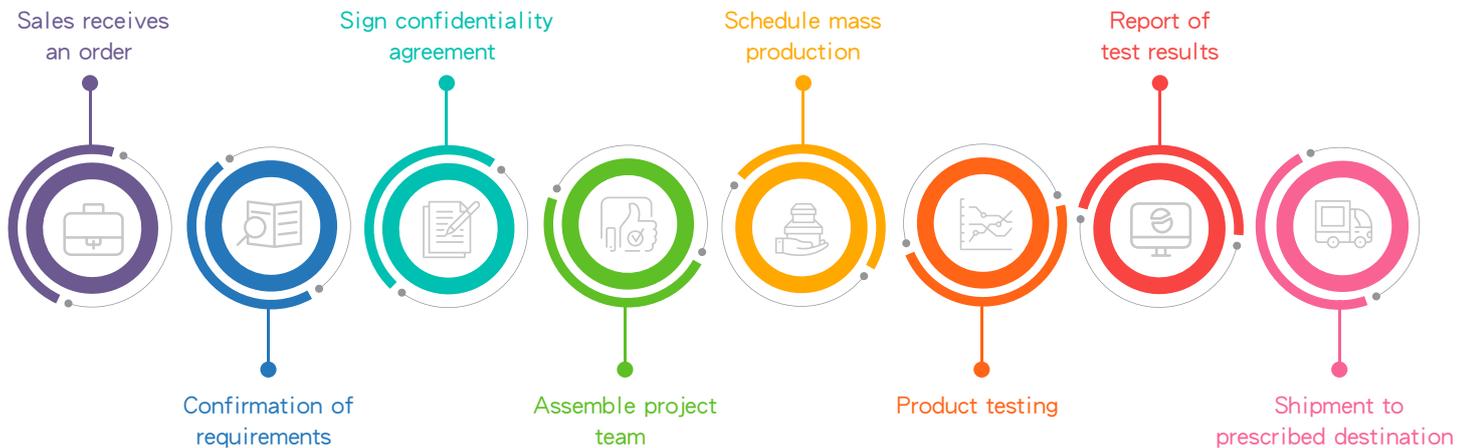
- 6.1 Customer Service
- 6.2 Customer Secrecy Protection
- 6.3 Quality Optimization of Customer Service
- 6.4 Customer Satisfaction Surveys
- 6.5 Supplier/Contractor Management
- 6.6 Supplier Audits
- 6.7 Supplier/Contractor Workplace Safety

## 6.1 Customer Service

Ardentec focuses on the development of wafer and final testing technologies as well as improvements to rapid mass production. A comprehensive information system has been developed to provide customers with high-quality and timely testing services. The information system also protects confidential customer data to help them succeed in the global market. The strategy benefits both Ardentec and our customers.

The Test Process Analysis System (TPAS) information system developed by Ardentec can provide

customers with transparent, real-time information on production and testing. The system can also be customized to satisfy the product testing requirements of each customer. Weekly project meetings strengthen the function and service efficiency of trans-department customer project teams. Integrated service systems and communication channels are provided for sales, production management, quality assurance, test development, product engineering, product manufacture and other areas.



## 6.2 Customer Secrecy Protection 418-1

Ardentec has established an Information Security Committee to promote information security related management. Common Criteria verification is also promoted to ensure the effectiveness of the information security management system. Confidentiality agreements are signed with every customer with the support team adhering strictly to the confidentiality requirements during the customer service process to protect the trade secrets 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.

DCC closely monitor and control all customer technology and data, grant access individually on need-to-know basis. Identify the individuals who print and require access card to retrieve printed documents to eliminate the risk of leaking of customer's confidential information.

To step up outgoing email (to external party) control, review recipient's domain and return all suspicious emails to prevent any emails send to non-intended parties by accident, committing ourselves to protect our customers' confidential information.

Monthly review any violation cases reported relating to invasion of privacy or data leakage. In 2019, no violation cases reported by any customer.

## 6.3 Quality Optimization of Customer Service

Weekly project meetings are conducted with the customer by Ardentec. Quarterly Business Reviews (QBRs) are also conducted with key customers on business, engineering technology and quality optimization to collect customer opinions and requirements. Internal meetings are regularly held to review and propose improvement plans. Progress is then reported at the next business, engineering technology and quality optimization meeting. To improve customer satisfaction, Ardentec executives and sales managers regularly visit customers to stay abreast of market changes and customer requirements.

Ardentec is continuing to upgrade the functionality and efficiency of our proprietary TPAS system to provide customized virtual factory information. Data links can be set up based on individual customer requirements to provide the latest information on production process and utilization

of production capacity. This virtual factory model allows the customer to keep track of production progress and delivery time at all times. 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.

Establish efficient communication channels between Ardentec and its customers, meetings held in discussing business, production, engineering matters by the members of each function and its corresponding customer contact points as and when needed, at the same time exchanging information on engineering and technology, with the aim to discover and resolve issues within shortest timeframe with our customers.

---

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

## 6.4 Customer Satisfaction Survey 102-29

The Customer Satisfaction Survey conducted by Ardentec every year looks at sales services, engineering support, on-time delivery rate, hazardous substance free controls, quality management and system services. The survey results provide a critical reference for future improvements to customer satisfaction. Having better knowledge of customer requirements allows Ardentec to make continuous improvements and upgrades to testing quality, engineering technology and service efficiency that translate into a win-win partnership. Ardentec believes

that customer satisfaction with delivered quality and services is the only way to improve customer satisfaction, strengthen relations with existing customers, and attract new customers. Only then can the profitability of the company be maintained. 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 2019, which was higher than the 85% 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 102-9 204-1 414-1

### 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 2019.

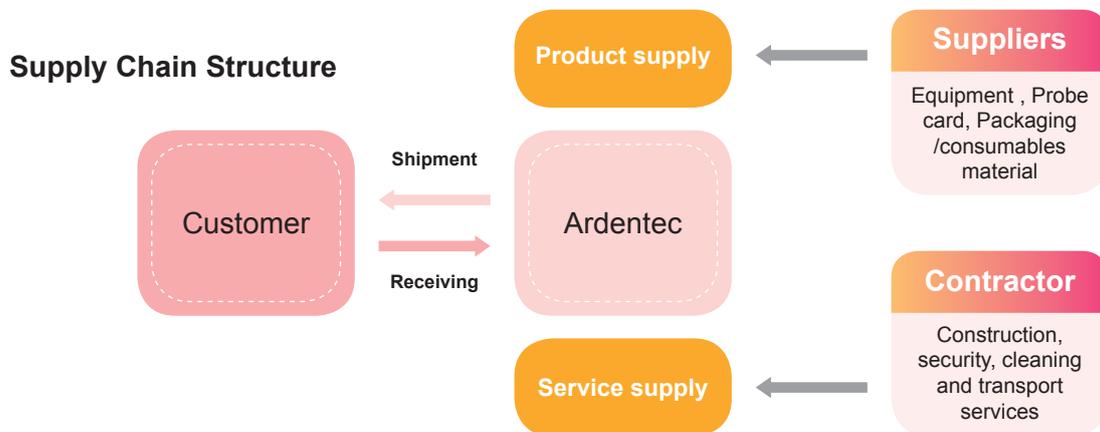
## Supplier/contractor management

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.



## 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 CSR 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; cell: +886-933-266-008; Project Senior Director Rhiannon Chen  
 E-mail : rhiannon.chen@ardentec.com ; grievance@ardentec.com

**Ardentec Corporation**

**Material Management 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 407-1 408-1

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

In 2019, 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.

(Note) Including the supplier had a domestic production providing probe card for production and with total order more than NT\$5 million in previous year, labor recruiting agent, and on-site service provider.

## 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:

1. Notification of hazards before commencing work to ensure the protection of the safety and health of contractors
2. Informing suppliers and contractors of the expectations and requirements in corporate social responsibility and business ethics for suppliers

In 2019, The headquarters and its subsidiaries have held a total of 180 sessions of Contractor Pre-Service Education and Training, attended by representing 444 suppliers, 1,932 participants.

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

#### Knowledge travel to remote by second-hand book sharing

We launched the 6th year of sharing good books with children in distant neighborhoods. We collected and donated There are 380 second-hand books donated by employees to the Hengshan and Jianshih former centers in 2019. In the past 6 years, a total of 4,812 books have been donated to Boyo Social Welfare Foundation and remote elementary schools in Hsinchu.



感謝狀

感謝 欣銓科技股份有限公司  
 響應社會公益活動，捐贈本書捐建圖書室一區，讓孩童  
 們能接觸更多元的書籍，增加閱讀量及知識視野。



#### Have a bright future — blessings to the graduates

Ardentec began supporting local schools and neighborhoods near the industrial park in 2017. A total of 48 Ardentec Awards have been given to graduates of Zhongzheng Junior High School as well as Huxing and Zhongxing Elementary Schools at Hukou Industrial Park in recognition of their academic endeavors and wish their future success! These are blessings that we present to local new blood and the hope for the future when the Phoenix Flower is in bloom!



Ardentec Award was presented in Chungshing Elementary School graduation ceremony



Ardentec Award was presented in Huaxing Elementary School graduation ceremony



Auspicious Lion Dance submit lucky to Ardentec ground-breaking of Tingshin Site Phase 2 – by Zhongzheng Junior High School Lion Dance Group

#### 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!

The visit from the Lion Dance Troupe of Zhongzheng Junior High School at Dingxing Site Phase 2 was an important and joyful event. An auspicious lion dance was presented at the ground-breaking ceremony on June 5, 2019, to symbolize joy and prosperity! The performance was applauded by the audience!

### After-school learning for Taiwanese children

There are many low-income or new immigrants' families in Hsinchu Industrial Park where Ardentec located. These families are less support to the education and learning for "Taiwanese children". The chief of Fengshan Village self-supported to organize "free after-school tutoring", and to offer "free dinner", after-school care for children of fore mentioned families. The initiatives help them overcome learning difficulties and reduce the learning gap among the next-generation of Taiwanese children. 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 for 7 consecutive years, to provide disadvantaged families with the support. The sustained support and assistance from Ardentec warmed the hearts of new immigrants and their children.



Headquarters donated necessities to Fengshan Village for after-school learning

### After-school care

Ardentec began sponsoring the after-school daycare classes set up by nearby Zhongzheng Junior High School in 2019. School teachers hold group or individual counseling classes for students based on their individual circumstances including supervising students' homework, studies, extra-curricular reading and character education.

### 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 2019 academic year, Ardentec provided 26 students from National Taiwan University of Science and Technology, Yuan Ze University, Fu Jen Catholic University, and Minghsin University of Science and Technology with internship opportunities. Since 2012, a total of 167 students from 8 universities have been offered internships and academia cooperation in Ardentec. We invited our interns to join Ardentec straight after graduation to accumulate their professional values in depth and breadth. Ardentec was invited to share its industry-academia cooperation experience at a presentation of results event in 2019 with the theme of

"Industry-academia cooperation for a better future" hosted by the Ministry of Education. In 2019, Vice President C. C. Rou was invited to serve on the college advisory and curriculum committees of Feng Chia University's College of Information and Electrical Engineering at to share his experience in the industry and provide a reference for curriculum design. To provide students with an understanding of semiconductor production operations and work environment, in the same year, a total of 126 teachers and students from the National Tsing Hua University's Department of Industrial Engineering and Engineering Management and from the Minghsin University of Science and Technology's Department of Information Management were given guided tours of the production lines.



Press conference for Industry-Academia Cooperation Achievement – by Ministry of Education, Aug. 22, 2019



Industrial Engineering and Management Department, National Tsing Hua University visit Ardentec, May 17, 2019

## 7.2 Caring for the Disadvantaged

### Build a career stage for the disadvantaged minorit

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,

### Diverse and friendly society

In 2019, we have expanded our participation in CSR, encourage our fellow colleagues to actively partake in charitable events and make donations to help the

Ardentec has hired more people with disabilities than the amount required by the People with Disabilities Rights Protection Act. In 2019, the employment of people with disabilities was 133% of that required by law.

disadvantaged groups, total donation NTD507,100, let Ardentec's warm heart brighten every corner. Annually, GIGA Solution promote the products made



by vulnerable groups to its employees through charity sales or orders, collectively, they have transformed employee's spending into positive income of these beneficiary groups. The amount of NTD 47,835 was generated for Down Syndrome Foundation in year 2019 through such activities.

Ardentec's longstanding support for local charities such

as Boyo Social Welfare Foundation, Genesis Social Welfare Foundation, St. Joseph Social Welfare Foundation, Catholic Hua-Kuang Social Welfare Foundation and Maria Social Welfare Foundation help to foster a more friendly society. In 2019, Ardentec employees and Huashan Foundation put "treat other elders as your own" into action by visiting elders living alone in the Industrial Park with gifts of noodles, canned food and other items. Their gesture touched the hearts of the elders.



Appreciation from Boyo Social Welfare Foundation by Richard Chia-Tung Lee, the founder (Left)



Rice donation to local charity center - Korea subsidiary



Help kimchi making for nursing center – Korea subsidiary



Charity sale for Down Syndrome Foundation - Giga Solution subsidiary

### Anti-cancer charity project

2019 was the 2nd year Singapore subsidiary employees joined Singapore Cancer Charity projects to donate and provide services for reducing cancer and save lives!



### Charity run

In 2019, employees Singapore subsidiary took part in the charity run organized by The Strait Times in Singapore for the third times to raise funds for disadvantaged groups.

### Warm companionship Having fun together

Volunteer club members regularly visit St. Joseph Home to accompany the elderly in singing, exercising, dancing, and helping their social integration, etc. They provide haircuts and interation for the elderly to activate lively aged life.



### Saving lives with blood donation

Ardentec has been hosting 2 blood donation drives every year since 2013. Employees are encouraged to donate their blood towards the cause of "donate one bag of blood to save a life". A total of 1,007 bags of blood have been donated through 6 consecutive years of selfless compassion. Employees at the Singapore subsidiary roll up their sleeves every year to donate blood. Everyone is willing to donate their warm blood to strangers that need it. Their love is like a cheering squad for another life!

Blood donation - headquarters (left), Singapore subsidiary (right)



## 7.3 Sustainability of the Environment and Ecosystem

### Guarding the Ocean and Loving the Earth Guarding the Ocean and Loveing the Earth Beach cleanup campaign at hoe and abroad countries

#### International Coastal Cleanup

"If everyone of us is willing to contribute our little energy towards our environment, there will be 7 billion energy source to make earth a better place". With the belief, Ardentec hosted its 7th "Protect the Oceans and Love the Earth" coastal cleanup event in 2019. Around 208 people including employees and their families from Headquarters and GIGA Solution took part in this environmental education initiative. The General Manager of Singapore subsidiary led employees and their families about 37 people in volunteering for the local International Coastal Cleanup Day.

The coastal clean-up removed garbage occupying

the coastline for sorting and counting. Data on collected garbage was sent through the organizers to The Ocean Conservancy, the US-based organizer of the International Coastal Cleanup (ICC), to be compiled into an annual report on global maritime waste and make a contribution to global environmental protection. A total of 626 kg of garbage was cleaned up in 2019.

Their passion for the environment sees Ardentec employees and their families work hard to restore the beauty of the sea and sustain marine life! Through actual participation, everyone could learn how to improve their daily habits as well as sort and recycle waste in order to do everything they can to protect our magnificent oceans and the natural ecology that nurtures so much life.



Headquarter's and GIGA Solution subsidiary's employees and families/friends clean up the beach



Singapore subsidiary's employees and families/friends clean up the beach

### Ardentec's paddy – respect ecologies

Since 2015, Ardentec started supporting Changhua Ecology Wetland Rehabilitation Project and co-working for ecological wetland rice field restoration as "Ardentec Natural Paddy". Only the most natural farming methods that eschew the use of pesticides, herbicides and chemical fertilizers are employed so that a naturally diverse and balanced eco-system can be formed by the plants and animals living on the land.





### Joy riding - low-carbon light tour

All employee partners at ArdenTec love exercise and nature. The cycling club held a low-carbon light tour for the 9th consecutive year in 2019 with bicycles replacing transportation that consume energy and produce waste emissions. Colleagues and dependents were encouraged to join in living the low-carbon life. A support car provided drinking water and rations at fixed points to eliminate waste plastic bottles, plastic bags and packaging during the trip. People could then enjoy the beauty of nature during the ride without leaving trash behind.



## Community service - helping to keep the environment clean



Korea subsidiary employees clean up nearby streets quarterly. Through these activities to serve community and environment, and also to implement the coexistence and social responsibility with the community.



## Annexes

---

- Annex 1** Independent Assurance Opinion Statement
- Annex 2** GRI Standards Reference Table
- Annex 3** ISO26000 Reference Table
- Annex 4** UN Sustainable Development Goals (SDGs) 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 102-56



## INDEPENDENT ASSURANCE OPINION STATEMENT

### Ardentec Corporation 2019 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 verification of the sustainability statements contained in this report.

This independent assurance opinion statement has been prepared for the stakeholders of 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 2019 Corporate Social Responsibility Report.
2. The evaluation of the nature and extent of the Ardentec's adherence to AA1000 AccountAbility Principles (2018) in this report as conducted in accordance with type 1 of AA1000 Assurance Standard (2008) with 2018 Addendum 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 2019 Corporate Social Responsibility Report provides a fair view of the Ardentec CSR programmes and performances during 2019. 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 2019 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 AA1000AS (2008) with 2018 Addendum. We planned and performed this part of our work to obtain the necessary information and explanations we considered to provide sufficient evidence that Ardentec's description of their approach to AA1000AS (2008) with 2018 Addendum and their self-declaration in accordance with GRI Standards: Core option were fairly stated.

#### Methodology

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

- a top level review of issues raised by external parties that could be relevant to Ardentec's policies to provide a check on the appropriateness of statements made in the report.
- discussion with managers on approach to stakeholder engagement. However, we had no direct contact with external stakeholders.
- 12 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, Responsiveness and Impact as described in the AA1000AP (2018).

## Conclusions

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

### Inclusivity

This report has reflected a fact that Ardentec has continually sought the engagement of its stakeholders and established material sustainability topics, as the participation of stakeholders has been conducted in developing and achieving an accountable and strategic response to sustainability. There are fair reporting and disclosures for economic, social and environmental information in this report, so that appropriate planning and target-setting can be supported. In our professional opinion the report covers the 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 continually 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.

### Impact

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

### GRI Sustainability Reporting Standards (GRI Standards)

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

### Assurance level

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

### Responsibility

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

For and on behalf of BSI:



Peter Pu, Managing Director BSI Taiwan



**AA1000**  
Licensed Assurance Provider  
000-4

Statement No: SRA-TW-2019039  
2020-04-17

...making excellence a habit.™

## Annex 2 GRI Standards Reference Table 102-55 406-1

Verify result is as Annex 1 Independent Assurance Opinion Statement

	GRI Standards item	Corresponding chapter	Page	Remarks
<b>GRI 102: General Disclosures 2016</b>				
<b>Organizational profile</b>				
*102-1	Name of the organization	CSR Report cover	7	
*102-2	Activities, brands, products, and services	1.1 Company Introduction 1.4 Professional Services	7 9	
*102-3	Location of headquarters	About the Report 1.1 Company Introduction	7	
*102-4	Location of operations	About the Report	1	
*102-5	Ownership and legal form	1.1 Company	7	
*102-6	Markets served	1.5 Market Size and Performance	10-11	
*102-7	Scale of the organization	1.3 The Organization 5.7 Workforce Structure	8-9 63	
*102-8	Information on employees and other workers	5.7 Workforce Structure	63	
*102-9	Supply chain	6.5 Supplier/Contractor Management	66-68	
*102-10	Significant changes to the organization and its supply	3.7 Major Investment	35	
*✘102-11	Precautionary Principle or approach	3.5 Internal Controls 3.6 Risk Management	32 32-34	
*102-12	External initiatives	1.8 Honors and Accolades 4.3 Climate Change and Energy Management	12-14 38-15	Reduce damage to the Ozone layer from methane emissions
*102-13	Membership of associations	1.8 Honors and Accolades	12-14	
<b>Strategy</b>				
*✘102-14	Statement from senior decision-maker	Letter from the Management 3.1 Governance Principles	4 29	
✘102-15	Key impacts, risks, and opportunities	1.5 Market Size and Performance	10-11	
<b>Ethics and integrity</b>				
*✘102-16	Values, principles, standards, and norms of behavior	3.4 Ethical Guidelines	31-32	
✘102-17	Mechanisms for advice and concerns about ethics	3.4 Ethical Guidelines 5.6 Labor-Management Harmony	31-32 61-62	
<b>Governance</b>				
*102-18	Governance structure	1.3 The Organization 2.1 CSR Policy 2.2 The CSR Organization 3.2 Board of Directors	8-9 16 16-17 29-31	
102-19	Delegating authority	2.2 The CSR Organization	16-17	
102-20	Executive-level responsibility for economic, environmental, and social topics	2.2 The CSR Organization	16-17	
102-21	Consulting stakeholders on economic, environmental, and social topics	2.4 Stakeholders and analysis of Topics of Concern	18-21	
102-22	Composition of the highest governance body and its committees	3.2 Board of Directors	29-31	
102-23	Chair of the highest governance body	3.2 Board of Directors	29-31	

GRI Standards item		Corresponding chapter	Page	Remarks
102-24	Nominating and selecting the highest governance body	3.2 Board of Directors	29-31	
102-25	Conflicts of interest	3.2 Board of Directors 3.3 Executive Compensation Policy	29-31 31	
102-26	Role of highest governance body in setting purpose, values, and strategy	1.2 Corporate Values	8	
※102-27	Collective knowledge of highest governance body	3.1 Governance Principles	29	
※102-28	Evaluating the highest governance body's performance	3.1 Governance Principles 3.2 Board of Directors	29 29-31	
102-29	Identifying and managing economic, environmental, and social impacts	6.4 Customer Satisfaction Surveys	66	
※102-30	Effectiveness of risk management processes	3.6 Risk Management	32-34	
※102-31	Review of economic, environmental, and social topics	3.1 Governance Principles 3.6 Risk Management	29 32-34	
102-32	Highest governance body's role in sustainability reporting	About the Report	1	
102-36	Process for determining remuneration	3.3 Executive Compensation Policy	31	
<b>Communicate with stakeholders</b>				
*102-40	List of stakeholder groups	2.4 Stakeholders and analysis of Topics of Concern	18-21	
*102-41	Collective bargaining agreements	5.6 Labor-Management Harmony	61-62	
*102-42	Identifying and selecting stakeholders	2.4 Stakeholders and analysis of Topics of Concern	18-21	
*102-43	Approach to stakeholder engagement	2.4 Stakeholders and analysis of Topics of Concern	18-21	
*102-44	Key topics and concerns raised	2.5 Key Topics and the Identification of Boundaries	22	
<b>Report overview</b>				
*102-45	Entities included in the consolidated financial statements	1.5 Market Size and Performance	10-11	
*102-46	Defining report content and topic Boundaries	About the Report	1	
*102-47	List of material topics	2.5 Topic Materiality Matrix	22	
*102-48	Restatements of information	Refer to each chapter		
*102-49	Changes in reporting	2.6 Material Topics Value Chain and Management Strategy	23-26	Material topic "Business integrity" was effectively controlled with relatively low risk in 2018, thus it was waived from material topics in 2019.
*102-50	Reporting period	About the Report	1	
*102-51	Date of most recent report	About the Report	1	
*102-52	Reporting cycle	About the Report	1	
*102-53	Contact point for questions regarding the report	About the Report	1	
*102-54	Claims of reporting in accordance with the GRI Standards	About the Report	1	
*102-55	GRI content index	Annex 2	82-86	
*102-56	External assurance	About the Report Annex 1	1 80-81	
<b>GRI 103 : Management Approach 2016</b>				

GRI Standards item		Corresponding chapter	Page	Remarks
*103-1	Explanation of the material topic and its Boundary	2.5 Topic Materiality Matrix 2.6 Material Topics Value Chain and Management Strategy	22 23-26	
*103-2	The management approach and its components	2.6 Material Topics Value Chain and Management Strategy	23-26	
*103-3	Evaluation of the management approach	2.6 Material Topics Value Chain and Management Strategy	23-26	
<b>Disclosure of specific topic</b>				
<b>GRI 201 : Economic Performance 2016</b>				
*✕201-1	Direct economic value generated and distributed	1.5 Market Size and Performance 1.6 Surplus Allocation 3.3 Executive Compensation Policy 5.3 Compensation and Benefits	10-11 11 31 52-56	
*✕201-3	Defined benefit plan obligations and other retirement plans	5.3 Compensation and Benefits	52-56	
<b>GRI 202 : Market Presence 2016</b>				
202-2	Proportion of senior management hired from the local community	5.2 Right People for Right Job	51-52	
<b>GRI 203 : Indirect Economic Impacts 2016</b>				
✕203-2	Significant indirect economic impacts	3.6 Risk Management	32-34	
<b>GRI 204 : Procurement Practices 2016</b>				
204-1	Proportion of spending on local suppliers	6.5 Supplier/Contractor Management	66-68	
<b>GRI 205 : Anti-corruption 2016</b>				
205-1	Operations assessed for risks related to corruption	3.4 Ethical Guidelines	31-32	
✕205-2	Communication and training about anti-corruption policies and procedures	3.4 Ethical Guidelines	31-32	
✕205-3	Confirmed incidents of corruption and actions taken	3.4 Ethical Guidelines	31-32	
<b>GRI 301 : Materials 2016</b>				
301-1	Materials used by weight or volume	4.4 Disclosure of Environmental Information	45-46	
301-2	Recycled input materials used	4.4 Disclosure of Environmental Information	45-46	
<b>GRI 302 : Energy 2016</b>				
302-1	Energy consumption within the organization	4.4 Disclosure of Environmental Information	45-46	
302-3	Energy intensity	4.4 Disclosure of Environmental Information	45-46	
302-4	Reduction of energy consumption	4.3 Climate Change and Energy Management	38-45	
<b>GRI 303 : Water 2016</b>				
303-1	Water withdrawal by source	4.5 Water Resource Management	47	
303-2	Water sources significantly affected by withdrawal of water	4.5 Water Resource Management	47	
303-3	Water recycled and reused	4.5 Water Resource Management	47	

GRI Standards item		Corresponding chapter	Page	Remarks
<b>GRI 304 : Biodiversity 2016</b>				
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	37	
304-2	Significant impacts of activities, products, and services on biodiversity	4.6 Pollution Prevention	48-49	
<b>GRI 305 : Emissions 2016</b>				
305-1	Direct (Scope 1) GHG emissions	4.3 Climate Change and Energy Management	38-45	The direct GHG emissions in Taiwan headquarters and Singapore Site has been verified by BSI
305-2	Energy indirect (Scope 2) GHG emissions	4.3 Climate Change and Energy Management	38-45	The direct GHG emissions in Taiwan headquarters and Singapore Site has been verified by BSI
305-4	GHG emissions intensity	4.3 Climate Change and Energy Management	38-45	
305-5	Reduction of GHG emissions	4.3 Climate Change and Energy Management	38-45	
<b>GRI 306 : Effluents and Waste 2016</b>				
306-1	Water discharge by quality and destination	4.6 Pollution Prevention	48-49	
306-2	Waste by type and disposal method	4.6 Pollution Prevention	48-49	
306-5	Water bodies affected by water discharges and/or runoff	4.6 Pollution Prevention	48-49	
<b>GRI 307 : Environmental Compliance 2016</b>				
307-1	Non-compliance with environmental laws and regulations	4.3 Climate Change and Energy Management	38-45	There was no violation in the year of report.
<b>GRI 401 : Employment 2016</b>				
※401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	5.3 Compensation and Benefits	52-56	
<b>GRI 402 : Labor/Management Relations 2016</b>				
※402-1	Minimum notice periods regarding operational changes	5.6 Labor-Management Harmony	61-62	
<b>GRI 403 : Occupational Health and Safety 2016</b>				
※403-1	Workers representation in formal joint management-worker health and safety committees	5.5 Workplace Health and Safety	58-60	
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	5.5 Workplace Health and Safety	58-60	
※403-4	Health and safety topics covered in formal agreements with trade unions	5.5 Workplace Health and Safety	58-60	There is no union in the Company, but there is an occupational safety and health management committee dedicated to this function

GRI Standards item		Corresponding chapter	Page	Remarks
<b>GRI 404 : Training and Education 2016</b>				
404-1	Average hours of training per year per employee	5.4 Career Development	56-58	
404-2	Programs for upgrading employee skills and transition assistance programs	5.4 Career Development	56-58	
404-3	Percentage of employees receiving regular performance and career development reviews	5.3 Compensation and Benefits 5.4 Career Development	52-56 56-58	
<b>GRI 405 : Diversity and Equal Opportunity 2016</b>				
405-1	Diversity of governance bodies and employees	3.2 Board of Directors 5.7 Workforce Structure	29-31 63	
<b>GRI 406 : Non-discrimination 2016</b>				
※406-1	Incidents of discrimination and corrective actions taken	GRI Standards Reference Table	82-86	There was no discrimination in 2019.
<b>GRI 407 : Freedom of Association and Collective Bargaining 2016</b>				
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	5.6 Labor-Management Harmony 6.6 Supplier Audits	61-62 68	
<b>GRI 408 : Child Labor 2016</b>				
※408-1	Operations and suppliers at significant risk for incidents of child labor	5.2 Right People for Right Job 6.6 Supplier Audits	56-58	
<b>GRI 410 : Security Practices 2016</b>				
410-1	Security personnel trained in human rights policies or procedures	5.4 Career Development	56-58	
<b>GRI 412 : Human Rights Assessment 2016</b>				
412-2	Employee training on human rights policies or procedures	5.4 Career Development	56-58	
<b>GRI 414 : Supplier Social Assessment 2016</b>				
414-1	New suppliers that were screened using social criteria	6.5 Supplier/Contractor Management	66-68	
<b>GRI 418 : Customer Privacy 2016</b>				
※418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	3.6 Risk Management 6.2 Customer Secrecy Protection	32-34 65	There was no complaint of violation of customer privacy or data leakage in 2019.
<b>GRI 419 : Socioeconomic Compliance 2016</b>				
※419-1	Non-compliance with laws and regulations in the social and economic area	2.6 Material Topics Value Chain and Management Strategy	23-26	The Giga Solution subsidiary was fined NT\$20,000 for breaching Paragraph 1, Article 24 of the Labor Standards Act.

\*Core Item ; ※Topic Materiality; Core Item is fully disclosed and others are non-fully disclosed.

### Annex 3 ISO 26000 Reference Table

ISO 26000 indicator	Corresponding chapter	Note	
<b>Organizational governance</b>	Decision-making processes and structures that help fulfill social responsibilities and enable applications of core CSR principles	2. Sustainable Business Framework 3. Corporate Governance 5.2 Right People for Right Job	
<b>Human rights</b>	Checks for regulatory compliance and avoidance of human rights risks	5. Employees as Partners 6.5 Supplier/Contractor Management	Employees are provided with a multiple means through which to communicate and file complaints
	Human rights risk situations	5. Employees as Partners 5.6 Labor-Management Harmony	
	Avoidance of complicit	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	
<b>Labor practices</b>	Employment and employment relations	5.2 Right People for Right Job	
	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	2.7 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	
<b>The environment</b>	Prevention of pollution	4.3 Climate Change and Energy Management 4.6 Pollution Prevention	
	Sustainable resource use	4.6 Pollution Prevention	
	Climate change mitigation and adaptation	4.1 Environmental Policy 4.3 Climate Change and Energy Management	
	Protection of the environment, biodiversity and restoration of natural habitats	4.1 Environmental Policy 7.3 Sustainability of the Environment and Ecosystem	

	ISO 26000 indicator	Corresponding chapter	Note
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 6.4 Customer Satisfaction Surveys 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. Community involvement 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	5.5 Workplace Health and Safety	58
		3.9		
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	4.4	5.4 Career Growth	56
		4.5	7.1 Educational Support	70
		4.7		
5	Achieve gender equality and empower all women and girls	5.1	5.2 Right People for Right Job	51
		5.2	5.3 Compensation and Benefits	52
		5.b	5.4 Career Growth	56
6	Ensure availability and sustainable management of water and sanitation for all	6.3	4.5 Water Resource Management	47
		6.4	4.6 Pollution Prevention	48
7	Ensure access to affordable, reliable, sustainable and modern energy for all		4.3 Climate Change and Energy Management	72
		7.2 7.3	4.5 Greenhouse Gas Management	75
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.2	1.7 Development Strategies and Innovations	11
		8.7	5.2 Right People for Right Job	51
		8.8	5.4 Career Growth	56
12	Ensure sustainable consumption and production patterns		4.3 Climate Change and Energy Management	38
		12.5	4.6 Pollution Prevention	48
13	Take urgent action to combat climate change and its impacts		4.3 Climate Change and Energy Management	38
		13.3	5.4 Career Growth	56
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	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	4.3 Climate Change and Energy Management 4.5 Water Resource Management 4.6 Pollution Prevention 7.3 Sustainability of the Environment and Ecosystem	
	Undertake initiatives to promote greater environmental responsibility	4.3 Climate Change and Energy Management 4.5 Water Resource Management 4.6 Pollution Prevention 7.3 Sustainability of the Environment and Ecosystem	
	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	3.1 Governance Principles 3.4 Ethical Guidelines 3.5 Internal Controls 6.5 Supplier/Contractor Management	

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

	Definition	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 the Management 2.2 The CSR Organization 3.1 Governance Principles
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 the Management 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 the Management 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	3.1 Governance Principles 3.4 Ethical Guidelines

	Definition	Corresponding chapter
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 the Management</p> <p>2. Sustainable Business Framework</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. 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> <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>	2.2 The CSR Organization
Article 10	<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>	<p>2.4 Stakeholders and Analysis to Topics of Concern</p> <p>2.7 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

	Definition	Corresponding chapter
Article 12	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.	4.3 Climate Change and Energy Management
Article 13	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: 1. Collecting sufficient and up-to-date information to evaluate the impact of the company's business operations on the natural environment. 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. 3. Adopting enforcement measures such as concrete plans or action plans, and examining the results of their operation on a regular basis.	4.3 Climate Change and Energy Management
Article 14	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.	4.3 Climate Change and Energy Management
Article 15	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: 1. Reduce resource and energy consumption of their products and services. 2. Reduce emission of pollutants, toxins and waste, and dispose of waste properly. 3. Improve recyclability and reusability of raw materials or products. 4. Maximize the sustainability of renewable resources. 5. Enhance the durability of products. 6. Improve efficiency of products and services.	4.3 Climate Change and Energy Management 4.5 Water Resource Management 4.6 Pollution Prevention
Article 16	To improve water use efficiency, TWSE/GTSM listed companies shall properly and sustainably use water resources and establish relevant management measures. 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.	4.5 Water Resource Management 4.6 Pollution Prevention
Article 17	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: 1. Direct greenhouse gas emissions: emissions from operations that are owned or controlled by the company. 2. Indirect greenhouse gas emissions: emissions resulting from the generation of externally purchased or acquired electricity, heating, or steam. 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.	4.3 Climate Change and Energy Management

	Definition	Corresponding chapter
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

	Definition	Corresponding chapter
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.</p> <p>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>	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 23	<p>TWSE/GTSM listed companies shall take responsibility for their products and services, and take marketing ethics seriously. In the process of research and development, procurement, production, operations, and services, the company shall ensure the transparency and safety of their products and services. They further shall establish and disclose policies on consumer rights and interests, and enforce them in the course of business operations, in order to prevent the products or services from adversely impacting the rights, interests, health, or safety of consumers.</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.</p> <p>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.</p> <p>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.

	Definition	Corresponding chapter
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.</p> <p>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>	5.2 Right People for Right Job 7. Community Involvement
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>	5. Employees as Partners 7. Community Involvement
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>	About the Report 2. Sustainable Business Framework
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>	2.2 The CSR Organization



#### **Taiwan Headquarters**

Ardentec Corporation  
No.3, Gongye 3rd Rd., Shengli Vil.,  
Hukou Township, Hsinchu County 30351, Taiwan, R.O.C.  
Telephone: +886-3-5976688  
Fax:+886-3-5971397

#### **Taiwan Subsidiary**

GIGA Solution Tech. Co., Ltd.  
7F, No. 6, Technology Road 5, Hsinchu Science Park,  
Hsinchu City 30078, Taiwan, R.O.C.  
Telephone: +886-3-6116168  
Fax: +886-3-5630100

#### **Nanjing Subsidiary**

Ardentec Nanjing Co., Ltd.  
No. 29, Qiuyun Road, Qiaolin Street, Pukou District,  
Nanjing City, Jiangsu Prov., 211800 China  
Telephone: +86-25-58656688  
Fax: +86-25-58270955

#### **Singapore Subsidiary**

Ardentec Singapore Pte. Ltd.  
12 Woodlands Loop, #02-00 Singapore 738283  
Telephone: +65-64821000  
Fax: +65-62571704

#### **Korea Subsidiary**

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